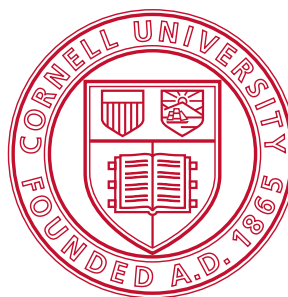


**Memorial Statements of the Cornell University Faculty
1990-1999
Volume 7**



**Memorial Statements of the
Cornell University Faculty**

The memorial statements contained herein were prepared by the Office of the Dean of the University Faculty of Cornell University to honor its faculty for their service to the university.

Ronald B. Furry & Donald F. Holcomb, proofreaders
J. Robert Cooke, producer

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Preface

The custom of honoring each deceased faculty member through a memorial statement was established in 1868, just after the founding of Cornell University. Annually since 1938, the Office of the Dean of the Faculty has produced a memorial booklet which is sent to the families of the deceased and also filed in the university archives.

We are now making the entire collection of memorial statements (1868 through 2009) readily available online and, for convenience, are grouping these by the decade in which the death occurred, assembling the memorials alphabetically within the decade. The Statements for the early years (1868 through 1938, assembled by Dean Cornelius Betten and now enlarged to include the remaining years of the 1930s, are in volume one. Many of these entries also included retirement statements; when available, these *follow* the companion memorial statement in this book. A CD version has also been created.

A few printed archival copies are being bound and stored in the Office of the Dean of the Faculty and in the Rare and Manuscript Collection in Kroch Library. However, the primary access (approximately 3,400 pages) is online in the University Faculty Archive at <http://ecommons.cornell.edu/handle/1813/17811> and within “The Legacy of Cornell Faculty and Staff” Collection at <http://ecommons.library.cornell.edu/handle/1813/14143>

These documents are full-text searchable across all years. Individual memorial statements, as well as volumes of these, may be downloaded. These PDF files include bookmarks and a contents listing with each entry hyperlinked for convenient access. For historical purposes, scans of the original documents are also accessible.

This project was sponsored by The Cornell Association of Professors Emeriti. Proofreaders included: Barry B. Adams, Royal D. Colle, Gould P. Colman, P. C. Tobias de Boer, Ronald B. Furry, Donald F. Holcomb, Malden C. Nesheim, Porus D. Olpadwala and Milo E. Richmond. Judith A. Bower, who has edited these booklets for many years, has had oversight for quality control. These were produced by J. Robert Cooke, co-founder of the Internet-First University Press with Kenneth M. King. J. Robert Cooke has also served as Dean of the University Faculty (1998-2003).

The archival copies of the source materials were provided by Diane D. LaLonde of the Office of the Dean of the Faculty and Elaine Engst of the Division of Rare and Manuscript Collection. The scanning and optical character recognition services were provided by Fiona Patrick and colleagues in the Cornell University Library’s Digital Consulting and Production Services.

November 2010

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* Web address is <http://ecommons.library.cornell.edu/handle/1813/> plus five digit ending.
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<i>Everhart, Watson Harry</i>	7.166	18689	<i>Hand, David Birney</i>	7.232	17956
—F—			<i>Hanselman, George Raymond</i>	7.236	18770
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<i>Feuer, Reeshon</i>	7.170	18524	<i>Hartman, John Daniel</i>	7.241	19091
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<i>Isenberg, Francis Marion R.</i>	7.269	18900	<i>Leibovitz, Louis</i>	7.330	18321
—J—			<i>Leonard, Ellis Pierson</i>	7.333	17958
<i>Jensen, Vernon</i>	7.271	18668	<i>Levin, Harry</i>	7.336	18081
<i>Johnson, Philip Gustaf</i>	7.274	18691	<i>Levy, Charles S.</i>	7.339	18890
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—K—			<i>Loper, Ruby M.</i>	7.349	19286
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<i>Kenworthy, Eldon</i>	7.301	19001	<i>Malott, Dean Waldo</i>	7.360	17924
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Proud, Dorothy M.	7.466	19253	Shadick, Harold	7.536	18032
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<i>Turk, Kenneth L.</i>	7.602	18396			
—V—					
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Noble Wayne Abrahams

August 1, 1900 — February 15, 1991

Noble W. Abrahams began his second career in 1957 when he left his well-earned retirement as Captain in the U.S. Navy, to accept an appointment as assistant professor in the then Department of Engineering Drawing in the Sibley School of Mechanical Engineering. Noble was born in Dublin, Texas. He attended grammar school and high school in Washington, D.C. and in 1920 received an appointment from the State of Texas to the U.S. Naval Academy. Upon graduation from the Academy in 1924, he began his long and productive career as an officer in the U.S. Navy.

Until the end of World War II, his duty assignments were highly engineering oriented. He served at sea in many capacities, including being engineering officer on a number of ships—from destroyers to cruisers to battleships. His major shore-duty assignments were to the Philadelphia and New York Navy Yards, the San Francisco Damage Control School for Naval Officers, and the Philadelphia Naval Damage Control Training Center. At the navy yards he was responsible for the installation of machinery and the testing of all systems during the construction of a number of cruisers, and he commissioned and fitted out several other major vessels including the battleship U.S.S. Iowa. He organized, commissioned, and commanded both the damage-control schools. His last sea-going assignment was as Commanding Officer of the U.S.S. Amphion, a Fleet Repair Ship and the Flagship for the Commander of the Service Force, U.S. Atlantic Fleet.

Noble's post-war assignments included duty as Senior U.S. Naval Liaison Officer to the European Command Headquarters, Frankfurt and Heidelberg, Germany; Head of the Coordinated Procurement Branch of Procurement, Policy Division, Washington, D.C.; Chief Staff Officer, Military Sea Transportation Service, Western Pacific Area, Tokyo; Chief Naval Staff Officer with the High Command in Tokyo; and, finally, Intelligence Officer, Headquarters Potomac and Severn River Naval Commands.

Upon his retirement from the Navy in 1954, the Abrahams chose Trumansburg for their permanent residence and built a home overlooking Cayuga Lake, high on the hill just North of Taughannock Park. After a relatively short time, Noble decided that he was too young to simply sit and enjoy the view and that there should be some place nearby that would offer an interesting and challenging opportunity for using some of his experience and expertise. Fortunately for Cornell, he made contact with the Sibley School of Mechanical Engineering—where just such

an opportunity existed in teaching first-year mechanical engineering students descriptive drawing, mechanical drafting, and freehand drawing.

Professor Abrahams was a dedicated teacher who took a personal interest in each student. One result of his efforts and concern was his being a runner-up in the balloting, by freshmen, for one of the 1965 Philip Sporn Teaching Awards in Engineering. Another result was the founding of numerous life-long friendships with students and their families.

Noble officially retired from Cornell in 1967; but his talents were in such demand that he continued to work, on a year-to-year basis, until June 1970.

He continued to be very active as a citizen, devoting time and money to the development and growth of community institutions, the Church of the Epiphany, the Philomathic Library, and the Cornell ROTC.

Professor Abrahams is survived by his wife, Mary Barlow Abrahams; one daughter, Elaine Abrahams; a sister, Virginia Alleman; a brother, Otis; two grandchildren; and two great-grandchildren.

Bart Conta, Dennis G. Shepherd, Richard M. Phelan

Frederick B. Agard

September 23, 1907 — May 11, 1993

Fred (“Fritz”) Agard came to Cornell as assistant professor of linguistics in the fall of 1946, to be one of the “founding five” of the then newly established Division of Modern Languages. He had earned his A.B. and A.M. degrees at Brown in 1928 and 1930 respectively. His Ph.D. degree, awarded by Princeton in 1935, was in Romance philology and Old French literature. After ten years as instructor and assistant professor at Princeton, he abandoned philology and literature for linguistics, both Romance and general. Immediately after the war’s end in 1945, Fritz went to the University of Chicago’s School of Education to participate in a research investigation of foreign-language teaching. This work served as a transition to his enduring association with Cornell, where he was promoted to associate professor in 1947 and to full professor in 1953, retiring as emeritus in 1974.

At Cornell, Fred was an essential member of the new D.M.L.’s senior staff, all of whom, despite diverse specializations, had simply the title “Professor of Linguistics”. At the outset his work concentrated on Spanish and Ibero-Romance, but in time it expanded to include other Romance languages, particularly Roumanian, as well as comparative Romance. In the 1960s he was in charge of a special program for teaching Roumanian to selected Army personnel; this involved extensive preparation of classroom material and led to descriptive analyses of, eventually also to fieldwork in, that language.

Like many other members of the D.M.L., Fritz spent considerable time in overseas assignments, especially in connection with the Ford-Cornell project for the teaching of English in Italy, where he was a Fulbright lecturer in 1956-57 and directed the program from 1963 through 1966. Other assignments included a year in Bucharest in

1969-70 and a summer at the Cuarto Instituto Lingüístico Panamericano at the University of Puerto Rico in 1971. After Fred's retirement, he was a visiting professor in Konstanz, Germany in 1976-77 and in Edmonton, Alberta in 1985. In addition, he served for a number of years as examiner in French and Spanish for the College Entrance Examination Board.

During the nearly three decades of Fritz's association with Cornell, there were continual developments in linguistic theory and in its application to language teaching. He took an active interest in new approaches and devoted himself to their exploration. At first, in the late 1940s and early 1950s, he turned for this to creolized languages: Papiamentu (spoken on Curaçao and neighboring islands) and Ladino (the Judaeo-Spanish of Thrace, for which he found a source of information in a family living in Rochester). His 1958 sketch of Roumanian, developed from a structuralist approach, was followed by further studies of that language from a transformational-generative point of view. His last and in some ways most outstanding work was *A Course in Romance Linguistics* (1984), in which he employed several modern approaches to the reconstruction of the ancestral form of speech known to historical linguists as "Proto-Romance" (close to, but not identical with, classical Latin), from which the various Romance languages developed. In addition to these works, he produced several outstanding language-teaching texts and reference works: *The Sounds of English and Italian* and *The Grammatical Structures of English and Italian* (both with Robert J. Di Pietro, 1955); *Speaking and Writing Spanish* (1951, with Angela Paratore and Raymond P. Willis, Jr.); *Modern Approach to Spanish* (1964); *Spoken Roumanian* (1974); and, for speakers of Spanish learning English, *El Inglés Hablado* (1953).

In the classroom and out of it, Fritz was a greatly beloved teacher and mentor. He was the chairman of the Ph.D. committees of a number of candidates in Ibero-Romance, Italo-Romance, comparative Romance, and general linguistics, and a member for numerous other candidates who had a minor in one of those fields. On his retirement, his students presented him with a diploma extolling him as a "native speaker of Proto-Romance". At social gatherings Fred was a stand-up comedian, his monologs exploiting his remarkable ability to mimic all manner of strange dialects and accents. In both professional and social matters, he was one of the most active and inspiring contributors, from 1946 onward, to the work of the D.M.L. and of its successor the Department of Modern Languages and Linguistics.

Fred is survived by his wife Hildegard, his son Stephen, and his stepdaughter Leigh Jones, as well as by four grandsons and one great-granddaughter.

Robert A. Hall Jr., Charles F. Hockett, J Milton Cowan

William H. (Hub) Allaway

April 12, 1916 — May 2, 1995

William H. (Hub) Allaway was born in Homer, Nebraska, and died in Lexington, Virginia. He received a B.S. degree in Agriculture from the University of Nebraska in 1938.

He received an M.Sc. degree in 1939 and a Ph.D. degree in 1945, both in Soils from Iowa State University. He was an Assistant Professor of Soils at the University of Nebraska from 1943-45, an Assistant Professor of Soils at Iowa State University from 1945-47, an Associate Professor of Soils and of Chemistry at Iowa State University from 1947-49, and a Professor of Soils at Iowa State University from 1949-50.

In 1950, Hub joined the U.S. Department of Agriculture (USDA) and worked in Beltsville, Maryland, and Washington, D.C. He was responsible for national programs on interpretation and use of soil surveys and for certain phases of soil management research. In 1954, he moved into administrative work for the Agricultural Research Service (ARS) of the USDA, where he served as Head of the Soil-Plant Relationships Section and as Assistant Director of the Soil and Water Conservation Research Division.

He came to Ithaca in 1961 as Director of the U.S. Plant, Soil and Nutrition Laboratory, which is located on the Cornell University campus. He also held a courtesy appointment as Professor of Soils in the Department of Soil, Crop and Atmospheric Sciences. After his retirement from the ARS-USDA in 1976, he taught at Cornell and did research in Agricultural Extension. During this time, he served as a Senior Lecturer in the Department of Soil, Crop and Atmospheric Sciences from 1976-83 and as a Visiting Fellow for the same Department from 1983-88.

Hub's impact as a research leader and Director of the U.S. Plant, Soil and Nutrition Laboratory, is evidenced by the statement by Dr. Robert W. Holley in *Science* magazine on April 27, 1973: "...the Director of my lab, W.H. Allaway, thought my work was important and gave me the support to do it full time. But for Allaway I would not have finished the structure [of the nucleic acid] before someone else did, and I would not have gotten the Nobel prize."

In addition, Hub encouraged initiation of a number of new programs during his tenure as Laboratory Director, including work on grass tetany, magnesium metabolism in plants and animals, zinc absorption by plants, zinc in animal reproduction, absorption of other trace metals by plants and animals, plant requirements for chromium and vanadium, value of plants as dietary sources of trace minerals, control mechanisms in plants, improvement of nutritional quality of soy protein, and absorption of cadmium by plants and availability of cadmium from plants to animals. Many of the Laboratory scientists made notable advances in these fields. Hub's research leadership at

Ithaca has directly affected both the quality and quantity of food sources, and he played a major role in informing the general public on the relation of soil quality to food quality.

At the start of Hub's research on selenium (Se) at the Nutrition Lab, it was already known that very small amounts of dietary Se could correct certain diseases of livestock and that higher levels of dietary Se could be toxic. Through his own research, with a small group of associates, he developed a method for measuring the very low concentrations of Se in biological materials that were associated with Se deficiency. Then they prepared a map of the U.S. showing the areas where crops were likely to contain less Se than is required in animal diets. This map has been very widely used by feed manufacturers, veterinarians, medical epidemiologists, and public health officials. Hub also led the group that established the nutritional value of Se in forages and grains, and showed that animals on a Se-adequate diet could accumulate body reserves of Se that would protect them for as long as one year on Se-deficient diets. When the American Feed Manufacturers applied for permission to supplement animal diets with Se, their application was to a large extent based upon the work of Hub and his associates. The environmental impact statement, issued by the Food and Drug Administration in approving this application, was based almost entirely on the research of Hub and his collaborators. The addition of Se to animal rations is now very widely used in the U.S. and is clearly responsible for increases in the total production and nutritional value of foods of animal origin.

Hub and his associates established that Se was universally present in human blood and that the blood levels showed a relationship to local levels of Se in foods. Hub's work on Se distribution among the U.S. population provides additional evidence of the importance of Se in crops in the U.S. for human health problems. In September of 1979, Hub participated in a week-long workshop he helped organize that was directed toward examination of the role of Se in human health. The workshop was sponsored by the World Health Organization.

Hub's work in informing the general public on the relationship between soil quality and human nutrition is evidenced by the large number of citations to his Agr. Inf. Bulletin 378 — "The Effect of Soils and Fertilizers on Human and Animal Nutrition." These citations include popular magazines, newspapers, textbooks and court hearings on food quality. Almost sixteen thousand copies of this bulletin were distributed. A predecessor to this bulletin (also authored by Hub) was translated into Spanish by AID for use in their Latin American programs. Hub was the author of approximately 100 publications.

In honor of his research, he received the Soil Science Research Award of the Soil Science Society of America in 1971. In the same year, he also received an Honorary Doctor of Science degree from the University of Nebraska (his

undergraduate alma mater). In 1976, he was made an Honorary Member of the American Society of Agronomy, an honor reserved for very distinguished individuals. He was made a Fellow of the American Society of Agronomy in 1958.

In 1985 and 1986, Hub served as a member of a committee of the National Research Council of the National Academy of Science. That committee prepared recommendations for the U.S. Department of Interior and the State of California, on how to deal with the Se toxicity problems in the Kesterson Reservoir in California. Similar environmental problems are now developing elsewhere, and the advice of that committee may help in solving these problems also.

Hub is survived by his daughters, Susan LaRue and Nancy Lindsley; and his son, William H. Allaway, Jr. His wife, Mildred Holland Allaway, died on September 2, 1995.

David L. Grunes

Howard G. Andrus

July 17, 1915 — July 21, 1998

Howard G. Andrus was born on July 17, 1915, in Chemung, New York, the son of the Reverend Frank Andrus and Ethlyn Mighells Andrus. During his early years, he moved about the southern tier of New York State where his father served various pastorates. He attended Genesee Wesleyan Prep School in Lima, New York and earned a B.A. degree from Houghton College, Houghton, New York in 1938.

Following five years of teaching social studies at Rushford Central School, he entered the U.S. Army in 1943 where he served as a personnel placement officer in the European Theater. He was decorated with the American Campaign Medal and Ribbon, European, African, and Middle Eastern Medal, and two Bronze Service Stars. He was discharged in 1946 following distinguished service as a counselor to many G.I.s of World War II.

Howard met his future wife, Helen Shindledecker, while both were teaching at Rushford. They were married on November 3, 1945, while he was still in military service. To this union, three children were born: Duane, Richard and Sharon. He was a loving husband and father. His dedication to his wife during her prolonged illness was strongly evident. She (Helen) predeceased him on September 13, 1985.

Howard was the first student to matriculate under the G.I. Bill at Cornell University in 1946. He received his M.S. degree in Counseling in 1947 and immediately joined the staff as a Veterans Counselor. His outstanding service in this capacity led to the establishment of the University Guidance and Testing Center. Under his tutelage, many hundreds of veterans and non-veterans were privy to his outstanding advice on a variety of topics — from career choice to job placement. During this same period of time, 1947-51, he worked part-time on his Doctoral degree, receiving a Ph.D. in Guidance and Personnel Administration in 1951.

Despite all his professional and academic accomplishments, Howard was best known for his friendship and quick wit. He was always positive in his outlook and prone to pull a prank on his colleagues at unexpected times. His favorite saying, “You never get a second chance to make a first impression”, became his hallmark while serving as Director of Teacher Placement. In addition to his friendliness and wit, he had a passion for the New York Yankees and could cite statistics on every player going back to 1920!

Professional responsibilities did not keep Howard from serving his community. As a member and later President of the Ithaca City School District Board of Education, he rendered invaluable counsel during the turbulent 1960s

and 1970s. His ability to bring disparate groups together for the common good was evident throughout his time on the Board. He was also very active on the board of various Library Associations.

Let us continue our discussion about his contributions in teaching. While advancing from Assistant Professor to full Professor, he maintained a strong schedule of graduate courses for students in Counseling, Psychology, and general fields of Education. He was particularly sought out by international students to serve on Master's and Doctoral committees. His keen insight into their concerns and problems in our different culture made for a great mix. He always made time for students whether or not they had an appointment. His theme was, "If they are here and want to see me, send them in." He continued his total load of teaching, advising, and counseling through 1981 when he retired as Professor Emeritus of Education and as founding Director of the University Guidance and Testing Service.

Surviving are a son, Duane (Alessandra) Andrus, of Cortland, New York; a son, Richard Andrus, of Ithaca, New York; a daughter, Sharon (Dan) Andrus Trembley, of Freeville, New York; and two step granddaughters.

Marvin D. Glock, Verne Rockcastle, Joe P. Bail

Thomas Jefferson Baird

March 1, 1902 — March 21, 1993

Tom Baird, professor emeritus, died on March 21, 1993 at the age of 91. He was involved for almost 74 years with Cornell and the Ithaca area in activities ranging from being an undergraduate student to becoming a significant benefactor to Cornell, financially and professionally, after his retirement.

Tom spent his early years in Cleveland, Ohio where he was born, the son of Frederick Baird, a prominent Cleveland architect, and Mamie Zangerle Baird. In 1919, he entered Cornell University as an undergraduate student in the College of Arts and Sciences. Two years later he transferred to the College of Architecture, where he entered the five-year bachelor's program. An outstanding student, in his senior year he received the American Institute of Architects medal for excellence and placed first in the preliminary round for the International Paris Prize in Architecture. He received his Bachelor of Architecture degree in 1925 and was awarded a fellowship for continuing studies in architecture.

In 1926, Tom joined, as designer and draftsman, the Ithaca office of Bryant Fleming, architect and landscape architect. Mr. Fleming was responsible for many fine estates throughout the U.S. and for introducing landscape design courses into the curriculum of the College of Architecture at Cornell. The demand for estate designers decreased greatly in the Depression and the firm was dissolved in 1932 after the death of Mr. Fleming. There was little demand for the services of architects, and Tom took the opportunity to study landscape design at Cornell in the period 1932-34.

In 1935, Mr. Baird accepted a position with the Finger Lakes Park Commission as Architect and Landscape Architect to supervise the design and construction of Stony Brook Park in Western New York. On one of his return visits to Ithaca, he met Kerstin Thorin, a former member of the Swedish Olympic Swimming Team, who was teaching in the Women's Physical Education Department at Cornell. They were married in 1936.

Upon completion of the facilities of Stony Brook Park in 1939, Tom returned to Ithaca to enter private practice in architecture and neighborhood planning. At this time he was also hired as an instructor in the Department of Floriculture and Ornamental Horticulture in the College of Agriculture. In 1940, he received a prestigious fellowship to study at the renowned Cranbrook Academy of Art in Bloomfield Hills, Michigan, where he interacted with some of the most famous architects, designers, and artists of the time, including Saarinen, Eames, Bertoia, and Milles.

Imbued with the spirit of the contemporary art movement, Tom returned to Ithaca in 1941 to begin graduate study in regional planning in the College of Architecture at Cornell. During the next five years of part-time study he continued his private practice, on a greatly reduced scale, while serving as an instructor in landscape planning in the College of Agriculture (1940-42), a research associate in housing in the College of Home Economics (1941-45), and an instructor in engineering drawing in the Sibley School of Mechanical Engineering (1941-46). The latter part-time position was the direct result of his interest in helping Cornell meet its educational commitment during the war years, when engineering instructors were scarce, and was instrumental in setting the direction for his life's work in the years to come.

In addition to the more than full-time work load described above for the period 1942-46, Tom found time to redesign the Baird's small lake cottage near McKinney's Point on a slope overlooking Lake Cayuga. His design was very modern in concept—using cantilevered decks, window walls, secluded terraces, and ingenious noise shielding. The home received national recognition and was praised in two professional architectural magazines. He also published some ten papers and articles in professional and popular architectural magazines, such as *House and Garden*, *America Home*, *American Nurseryman*, *Progressive Architecture*, *House Beautiful*, and *The Ideal Home Magazine*. The articles covered topics ranging from “Spatial Planning in the Community”, to “Remodeled American Homes”, “A Plan for the Great Lakes Region”, and “Homes—Small, Medium, and Large.”

In February, 1946, Tom was awarded the degree of Master of Regional Planning from the College of Architecture. Professor C.E. Townsend, head of the Department of Engineering Drawing in the Sibley School, with great foresight relative to the direction in which post-war mechanical engineering education should head, immediately offered Tom a promotion to the full-time position of assistant professor of engineering drawing. To mechanical engineering's great good luck—and most likely to Professor Townsend's happy surprise—Tom accepted the offer.

A new elective course in freehand drawing and perspective drawing was introduced by Professor Baird. This course—with its goal the stimulation of habits of creative thinking and imagination by using freehand drawing and other techniques—was a pioneering effort in the area that would be called “creative design.” The course content and method of presentation changed throughout the years with his increasing knowledge and interest in mechanical engineering design. His collaboration with Professor George B. Du Bois, of the Department of Machine Design, was of great value to both men and to the Sibley School. Professor Baird continued his association with the College of Home Economics by teaching courses on house planning in summer school from 1946-50.

Tom was promoted to associate professor of drafting and industrial design in 1952. In 1953, the title of the elective course was changed to “Creative Sketching” In 1967, the title was changed again, to “Introduction to Industrial Design” and a project course in industrial design was added. In 1961, the programs in the College of Engineering were restructured and the Department of Engineering Drawing disappeared. The course announcements no longer included drawing, descriptive geometry etc.—only Creative Sketching, Introduction to Industrial Design, Special Investigations in Industrial Design, and Industrial Design Project, all of which were Professor Baird’s courses. In 1965, the students recognized his excellence in teaching freshmen by voting him as one of the two winners of the Philip Sporn Prize. Tom became a member of the Department of Machine Design. In 1966, he was promoted to professor of machine design and in 1967, to professor emeritus.

Professor Baird was a member of Tau Beta Pi, the American Institute of Planners, the Industrial Designer’s Society of America, and the American Association of University Professors.

Beneficence to Cornell by the Baird family began in 1927 when Professor Baird’s mother established the Baird Prize Fund in the College of Architecture (currently the College of Architecture, Art, and Planning). The prize was awarded in open competition to a second-year student in the college and the fund has been maintained up to the present by Professor Baird.

For many years, after retirement, the Bairds maintained an active life at Cornell, especially enjoying the concerts and other musical events. They spent their summers in Maine, part of their winters in Sweden and part touring Europe, especially Italy and Sicily. When Mrs. Baird’s health declined they settled down in their Ithaca apartment and devoted themselves to Cornell and to activities with their local friends.

In 1981 Professor Emeritus Baird and his wife made a bequest of half a million dollars to Cornell University, \$400,000 of this amount to create the Thomas J. Baird Visiting Critic Fund to sponsor visits to Cornell by architecture scholars and practitioners in the College of Architecture, Art and Planning. The remaining \$100,000 was bequeathed to the Music Department of the College of Arts and Sciences to support the Thomas and Kerstin Baird Concert Fund for free public concerts, lectures and related presentations of classical and chamber music sponsored by the Department of Music. A plaque in their honor was dedicated in 1982 in Barnes Hall, the site of the annual Baird Concerts.

In 1986, the Bairds suggested that a terrace be placed on the north side of Sage Chapel where they frequently rested after their usual Sunday morning walks on the Cornell Campus. In August of 1987, Professor Baird dedicated the

Kerstin Thorin Baird Garden Courtyard in honor of his wife who died earlier in the year. The garden courtyard has been described as a “haven of beauty—a particularly appropriate memorial to a woman who was a devoted supporter of the cultural arts of Cornell.”

In 1989, seeing the need to balance the overall design of the Sage Chapel exterior, Professor Baird dedicated a matching terrace, which bears his name, on the south side of the chapel.

Still looking for projects that might benefit his beloved Cornell, Professor Baird was introduced to the newly created Newman Arboretum by his longtime friend and former student, Raymond Fox, professor of floriculture and ornamental horticulture. Professor Baird was immediately attracted to the Arboretum because it gave him a quiet place of beauty to walk and to contemplate nature in its changing moods. Inspired by Autumn drifts of goldenrod and bedstraw growing on the slopes of the natural bowl-shaped Arboretum, and encouraged by Professor Fox, Professor Baird approached the director of Cornell Plantations and suggested that similar effects with other wildflower plantings could provide colorful effects throughout the growing season. Thus was born the Baird Field Flower Meadow Project, to which he gave his generous support.

Professor Baird also contributed a substantial sum to help establish a memorial grove of white birches in the Cornell Arboretum in honor of his and Kerstin’s longtime friend, Mrs. Ruth Cavetz.

Professor Baird’s talents in architectural design were greatly admired by his college roommate and great friend Mr. Richard Belcher, class of ‘28, Bachelor of Architecture ‘30 at Cornell. Mr. Belcher also worked in Bryant Fleming’s office before moving to New York City eventually becoming chief architect for the R.H. Macy Company enterprises. To honor his good friend, Mr. Belcher recently established a \$100,000 fellowship bequest for students enrolled in the Master of Architecture Program at Cornell. It will be an annual award to “inspire, encourage, and reward fine architectural talent at Cornell” and is to be known as the Richard G. Belcher-Thomas J. Baird Award for Architectural Design.

Professor Baird was predeceased by his three brothers. He is survived by his sister-in-law, Mrs. Mary Baird Hefner; his nephew, Mr. Lincoln Baird and wife Carol; a niece, Miss Lucy Baird; two grandnephews, Lincoln and Graham Baird—all residents of California; a cousin, Mr. Willis Zangerle of Cleveland, Ohio; and by his wife’s nephew, Mr. Bengt Thorin, and his family of Sweden.

His friends and relatives will greatly miss Tom Baird for his gentlemanly, courtly manner, his sincere interest in his students, his caring ways, his ability to observe and to point out the beauty of nature and the aesthetics of good

taste and, not-the-least, for his enjoyment of a good joke, his sense of humor, and his ability to laugh at himself—all too rare attributes in today's world.

Bart Conta, Raymond T. Fox, Richard M. Phelan

O. Ernest Bangs

September 17, 1903 — August 10, 1995

O. Ernest Bangs, Professor Emeritus of Hotel Administration, died after a lengthy illness at his home at 731 Cayuga Heights Road, Ithaca, New York. Ernie's career was not unusual for the time; he moved from industry to academia in his mid 50s, then served the School well into retirement. He is remembered with affection by a generation of hotel faculty, staff, and students as a valued colleague and friend.

Ernie was born in Cameron, Missouri, in 1903—though he later changed this to 1905 in order not to be too old to enlist in the service. He was the oldest of five children and attended local schools and college in Missouri. His first career included over two decades in hotel and food-service management for the Fred Harvey Company and others, followed by service with the U.S. Navy supply corps during World War II. While stationed in the Mediterranean, Ernie was injured in an attack and was hospitalized for three months. After the war, Ernie married Isabelle Engle, and they had two daughters. They settled in Cleveland where, first, he managed an apartment hotel and then took a job with Porter Equipment Company, a career move that set the stage for his later work. At that time, the equipment supply companies often designed commercial kitchens and Porter found in Ernie an enthusiastic and able designer and engineer. Among his first projects was a major installation for National Cash Register in Dayton, Ohio, followed by a wide variety of industrial, hospital, school, and hotel projects.

Ernie, much like the “hotelies” he would later teach, had an entrepreneurial talent and, in the early 1950s, he established his own food-service design company. In 1954, he received the Annual Food Service Merit Award from *Institutions* magazine, honoring his design for the U.S. Army Finance Center in Ohio. As business grew, he merged his company with another to create Stephens-Bangs, for many years among the country's largest food-service design firms. In the following years, Ernie completed dozens of projects including major installations for the University of Michigan; for many Detroit-area manufacturers including Ford, Chrysler, General Motors, AT&T, and General Electric; and for the State Department and National Health Institutes in Washington, DC.

Dean Howard Meek invited Ernie in 1958 to teach a professional seminar in food-service engineering in the Hotel School's summer school. His efforts succeeding immediately, Ernie quickly joined the Cornell faculty that Fall as Acting Associate Professor of food-facilities engineering. He greatly expanded the Hotel School's course offerings in food facilities, a new subject area begun by Professor (emeritus) Paul Broten who recalls “I planted the seeds in the garden, but Ernie tilled the soil and PRODUCED.” Professor Broten remembers Ernie writing to him later to

thank him for his help in initiating the course and referring to himself and Paul as “brothers under the skin.” Paul also fondly characterizes Ernie as “extremely cooperative yet strong, and an unusual GENTLEMAN in that he was GENUINE and really did care about his associates and students.”

In his classes, Ernie continually challenged his students to think through problems, to consider an array of alternative solutions, and to prepare professional documents before there were any national standards. But Ernie taught much more than food-service design. In his strong mentoring role with his students, Ernie epitomized the highest standard of business and personal ethics. Ernie’s remarkable influence is recalled by William Eaton, a former student who, with a group of classmates, enrolled in Ernie’s first food-facilities course at Cornell, the beginning of a long sequence of design and engineering courses:

It really wasn't six terms. It was one very long class with five breaks, almost seamless. The key was that it allowed the group of us ... to grow to know each other . . . and [several of us] are still together! It never would have happened without Ernie Bangs. He taught us the Industry as no one else could have and, even more importantly, he taught us to think, to plan, and, above all, he taught us ethics. He was, and I do not exaggerate, the most ethical man I ever knew, and only hope that a fraction of what he taught has become a part of me.

It is not an overstatement that Ernie Bangs, single-handedly, educated a whole generation of industry leaders: in 1990, eighty percent of the executive committee of the International Food-Service Consultants Association were former students of Ernie’s. He is recognized, too, as the person who created the academic area of food-facilities design. In addition to those who hold leadership roles today in the industry, many of his former students now are teaching food-service facilities design at leading hospitality programs around the world.

Ernie continued to teach at the Hotel School until 1971 when he reluctantly retired. In the late 1960s, Ernie had successfully represented the Hotel School in helping fledgling hospitality programs in Korea and the Philippines establish departments of tourism and hotel management. Therefore, Dean Robert Beck invited Ernie to assume the directorship of the Hotel School’s new joint venture program in San Juan, Puerto Rico, where he served for eight more years. When he left in 1979, the students gave him a plaque reading, “For Professor O. Ernest Bangs: Our heartfelt gratitude, to one whose personal expertise and highest standards of both work and conduct kindled in all of us just one goal ... to strive for excellence.” Paul Gaurnier, Associate Dean during that period, recalls Ernie’s outstanding contribution:

Ernie truly came into his own in Puerto Rico. He was Cornell’s ambassador extraordinaire to the fledgling program, serving as professor, counselor to the students (for many of whom he became a surrogate father), and a public and governmental relations expert—overall an outstanding representative of Cornell. Ernie truly loved people and was at his best in helping

people advance their careers, even to the point of offering optional evening courses to those who could not attend his daytime classes. It was a joy to visit him there and watch the program bloom under his tutelage and guidance.

Ernie retired a second time in 1979 when he and Isabelle returned to Ithaca where they lived until Ernie's death in the mid-19th century farmhouse they had bought in 1960. Still full of energy and ideas, Ernie served as a volunteer counselor for the Small Business Administration where he advised local entrepreneurs on setting up their business and helped them deal with a variety of operating issues. In retirement, Ernie had more time to read, especially books on history and philosophy and religion. As his sight failed in his later years, he continued his lifelong education by "reading" more than one hundred books on tape.

When the new Statler opened in 1989, Ernie and Isabelle attended the grand opening. Although virtually blind, Ernie wandered off to explore the building that had been for so many years his professional home. He knew Statler Hall so well in his mind that he had no difficulty finding his way up the stairs to examine and critique the reconstructed food labs designed by his former students. He remained mentally sharp, always ready for a lively conversation, and inspired those around him with his curiosity and spirit.

Ernie is survived by his wife, Isabelle, in Ithaca; a son, Robert Bangs of Seattle, Washington; and two daughters, Connie Bangs of Brooklyn, New York, and Christine Hall of Inverell, Australia; five grandchildren; and five great-grandchildren. Ernie's faculty colleagues at Cornell fondly remember him as a gentleman of the utmost integrity; a consummate professional demanding the highest standards; a pleasant, knowledgeable, and highly valued friend; and a significant contributor to the success of the Hotel School's programs in Ithaca and Puerto Rico. He will be missed.

David C. Dunn, Richard H. Penner, Jack J. Clark

Harlan Parker Banks

September 1, 1913 — November 22, 1998

Harlan Parker Banks, Liberty Hyde Bailey Professor Emeritus in the College of Agriculture and Life Sciences, died on Sunday, November 22, 1998, at his retirement home in New Hampshire after a short illness.

Professor Banks was born on September 1, 1913, in Cambridge, Massachusetts, and graduated in 1930 from Classical High School in nearby Lynn. He received his B.S. degree in 1934 from Dartmouth College where he spent three further years as Instructor in Botany and held a Cramer Fellowship for Graduate Study. A Cornellian there, Professor Carl L. Wilson, interested him in plant anatomy and morphology and this expanded into the study of fossil plants. Most of his subsequent research was done in paleobotany, commencing with a doctoral dissertation at Cornell under the tutelage of the late Professor Loren C. Petry.

From 1940, he taught at Acadia University, Wolfville, Nova Scotia, where he became Associate Professor of Botany before leaving in 1947 for a similar position at the University of Minnesota. Upon retirement of the late Arthur J. Eames in 1949, Banks returned to Cornell as Associate Professor of Botany, Professor (1950-77), and as Liberty Hyde Bailey Professor (1977), retiring in 1978. During this period he also served as head of the Department of Botany, 1950-61, and upon formation of the Division of Biological Sciences, was associated with the Section of Genetics, Development, and Physiology.

Professor Banks and most of his 34 graduate students literally and figuratively quarried the rich Devonian fossil deposits of early land plants in New York for notable contributions to our understanding of the origin, structure, and evolution of these plants. Authorship or joint authorship of over 150 scientific papers, reviews, films, and one book on paleobotany—*Evolution and Plants of the Past*—led to his international recognition as a major authority on the earliest land plants. An effervescent lecturer, he was invited to lecture at some 70 universities and colleges in the continental United States and Puerto Rico, at 20 universities or scholarly societies in Europe, Asia, and Australia, as well as to numerous science clubs, museums, research institutions, and other departments within Cornell. He also was the paleobotany Lecturer at the Centennial Celebration of the Peabody Museum of Natural History at Yale University in 1966; held the David French Lectureship, Pomona College, in 1971; was guest lecturer at the Third International Gondwana Conference, Canberra, Australia, in 1973; and the W.W. Rubey Lecturer at UCLA, in 1976. He was awarded an honorary Doctor of Science degree from Dartmouth College in 1984,

and in 1987, he was elected as one of 50 foreign members of the Linnean Society of London and received the Paleontological Society's U.S. gold medal, awarded to a paleobotanist for the first time since 1970.

Despite many obligations, and always with good humor, he served as minor advisor to over 25 graduate students a year. In addition to his major graduate students, he averaged a dozen undergraduate advisees a year, and he kept an open door to countless other students and colleagues who sought his advice.

In the tradition of distinguished teaching in botany at Cornell, Harlan Banks was recognized within and without the university as not only exceedingly popular but also as a truly great teacher in his generation. This was particularly so in the introductory courses at Cornell, although he also taught upper-level courses and was associated with various short courses in summer institutions or commissions on education sponsored by the Botanical Society of America, the National Science Foundation, and American Institute of Biological Sciences. In 1961, he received the Certificate of Merit from Seniors in the College of Agriculture, and in 1975, the SUNY Chancellor's Award for Excellence in Teaching. Further honors for teaching and research came in the form of selection by the Faculty of the University of Liège to be a Fulbright Research Scholar in Belgium in 1957-58; election as Corresponding Member, Société Géologique de Belgique in 1959; as John Simon Guggenheim Memorial Foundation Fellow with tenure at the University of Liège and at Cambridge University in 1963-64; as Fellow of Clare Hall, Cambridge University in 1968; and as Honorary Vice President, XII International Botanical Congress, Leningrad, in 1975. In the same year, he was awarded a Certificate of Merit by the Botanical Society of America, which he had served as member of the Editorial Board, Secretary Pro-tem (1952-53), Treasurer (1964-67), Vice President (1968), and President (1969).

He was a fellow of the American Association for the Advancement of Science, and he also served in various capacities with the International Organization of Paleobotany (Vice President, 1964-69; President 1969-75), Paleontological Society (Councilor-at-Large, 1974) and was a member of the Paleontological Association, International Society of Plant Morphologists, International Association for Plant Taxonomy, Torrey Botanical Club, Paleontological Research Institution, Commission Internationale Microflore Paleozoïque, Asociacion Latinamericana de Paleobotanica y Palinologia, Sigma Xi (President, Cornell Chapter 1954-56), Beta Beta Beta, Gamma Alpha, and Ho-Nun-De-Kah (Honorary Member, 1959). From 1977-83, he served on the United States National Committee for the International Union of Biological Sciences sponsored by the National Academy of Science, and was elected to the National Academy of Science in 1980. Continuing his activities after he retired, he published 11 papers

during the 1990s. In December 1997, he delivered the monthly lecture at the New England Botanical Club in Cambridge.

His wife, Rosamund L. (Kit) Shurtleff Banks and a daughter, Jane Angstrom, survive him. Funeral arrangements will be private. Donations in memory of Professor Banks may be made to Cornell Plantations.

John Kingsbury, Karl Niklas, Natalie Uhl

Milton L. Barnett

January 16, 1916 — June 17, 1994

On a pleasant summer afternoon in mid-August, close to a hundred people gathered near the Old Mill at Upper Enfield, Robert Treman State Park, to celebrate the life of Milton L. Barnett. In words and music, the celebration reflected the many facets of Milt's life and enabled a sharing of the man as he saw himself and as others saw him.

Born in New York City in 1916, Milt described his grade school and high school education as standard American. When very young, he was introduced by his mother to a variety of books on Asia, and by the time he was a teenager, he knew that he was going to study Chinese language. However, his entry into Asian studies took a very circuitous route. Early in his undergraduate life, uncertain of the merits of further academic training, he dropped out of college and later joined the Army. Volunteering for language training in Chinese, in 1943 the Army Specialized Training Program sent him to Cornell. Here he first met Knight Biggerstaff and Lauriston Sharp, two Cornell faculty members who would become lifelong friends and colleagues and would have a marked influence on Milt's professional career.

After a year of language training at Cornell, Milt was sent to Ft. Riley, Kansas, to be trained in horsemanship and small weapons for China. But the war ended before he could put this training into practice and, with Lauri Sharp's encouragement, he returned to Cornell to complete his undergraduate and graduate studies in anthropology (A.B. degree 1947, Ph.D. degree 1952). While at Cornell, he undertook fieldwork with the resettlement of the Hopi Indians among the Mohave in the Southwest and began a long-term interest in the lives of Native American peoples. However, his thesis research continued his commitment to Chinese where he undertook a study of the pattern of alcoholism among the Chinese in Boston, New York, Atlanta, and Phoenix.

In 1950, even before completing his Ph.D. degree, Milt was hired as an Instructor in Anthropology at Wisconsin. His years on the Wisconsin faculty established his reputation earlier-on as an outstanding teacher and advisor of students. This reputation was built upon a pedagogical style of using stories and personal experience to make conceptual and theoretical arguments and engage students in new ways of thinking about particular issues and ideas. This style also built upon a view of scholarly activity that combined theory and practical work. But for Milt, it was fieldwork that provided the excitement.

Milt's first overseas assignment was in 1953 as a member of an interdisciplinary team working on the solution of community development problems in Venezuela. Closer to home, he maintained his contact with the Hopi

and Mohave, and he and his students studied the Ojibway and Chippewa in Wisconsin. His interest with Native American issues continued during later years at Cornell where he played a critical role in the development of the American Indian Studies Program.

It was not until 1960 that Milt made his first trip to Asia. He went to Indonesia for six months to investigate the feasibility of establishing a training center for community development. Although he recommended against such a center, in his own words he “fell in love with Java”. This was not, of course, his first love (China), but it was nonetheless deep and abiding.

Not long after this trip, Milt accepted the offer of Arthur Mosher, President of the Agricultural Development Council (ADC), to join the field staff in Asia. The ADC, in which Milt served for over a decade, was created in 1953 to counterbalance the support given to the “hard sciences” by the Rockefeller Foundation’s overseas programs. His first assignment was in the Philippines where he served from 1962 to 1966 as advisor to the Philippine government on community development while simultaneously teaching at the University of the Philippines. He then moved to Malaysia where he served as advisor to Prime Minister Tun Razak on rural development and was involved in teaching and research at the University of Malaya. In recognition of his services, Milt was honored with the Government’s Panglima Setia Mahkota Award, an award normally reserved for Malaysian citizens.

Characteristically, however, Milt had serious reservations about his role as an expatriate advisor. On the one hand, he felt that anthropologists had an obligation to interpret the broad shifts that were coming to characterize life in Asia and to help buffer the impact of change on peoples who had limited contact with the industrial west. On the other hand, however, he was concerned lest the interpretations be misguided and the advice he offered inappropriate.

In 1973, Milt returned to Cornell for the third and final time, now as a Professor in the Department of Rural Sociology. He was concerned to find on his return to academia that in too many ways the exchanges between students and faculty that had characterized his own student and professional experiences had been transformed into a mode of lecturing which distanced students from faculty. For Milt, these new exchanges excluded the possibility of professors learning from their students and eroded the give and take that enabled special and long-term relationships to develop and sustain professional life. Another important change which Milt often fought was the declining appreciation of fieldwork and social practice and their connection to theory building. As Astri Wright, one of Milt’s students, acknowledges: “Professor Milton L. Barnett(s)...many years in anthropology and

international development enabled him to ceaselessly insist that there were ways to bridge the academic world with the ‘real.’”

Milt Barnett’s sustained commitment to what was a rapidly declining form of exchange between students and faculty and his appreciation of the connection between the practical and the academic were critical aspects of the Department of Rural Sociology’s reputation as a leading arena of development studies in the U.S. during the 1970s and 1980s. And, it is likely that it is because of these pedagogical and intellectual commitments that Milt attracted a steady stream of graduate students, some would say far too many students. But with Milt, students were the first priority, and there was always time for advice or council on professional or personal matters. In fact, students frequently shared in family events well beyond the confines of Warren Hall or the University. As Charlie Mehl, a graduate student during that period, recalled: “And then there were the nights of smelting, the evenings of collecting maple sap, and the good conversation and companionship.” And, as many of his students and colleagues also came to appreciate, we all received our reading assignments from Milt and talked on and on about a novel, a critical essay or the sharing of a recent trip. As a long-term friend and colleague, Cliff Wharton recalls:

I first met Milt in 1953 when he visited Venezuela as a part of an interdisciplinary team from the University of Wisconsin supported by Nelson Rockefeller for whom I was working. From the beginning I had a lasting impression of Milt as a caring scholar. He was genuinely concerned about people in all walks of life. Whether he was working with Native Americans, selecting ADC fellows to study in the United States, or advising prime ministers and presidents, he was always himself—Milt Barnett, the scholar, the advisor, the colleague, and the friend.

And, as Nancy Peluso says, in capturing what many of our recollections bring to mind: “I will remember with affection: the smile, the twinkle, the raised eyebrow, the adjustment of the pipe; the warmth, the concern, the moral support, the man.”

One need only add that despite the assurance and comfort he gave to others, Milt often saw himself in a different light. As a person whose mind (and office) was not always organized, he wondered why others sought his advice and trusted his judgment; he was sometimes uncertain as to whether he was indeed being helpful; he hoped that at the very least he was doing no harm; he had a deep sense of humility about his role and accomplishments in life.

Randy Barker, E.W. Coward, Jr., Shelley Feldman

Stuart Moffett Barnette

March 20, 1905 — November 5, 1992

Stuart M. Barnette, son of the late Mr. and Mrs. John Stuart Barnette, of Dover, Delaware, died on November 5, 1992.

He attended the Naval Academy at Annapolis, Maryland, Ecolé de Beaux Arts of Paris, France, and was graduated from the Massachusetts Institute of Technology.

At Cornell University, Professor Barnette was appointed Associate Professor of Architecture in July 1947, and promoted to Professor in July 1954. He retired on June 30, 1970 and was appointed Professor Emeritus of Architecture.

Office of the Dean of the University Faculty

Robert Eric Bechhofer

March 11, 1919 — May 13, 1996

Professor Emeritus Robert Bechhofer died in Ithaca, after a six-year struggle with Parkinson's disease. He is survived by his wife of 43 years, Joan Lebrecht Bechhofer; son David; daughters Robin, Laurie, and Ellen Kitchen; as well as three grandchildren, a sister, two sons-in-law, a nephew, nieces, and cousins.

Robert Bechhofer was born in New York City, and his family moved to Teaneck, New Jersey when he was a young child. He was educated in the Teaneck public schools. He entered Columbia College in 1937, and graduated in 1941 with the degree of A.B., majoring in mathematics and statistics. From 1941-45, he was Assistant Chief of the Analytical Section, Arms and Ammunition Division, Aberdeen Proving Ground, Maryland. In 1945 and early 1946, he was a Technical Engineer with Carbide and Carbon Chemical Corporation, Oak Ridge, Tennessee. In June 1946, he started graduate study in statistics at a summer session at North Carolina State College in Raleigh. He continued his graduate studies at Columbia University. After receiving the Ph.D. degree in mathematical statistics from Columbia in 1951, he was appointed Assistant Professor in Columbia's Department of Industrial Engineering. In 1952-53, he was at Cornell as a Research Associate in the Department of Mathematics and Visiting Associate Professor in the Department of Plant Breeding. From 1953-57, he was Associate Professor in Cornell's Department of Industrial Engineering; from 1957-67, Professor in the Department; from 1967-75, Chairman of the Department; and from 1975-77, Director of the newly-created School of Operations Research and Industrial Engineering. He became Professor Emeritus in June 1989.

During leaves from Cornell, Professor Bechhofer was Visiting Professor in the Stanford Medical School and Research Associate in Stanford's Department of Statistics (1958-59); Visiting Professor, Statistical Laboratory, University of Cambridge (1966-67); and Visiting Professor, Department of Management Science and Department of Mathematics, Imperial College of Science and Technology, London (1973-74).

Professor Bechhofer's research was in statistical theory and led to fundamental advances. Much of it was in a branch of the theory known as ranking and selection procedures, in which the goal is not merely to estimate the values of parameters, but also to rank them with the goal of selecting entities with the most desirable values of the parameters. He was one of the originators of this branch of research, and his contributions to it brought him many professional honors, including election to the International Statistical Institute and as Fellow of the American Statistical Association, the Institute of Mathematical Statistics, the Royal Statistical Society, the

American Association for the Advancement of Science, and other professional organizations, and selection as the first recipient of the Samuel S. Wilks Award for contributions to statistical methodologies in Army research, development, and testing.

Professor Bechhofer was an excellent teacher and lecturer, and gave many invited talks at meetings of professional societies, and several short courses outside of Cornell. Several students who took his courses were attracted into doing research in ranking and selection, and became collaborators on papers published jointly with him. Since his death, the School has received a very large number of letters from alumni, praising Professor Bechhofer as an outstanding teacher and an inspiring mentor.

Robert Bechhofer was a man of wide interests. As an undergraduate at Columbia, he was a member of the chess team, which was a powerhouse at the time. He was a connoisseur of classical music, with a particular liking for the compositions of Berlioz. He was widely read in literature in general, and an avid reader of the *New York Times* and other publications that kept him up with current events. He collected stamps. He and Mrs. Bechhofer collected prints, and Inuit carvings. In 1992, they donated a large collection of prints to the Herbert F. Johnson Museum of Art.

Two volumes of essays in honor of Professor Bechhofer were published in 1984 and 1985. On May 18, 1992, the Ph.D. computer laboratory and library of the School of Operations Research and Industrial Engineering was named in his honor as the Robert E. Bechhofer Graduate Resource Facility. This was made possible by the generosity of a group of alumni of the School. On this occasion, several friends, colleagues, and students of Professor Bechhofer shared their memories of his life and work.

Robert Bechhofer was an exceptionally generous and sweet-tempered man. Nobody can remember an occasion when he lost his temper. Even during his final illness, when walking became very difficult, he would walk several blocks to his office and exhibit the same cheerful and pleasant outlook. He worked almost to the end on his final publication, a Wiley volume written jointly with David M. Goldsman and Thomas J. Santner, extending the theory to which he had devoted his professional life.

David M. Goldsman, Bruce W. Turnbull, Lionel I. Weiss

Robert F. Becker

August 9, 1931 — July 23, 1996

Robert Becker died July 23, 1996, after a tragic and sudden accident. Bob died doing what he truly enjoyed, helping other people. He was painting the roof of the First United Methodist Church in Rushville, New York, when he slipped and fell onto the cement sidewalk 12 feet below.

Bob was born in New Jersey on August 9, 1931. He received his undergraduate degree from the University of New Hampshire in Horticulture in 1954 and his Master's degree in Botany from the same university in 1956. He worked towards a Ph.D. degree in Horticulture at the University of Missouri, and then spent two years in the military, reaching the rank of Captain.

In 1959, he joined the Cornell community as an Assistant County Agricultural Agent in Ontario County. In 1960, he was appointed Regional County Extension Specialist, and in 1970, Extension Specialist, located at the New York State Agricultural Experiment Station. The rapport he developed with growers and processors was well appreciated and he was named the Extension Specialist for processing vegetables for the College of Agriculture and Life Sciences. He held that position from 1970-86. But Bob was much more than an advisor on vegetable production. He was an advisor to many Cornell administrators on the direction the university should take in regard to vegetable and extension programming. He was respected and admired by the vegetable farmers of New York, and also by his peers around the nation. He was in widespread demand as a speaker at vegetable production meetings across the nation. In 1986, he was promoted to Associate Professor in the Department of Horticultural Sciences. Bob retired in 1992.

Bob developed and promoted the NYS Processing Vegetable Conference which later became the NYS Vegetable Conference, one of the major such conferences in the country. In 1980, Bob initiated the commodity advisory committees for sweet corn, snap beans, cabbage and tomatoes. It was a result of Bob's influence that growers and processors began to contribute research funds to the university through these commodity research committees. The cumulative value of these contributions to vegetable crop research at Cornell is in excess of \$1,000,000.

Bob's list of friends was many, not only within the Cornell community, but also throughout the entire nation. The awards given to him by the many organizations with which he was connected evidence this. He received a special award for 33 years of service from the New York State Cabbage Research Association in 1992, the Outstanding

Leadership Award from the New York State Vegetable Conference Planning Committee in 1992, and the Extension Division award of Excellence from the American Society for Horticultural Science in 1989.

Even in retirement, Bob devoted considerable time to the Experiment Station. He continued to serve as a resource person and provided support for the vegetable extension field staff and, during the season, would often be seen with them in different counties as they worked with growers and processors. He also helped the Experiment Station's vegetable variety evaluation programs on snap beans, sweet corn, and cabbage. He participated actively in the planning process for the NYS Vegetable Conference, and continued to participate in some of the commodity advisory committee meetings.

Bob had many interests beyond vegetable crops research and extension. He was a specialist on the history of vegetable production and varieties grown in the U.S. He advised many of the vegetable garden projects at historic centers around the country, such as Williamsburg and Sturbridge Village. He was on the advisory board of the Genesee Country Museum and active in developing its historic vegetable garden, including growing seed of some of the old outdated vegetables. During the centennial year for the Experiment Station, he was in charge of designing and planting a Heritage Garden. This garden had examples of varieties of vegetables grown for 100 years previously and compared them to the kinds of vegetables grown today.

Bob was also a great wood worker and specialized in carving shore birds. He and his wife, Fay, scoured the countryside for rare decoys and had a large collection at home. He was very active in his local church, the United Methodist Church in Rushville, New York, and was chairman of the church board.

Some of the professional organizations to which Bob belonged included the New York State Association of County Agricultural Agents where he had been secretary and vice president, the National Association of County Agents, the American Society for Horticultural Science, the Association of Living Historic Farms and Agricultural Museums, and the Empire State Soil Fertility Association.

His wife, Fay, and three children, Nancy, Dale, and Sheryl, survive him. He was very fond of his six grandchildren, and enjoyed making most of their Christmas presents. Bob will be remembered as a leader, a scholar, a mentor, and a lifelong friend by all whom knew him well.

Helene Dillard, Michael Dickson, Hugh Price

Israel Berstein

June 23, 1926 — September 22, 1991

The death of Israel Berstein on September 22, 1991 brought to a sad conclusion the heroic battle he had waged against Parkinson's Disease for over twenty-five years. He left behind a personal legacy of sparkling humor, mathematical breadth and brilliance, and a professional and personal generosity and optimism that will always be treasured by those who knew him.

Israel Berstein was born in 1926 in the town of Briceni, Bessarabia, which was then part of Rumania. The Soviet Union occupied Bessarabia in 1940, and in the same year the K.G.B. deported Berstein's father, Ephraim, to Siberia. He was never heard from again. A Rumanian and German occupation followed. The Berstein family, which consisted of Israel, his mother Hannah, and his sister Gita, took refuge with Rumanian friends and was thereby able to escape the roundup of Jews that routinely accompanied such occupations. With the reversal of German fortunes in the war came another Russian occupation in 1944. This liberation resulted in Berstein's induction into the Red Army. In the first week of action, however, he was severely wounded. Not only did those wounds cause major back injuries and the amputation of his right leg, but they also led to a severe case of bone tuberculosis, which kept him continuously hospitalized well into 1947. His family credits Berstein's survival at that time to the assistance of American relatives, who were able to supply desperately needed antibiotics. But Berstein did more than survive. He continued his school studies in the hospital and was so successful that shortly after his release he was admitted to the University of Bucharest, from which he received a degree in September, 1954.

Israel Berstein's professional career began in 1954 at the Institute of Mathematics of the Rumanian Academy of Sciences, where he was the star pupil of Simion Stoilov, the leading Rumanian mathematician of his generation. He specialized in analytic function theory and topology, and later exclusively in topology, receiving his doctorate on June 13, 1958. Already at that point he and his mentor, Tudor Ganea, were the two leading algebraic topologists in Rumania. Later that year at an international conference on geometry and topology in Iasi, Rumania, both Berstein and Ganea made the acquaintance of the British mathematician Peter Hilton. This encounter was the beginning of long mathematical collaborations for the three as well as lifelong friendships. Each of the three emigrated soon thereafter, Berstein to Israel in 1961, Ganea to Western Europe in the same year, and Hilton to the United States, to Cornell University, in 1962. In fact, in the year prior to coming to Cornell, Hilton had succeeded in arranging for Berstein to accompany him. Thus, in Fall 1962 Israel Berstein was appointed an Assistant Professor in the

Mathematics Department at Cornell. It was immediately clear to colleagues both at Cornell and outside that this position was insufficient for someone of his mathematical stature and talents. And so in 1963 Berstein was promoted to an Associate Professorship, and four years later he became a Full Professor.

Israel Berstein's mathematical work was primarily in the area of homotopy theory, a subbranch of algebraic topology that studies the properties of spaces remaining invariant under continuous deformation. His earliest contributions, which were collaborative efforts with Ganea, involved the study of so-called Lyusternik-Schirelman (L-S) category, a numerical measure of the homotopy-theoretic simplicity of a topological space. This notion has applications to many areas of topology, as well as to other subjects, notably to the study of singularities of real-valued functions. In his work on L-S category, first with Ganea, and later on his own and in collaboration with Hilton, Berstein contributed many important insights, extensions, examples and applications, becoming the foremost authority in the world on this subject.

It would be inaccurate, however, to leave the impression that Berstein's career was characterized by a single-minded devotion to one topic. On the contrary, his interests in topology were very diverse and his knowledge of the literature and the state of the art in many areas was extraordinarily deep and accurate. In addition to his work on L-S category and related topics in homotopy theory, Berstein made significant contributions to differential topology, the theory of group actions on manifolds, and to the theory of branched coverings.

A quick glance at the list of Berstein's published papers will reveal that close to two-thirds of his postdoctoral papers were collaborative efforts. This was because Berstein loved mathematics in both its human and personal aspects and its theoretical aspects. He loved to talk about mathematics and to discuss and share mathematical ideas. From this point of view, he was extraordinarily generous with his time, energy, and talent. Certainly a significant number of his collaborative publications arose from the many such discussions held in his office. But the published record does not show the countless suggestions, queries, tips, ideas, and attempted proofs that arose in that forum to the benefit of all who were there, both students and colleagues.

With a similar spirit and expertise, Berstein ran the Department's Senior Honors Seminar and a topology literature seminar for graduate students. This last, known informally as "The Berstein Seminar," was of great importance in the education of several generations of topologists, including one (now senior) member of the faculty. The Department has continued this seminar, now formally naming it "The Berstein Seminar" in his honor.

Israel Berstein's mathematical breadth, insight, and sharpness were widely known and appreciated. A story is often told about a former colleague who was advising a prospective visitor to Cornell as to how one organizes a general mathematics colloquium talk at Cornell. "For the first half hour," the ex-colleague advised, "make sure that everyone can follow you. The next fifteen minutes are for the experts. Then, the following ten minutes are for you and Berstein. And the final five minutes are for Berstein alone." This story not only captures some of the brilliance of Israel Berstein, as well as the humor that was always part of his life, but also, it accurately suggests the high esteem in which he was held by his colleagues and the affection they felt for him.

Throughout a life constantly plagued with serious misfortunes, Israel Berstein was always an optimist. He considered himself a very lucky man. Lucky in the family, friends, and colleagues that he had, in the opportunities that he had, and in the life he was able to lead here at Cornell. And in turn, he was generous to all who knew him. From childhood on he was a major source of help and support for his mother and sister. He also assisted a number of Rumanian mathematicians, former school friends, in emigrating to the West. He was devoted to students throughout his career, and, they returned his sentiments. One of his happiest teaching moments, for example, occurred when a group of students awarded him a plaque of appreciation which read:

"BERSTEIN EVER GEOMETRIZES"
For your humor, kindness, and patience, to you
Professor our lasting admiration and gratitude.
With fondness, Math 452, 1966.

The 1992 Cornell Topology Festival was dedicated to the memory of Israel Berstein. The keynote lecture was given by Peter Hilton who finished his talk with the statement, "I do not expect in my lifetime to meet someone comparable."

Israel Berstein is gone, and we shall have to work our way through "the last five minutes" without him.

Marshall M. Cohen, Peter J. Hilton, Thomas W. Rishel, James E. West, Peter J. Kahn

Richard Black

November 2, 1926 — September 27, 1998

Dick Black came to Cornell from the University of Illinois in 1959, at a time when the Agricultural Engineering Department (now Agricultural and Biological Engineering) was in transition from a department that was very applied, to one that could meet the needs of the rapidly changing agricultural sector in New York and the country. It was a time with increasing emphasis on research as well as strengthening the department's teaching program. Dick brought an unusual combination of skills very appropriate to the period. He coupled a genuine interest in the problems farmers faced with a willingness to address those problems through research in the field setting. He had a special skill in designing and implementing research that involved the real-world complexities of the natural environment. Dick was an artisan, with a range of skills unusual for an academic. He was an accomplished machinist, metalworker and carpenter, and used all of these skills in carrying out his research program. This program, centered on the drainage problems characteristic of New York, was one of the earliest that linked theory with the realities of a very heterogeneous physical situation characteristic of much of the state.

In addition to his research on agricultural drainage, Dick carried heavy teaching and advising responsibilities. He taught in both the department's technical program in the College of Agriculture, and the relatively new professionally oriented program carried out cooperatively with the College of Engineering. While he contributed substantially to the latter, including the development of the department's hydraulics laboratory, Dick's special forte was working with the department's "transfer" students in the technical program. These students, many from the state's agricultural and technical institutes, had special needs that Dick was able to meet. He was faculty advisor to most of these students, and was instrumental in their success.

With his boundless energy, Dick also was involved with the Department's Extension program. He was a strong advocate for the formation of the New York State Land Improvement Contractor's Association, and served as Secretary to the Association for a number of years.

Dick was an outdoorsman, with an avid interest in hunting and fishing. He shared these interests with youth in the community, through service as a leader in the Boy Scouts. He was a warm and generous individual, always willing to assist others.

In 1982, a combination of increasing interest in the area of extension, and the lure of returning to the mid-west, caused Dick to accept a position of Professor of Extension at the University of Kansas, where he remained until

retirement. He was a Professor Emeritus at both Cornell University and the University of Kansas. Following retirement, Dick and his wife, Marilyn, indulged in a favorite pastime, traveling with their recreational vehicle. It was on a visit to their daughter, Carolyn, in Alaska that he took ill and died soon after on September 27, 1998. His wife, Marilyn; son, Jim; two daughters, Carolyn and Barbara; and eight grandchildren survive Dick.

He was a good friend and colleague, and is missed.

Tammo Steenhuis, Gilbert Levine

Nicholas Cleaveland Bodman

July 27, 1913 — June 29, 1997

Nicholas Cleaveland Bodman, known to his colleagues as Nick, came to Cornell in 1962 as a Professor of Chinese Linguistics in the then Division of Modern Languages. Even prior to that, he had enjoyed an active and varied career that had contributed to his stature as an eminent figure in his field.

Nick was born in Chicago in 1913. His father was a successful businessman and his mother wrote a series of romantic novels with titles like *Castle of Doubt*, *The Guttering Flame*, and *The Nymph was Mortal*. He was educated at the Middlesex School in Concord, Massachusetts, and entered Harvard as a member of the class of 1935. He left after only one year, however, and spent several years doing clerical work and vacationing in Europe, which further stimulated his curiosity about languages. He joined the navy in 1941, and in early 1942, he was posted to FRUPAC (Fleet Radio Unit Pacific Fleet) at Pearl Harbor, Hawaii, where he served in the group that deciphered the Japanese naval code. There also, two events crucial to his future life occurred: he met and married his wife, Frances Sorrel Wainwright, and he took his first formal lessons in Chinese. At the end of the war, he retired from active duty and while on terminal leave was promoted to Lieutenant Commander. In the fall of 1945, he entered Yale University as a junior, and by 1950 had completed his B.A., M.A., and Ph.D. degrees in Chinese and Linguistics. While at Yale, he studied with Leonard Bloomfield, George Kennedy, and Lo Ch'ang-P'ei, who subsequently returned to China to found the Institute of Linguistics in the Chinese Academy of Social Sciences. On completing his Ph.D. degree, he joined the Foreign Service Institute of the Department of State (FSI) where he remained until joining the Cornell Faculty in 1962. All of that time was by no means spent in Washington, however. In 1951-52, on loan to the British Government, he was posted to Malaya during the emergency there to establish and run a language school for British police and civil servants, where he created a still unrivaled course in the Hokkien or Amoy dialect of Chinese. From 1955-57, he founded and ran the still existent Language and Area Training Center in Taiwan. He subsequently served as head of the FSI Department of Far Eastern languages. In 1961 and 1962, he was awarded Guggenheim and National Science Foundation fellowships for linguistic fieldwork in Darjeeling, India, where he collected first hand material on the Tibeto-Burman languages spoken in the Himalayan region, including the little known Lepcha. In 1962, he joined the Division of Modern Languages at Cornell, where he remained until his retirement in 1979, primarily teaching courses in the Chinese language, Chinese dialects and the history of Chinese. In 1967, he was a visiting professor at the School of Oriental and African Studies, University of London, and in 1968-69, on sabbatical leave, he carried out research in Hongkong on the Min dialects and in Kathmandu,

Nepal on Tibeto-Burman languages. In 1972, he spent a semester at the University of Hawaii teaching and carrying out research on Chinese dialects.

After retiring from Cornell as Professor Emeritus, he continued his active scholarly career for more than a decade. He made trips to Mainland China in 1980 and 1983, at the invitation of the Institute of Linguistics, Chinese Academy of Social Sciences. While there, he gave talks, met with colleagues, and continued his work in Fujian and Guangdong provinces on five southern Min dialects. His son, Richard, also a scholar in Chinese, accompanied him on one of these trips and recounts Nick's lively engagement in these activities, including his joy in interacting with local farmers and others in their own dialect including, characteristically, at least one humorous story.

In 1986, he was presented with a festschrift, *Contributions to Sino-Tibetan Studies*, edited by two of his former students who had become active scholars in Chinese Studies.

In 1993, Nick and Sorrel celebrated both his eightieth birthday and their fiftieth wedding anniversary. In the following year, as his health was declining, they left Ithaca, and moved to Northfield, Minnesota, to be nearer their family.

Nick was a formidable scholar in Chinese linguistics, and a name to be reckoned with in that field. He was the author of magisterial and pioneering works, especially in his special field of Sino-Tibetan historical linguistics, including four books and numerous papers and reviews in learned journals. He was a pioneering figure in the description and analysis of Chinese dialects, starting with southern Min and the reconstruction of Proto-Min and extending this into the reconstruction of Old Chinese and still further into Sino-Tibetan. His work on this was widely recognized and a collection of his work was translated into Chinese and published in Beijing in 1996, which fortunately was in time to be a source of satisfaction to him before he passed away. As one prominent young scholar remarked to one of us admiringly, Nick was a walking encyclopedia on Chinese dialects without peer.

Nick was unsparing in his concern for his students and unselfish in sharing his work and insights with them on which they could build their own. He extended his seminars and classes by inviting them to his home for meals and discussion, and a significant number of the active and important scholars and teachers in Chinese language and linguistics were formed to a great extent under his tutelage. He was also supportive of younger colleagues, a characteristic that extended to those outside his own special field.

Nick was in love with and fascinated by language, its complexities, and the interplay of sound and symbol. This manifested itself in many ways in addition to his multiple language competence: in his attachment to ciphers,

puzzles and music, as well as in writing light verse and, perhaps all, in a marvelous capacity for puns (to the benefit of many an otherwise unmemorable meeting). Though he could sometimes appear to those not well acquainted with him to be aloof and even imperious, those of us who were his colleagues and who enjoyed the company of Nick and Sorrel along with their hospitality on so many gracious and often imaginatively conceived occasions (which continued after his retirement), knew him as a witty, thoughtful and generous companion, who loved conversation, entertaining, cruises, and cats. In particular, he possessed a puckish but non-destructive wit, which frequently expressed itself in outrageous but apt puns. With all of his knowledge and experience, he revealed on occasion an almost childlike and fetching curiosity and capacity for surprise about the new, and even the ordinary, that came to his attention. He also possessed a strong sense of order and propriety, and when confronted by meanness or unfairness, was sometimes not only disturbed, but even surprised by its very existence, since it was so far removed from his own outlook and code of conduct.

He was survived by his wife, Sorrel; his son, Richard; and daughter, Ann; and he survives as well in his work and in the memories of many of us who were his colleagues, friends, or students.

Richard L. Leed, Frans Van Coetsem, James W. Gair

Maurice Bond

July 5, 1897 — February 22, 1992

Dr. Maurice Bond, Professor Emeritus of Agricultural Economics, died February 22, 1992 at the age of 94. He played a leading role in the development of cooperative extension programs, particularly in the marketing of agricultural products and marketing information for consumers. His leadership made a difference in extension at both the state and national levels. He believed strongly in extending the knowledge base generated at the College of Agriculture to the agricultural community of the state and nation and to the consuming public. He served as project leader for extension programs within the department and was Director of the New York State Cooperative Extension Service from 1954 until his retirement in 1962.

Extension work with the farming community had been firmly established in the department under the leadership of Dr. George Warren when Dr. Bond joined the faculty in 1928. Bond, together with his colleagues, L. C. Cunningham and V. B. Hart, broadened the scope of agricultural economics programs in extension using field surveys and farm accounts as an integral part of their work. His personal characteristics contributed strongly to his effective leadership and administrative skills. He was outgoing but firm in his convictions. He enjoyed people and his interactions with them. He had boundless energy and displayed high moral principles and integrity in all that he did. He paid close attention to details but did not lose sight of his objectives. He dealt with difficult problems without becoming emotionally involved and was an effective mediator. He was frugal in handling personal as well as public resources.

Maurice Bond was born on a farm in Orange County, Vermont, on July 5, 1897, beginning a lifelong association with agriculture. He grew up in Thetford and graduated from Thetford Academy. His professional association with agriculture began with his graduation from the University of Vermont in 1920 with a B.S. in agriculture. After graduation he spent six months as a second lieutenant in the U.S. Army Infantry. He taught high school for a year and a half and spent two years at the New York State School of Agriculture, Morrisville, where he taught courses in dairy husbandry and dairy science; he also coached football. He spent a year with the New York Holstein-Friesian Association before returning to the University of Vermont for his M.S. in 1924-25. He came to Cornell for a Ph.D. in 1926 working with H.A. Ross and W.I. Myers. His dissertation, *Marketing Milk Through Ice Cream*, was completed in 1928.

Dr. Bond chose to stay at Cornell and was appointed Assistant Professor and Extension Economist in 1928. He spent his entire career at Cornell in extension. Some time was spent working outside the department on a variety of special assignments. Many organizations appreciated his willingness to help them for a few weeks or months with a particular problem or project.

Dr. Bond authored more than 150 numbered departmental publications as sole or joint author. An important part of his early work was with vegetable growers. Specialized account books were developed to encourage growers to keep production and financial records. The account books were collected at the end of the year and summarized. This information provided an essential part of extension programs with growers. He published situation and outlook materials for New York agriculture and the dairy industry.

During the 1940s Maurice concentrated his efforts in making agricultural census data more useful and broadly available to agricultural and rural communities. He published data from the 1935 and 1940 agricultural censuses for individual townships within each county of the state including acreage, production and yields for individual crops, and livestock numbers and output. He continued these efforts for the agricultural censuses of 1945 and 1950. Several publications were authored showing trends in agricultural production over periods up to 100 years. Other studies examined vegetable production in New York and in competing areas of other major states.

Dr. Bond co-authored a widely used book with his colleagues, Hart and Cunningham, entitled, *Farm Management and Marketing*. This book, published in 1942, was written as an introductory text and was generally adopted throughout the Northeast in agricultural schools. More than 36,000 copies were sold with modest profit to the authors. Public service was the major objective in writing the book.

Dr. Bond was project leader for extension programs in agricultural economics during the 1940s and early 1950s. He directed a major expansion in the extension marketing staff and programs during his tenure as project leader. The new work in marketing perishable farm products, including fruit, vegetables, poultry and dairy, and the development of a consumer food marketing information program, were especially important. This latter program, initially developed in Ithaca, was extended to New York City with a special office and program in 1948.

Maurice was appointed Director of Cooperative Extension in 1954. He continued to demonstrate the same creative leadership in this new appointment. He administered the separation of Cooperative Extension from the Farm Bureau shortly after becoming Director. He was able to avoid the difficulties encountered commonly in other states by his openness and skills in communicating with farmers, agricultural leaders and rural communities.

This separation necessitated the formation of new extension structures at both the state and county level. A state advisory council was established representing extension's different clientele groups to review program objectives and plans for the year ahead. Local extension associations were formed in each county. Agricultural, 4-H and home economics programs were brought together under a single county administrator. This organization improved working relationships among the three divisions and simplified the administration of county programs and interactions with county governments. County associations were developed as membership organizations with an elected board to advise county staff and to represent the association in dealing with state and county officials. This structure has proven to be effective over time.

While Director, Dr. Bond opened up the process of selecting candidates to be considered for positions on his staff and at the county level. This made the process more competitive and increased the likelihood that the most qualified individual would be selected for each position. Many of the individuals chosen in this process provided effective leadership for Cooperative Extension in the 1960s and 1970s after he had retired. He also provided leadership at the national level in developing extension programs in marketing. He was a member of the national Extension Committee on Organization and Policy (ECOP). He chaired the ECOP subcommittee on marketing and helped establish new national initiatives in marketing across the country. During his tenure as Director he spent 1956-57 reviewing the Cornell Project in the Philippines and assisting the organization of extension activities in that location.

Dr. Bond was a member of Sigma Xi, Phi Kappa Phi, Epsilon Sigma Phi, and Alpha Zeta. He received the Superior Service Award from the United States Department of Agriculture. He retired in 1964 after more than 36 years of service to the University and Cooperative Extension. His professional activities did not end with his retirement. He spent 1963-64 as a Visiting Professor at the University of the Philippines, Los Banos, and as an Extension Consultant. He continued to travel and consult for more than a decade after his retirement including trips to Peru, Spain, Portugal, Yugoslavia, Turkey, Greece, and Mexico.

He was predeceased by his wife, Flora, a classmate at Thetford Academy, and survived by three sons: Philip, Bradford, and Robert. He had fourteen grandchildren and fifteen great grandchildren at the time of his death. During his residence in Ithaca, he was active in many local organizations, including the First Congregational Church of Ithaca, the Ithaca Rotary, and the Baden-Powell Council of Boy Scouts. He held a variety of positions in these organizations and received scouting's highest award, the Silver Beaver, in 1969. Other public service activities included the United Fund, Senior Citizens Council, and Friends of the Library. His long-time colleagues

in the Department of Agricultural Economics and Cooperative Extension remember him with great fondness and respect. He was a true public servant, who left an enduring mark on the fields he did so much to fashion and sought to serve with dedication and principle.

R.S. Smith, B.F. Stanton, C.E. Wright, R.P. Story

James Lewis Brann, Jr.

June 24, 1913 — July 29, 1990

James Lewis Brann, Jr. was born in Norwood, Massachusetts, a small town near Boston. As a youth, he was active in the 4-H Club program and participated in the training program in gardening and woodworking. He received a state award for outstanding service as a 4-H instructor. This was a prophetic indication of his future professional role as teacher.

He attended Boston University for a short time before transferring to Massachusetts State College where he majored in entomology and graduated in 1939. He then came to Cornell to continue his studies in entomology. He was appointed assistant in research in the Department of Entomology at the New York State Agricultural Experiment Station for the summers of 1939 and 1940 working on Long Island on the biology and control of insect pests of corn. He held a research fellowship in the Department of Entomology at Cornell, 1941-42, conducting research on the control of spider mites and insects affecting florist crops. He was appointed assistant in research, New York State Agricultural Experiment Station on March 16, 1942, assigned to the Poughkeepsie Substation. Cornell awarded him the Ph.D. degree in 1944.

Dr. Brann continued his career at the Poughkeepsie Substation being appointed assistant professor April 1, 1945. The commencement of his faculty career coincided with the post World War II surge in agricultural technology. Fruit growers were faced with serious problems in pest control because of the expanding pest complex, high labor costs, time-consuming application procedures and in some cases, inadequate water supplies. What was needed was an overhaul of traditional pesticide application technology.

Dr. Brann accepted this challenge, bringing to these problems an unusual combination of skills. He was thoroughly grounded in his own discipline, entomology. His mechanical aptitudes enabled him to incorporate principles of agricultural engineering and lastly, he could balance concepts and methodology of scientific research with technology which could be incorporated into grower practice. It was in the framework of these disparate considerations that Dr. Brann forged his fruitful career. His professional aptitudes and his personality enabled him to work comfortably at the interface between scientific colleagues and grower clientele.

He resigned his position on March 31, 1948 to move to Cornell at Ithaca as associate professor to teach and continue his research on equipment for the efficient application of pesticides. He was promoted to professor in

1954. The same year, he was awarded a U.S. patent for a very novel “Spraying Apparatus”. A few prototypes of his design were built, tested and used commercially. Even though the design did not catch on with growers, in part because it was developed a little before its time, Dr. Brann’s work served as a stimulus for continuing efforts to improve the efficiency of orchard sprayers. These efforts eventually resulted in smaller machines designed for low volume sprays on the smaller trees planted in recent years. He also studied the potential of electrostatically charging dust particles to make them deposit more effectively on target plants. He determined that charged dust particles deposited very unevenly due to a basic underlying problem and dismissed the concept as impractical. Years later, the same principle was tried for spray droplets. After extensive research and testing, the concept was judged to be impractical. Again, Dr. Brann was in the forefront.

In 1964 Dr. Brann assumed a new assignment, Professor of Entomology-Extension, as a specialist on fruit insect control and pesticide application. He also became Department of Entomology Extension Leader. Here his teaching and training abilities, which he demonstrated so ably as a youth, were put to excellent use. His outgoing personality, ability to communicate plus his careful conservatism with his recommendations to farmers made him very effective. He was respected and popular with growers, county agents and commercial field men. He was sensitive to the environmental and health implications of pesticide use and worked industriously to insure full compliance of Cornell’s pesticide recommendations with regulation emanating from the Environmental Protection Agency. His commitment and foresight did much to reduce health, legal and publicity problems. When the concept of integrated pest management (IPM) became popular and many zealots were making exaggerated claims for what it could do, Jim endorsed its application but only for proven systems. Throughout his twelve years of service to extension, Jim maintained his devotion to Cooperative Extension and to his fruit grower clientele whose adaptability and sense of responsibility won his loyalty and respect.

Dr. Brann visited most fruit growing regions in the United States and Canada to visit colleagues and study fruit insect problems and control practices. As a consultant to the United Fruit Company while on sabbatical leave in Panama in 1954-55, he developed a much needed method for control of red rust thrips on banana. In 1959 he went to Israel and Greece to advise workers on new methods and equipment for use in fruit pest control.

Although deeply committed to the heavy demands of his professional assignment, Jim struck a happy balance between work and play. Prime time was reserved for family fellowship and the sharing of common interests. Levity and humor infused his work routine and his democratic philosophy and personal style engendered a cordial rapport with students, staff, faculty colleagues, industry representatives and grower clientele.

Jim was a skilled outdoorsman whose mobility by van and canoe placed the fresh waters of the eastern seaboard within his range. Jim combined his love for the out-of-doors with his keen sense of environmental responsibility. He was a strong advocate of the Nature Conservancy.

Dr. Brann retired in September, 1976. He and his wife, Doris (Toby), moved to Sopchoppy, Florida in 1981. They were quickly accepted in the community and around their beautiful home, Jim raised blueberries, pecans and chestnuts and maintained a fine garden. He also pursued his special hobby, fishing.

Dr. Brann died at his home on July 29, 1990. He is survived by Doris, his wife of 48 years; one daughter; one son; two brothers; five grandchildren; and one great grandchild.

E.H. Glass, E.H. Smith, L.L. Pechuman

Alvin J. Braun

July 10, 1915 — June 7, 1999

Alvin J. Braun, Professor Emeritus of Plant Pathology at Cornell University's New York State Agricultural Experiment Station in Geneva, died June 7, 1999 at the age of 83.

Professor Braun began his career at Cornell in July 1945, and retired in January 1977. For 31 years, Al studied diverse fungal and bacterial diseases of grapes and other small fruits and how to control them. Most of his work was of a very applied nature and was of direct benefit to the growers of New York State. He was responsible for developing up-to-date disease control spray schedules that could be used by New York grape and berry growers. Determining what new fungicides were best to use, he analyzed and made recommendations related to the proper spray equipment growers should be using.

Al also studied virus diseases to determine whether control measures could be developed either through the use of cultural practices or through the breeding of resistant varieties. He worked cooperatively with scientists in what was then the Department of Pomology at Geneva on developing disease-resistant varieties of grapes and small fruits.

Early in his career, Al developed an interest in nematodes and how they affect grape and berry crops. He conducted surveys of the nematodes associated with those crops in New York State. He also conducted research studies on transmission of viruses by nematodes in raspberries and other crops.

Not only was Professor Braun a distinguished scientist with a worldwide reputation on the biology and control of grape and small fruit diseases, he also was a fine human being. He was a quiet individual, but he had a way of communicating with people that made them listen to what he had to say. He annually gave detailed reports of his research to New York grape and berry growers, and interpreted them so that the growers could improve their practices productively. His information was always helpful, and the growers used his recommendations for disease control routinely.

Al received a B.S. degree in Biological Sciences from the University of Chicago in 1937, and a Ph.M. degree in Botany from the University of Wisconsin in 1938. He received his Ph.D. degree in Plant Pathology from Oregon State College in 1947.

Prior to coming to Cornell, Al was a research assistant in the Department of Plant Pathology at the University of Wisconsin in 1937-38; a nursery inspector in the Department of Agriculture and Markets, State of Wisconsin, Madison during the summer of 1938; a research assistant in small fruit disease investigations at the Oregon Agricultural Experiment Station, Corvallis, 1938-42; an analytical chemist with Sherwin-Williams Company, Chicago, Illinois in 1942-43; an assistant pathologist with the United States Department of Agriculture in Salinas, California (studying the use of guayule for the war effort) in 1943-44; and continued with the USDA as a pathologist conducting surveys of plant diseases in Ohio and Michigan in 1944-45.

At Cornell, Al was appointed Assistant Professor of Plant Pathology in 1945. He was promoted to Associate Professor in 1950 and to Professor in 1957.

In 1956, Al spent a sabbatical leave in the nematology section of the USDA Agricultural Research Center, Beltsville, Maryland. In 1966-67, he spent 18 months as a consultant in plant nematology for the United Nations F.A.O. rice project in Bangkok, Thailand. His final overseas assignment was in 1975, when he spent six months on sabbatical leave at the Research Institute of Pomology at Skierniewice, Poland.

In addition to his highly successful professional career, Al was also an active leader in the community, especially within the Presbyterian Church, where he served as an elder among other positions. He was very active particularly in insuring the well being and upkeep of the church buildings.

In retirement, however, Al's roles were primarily as a devoted husband and dedicated grandfather to his five grandchildren. He and his wife, Edith, made countless trips across the eastern states to visit and help with the care of the grandchildren.

Al had a broad circle of friends in Geneva. He was an avid and accomplished poker player, and also occasionally played bridge. His friends from those happy evenings together remember him with great affection.

Surviving Al are his wife, Edith; two sons, Ken (Gail), Naperville, Illinois, and Robert, Billerica, Massachusetts; a daughter, Andrea (David) Gransee, New Canaan, Connecticut; grandchildren Abigail and Katherine Tarbox, Caroline Gransee, and Karen and Stephen Braun; a brother, Joseph Braun, Port Orange, Florida; and numerous nieces and nephews.

George S. Abawi, James E. Hunter, Herb S. Aldwinckle

Dalai Brenes

January 8, 1907 — April 7, 1997

Dalai Brenes, Professor of Romance Studies, Emeritus, died peacefully in Amherst, New York, at the age of 90. He came to the United States in 1920 after early schooling in Costa Rica, where he was born in Heredia into a distinguished and culturally active family. His father, Roberto Brenes-Mesén, who held academic posts in this country, was a well-known poet and essayist. Dalai was predeceased by his wife, Eleanor, and their daughter, Uday Hoffberg; and he is survived by his grandchildren, Claudia and Kevin Hoffberg of Lafayette, California; and Eric Hoffberg of Rochester; and two great-grandchildren.

Dalai received his B.A. degree from Northwestern University in 1936 and an M.A. degree from the University of Chicago a year later. He then interrupted his education to take on teaching posts at Pennsylvania State College from 1938-40 and at the YMCA College of Chicago during the war years. One of the founding faculty of Roosevelt University in Chicago, he rose in its ranks and chaired the Department of Modern Languages from 1945-54, when, at the invitation of Morris Bishop, he came to Cornell as an Instructor and doctoral candidate. He completed the degree in 1957 with a dissertation on “The Sanity of Don Quijote: A Study in Cervantine Deception,” at which time he was appointed Assistant Professor. He was promoted to Associate Professor in 1962, to Professor in 1965, and he retired in 1972.

Dalai read and studied avidly all his life. He was never wanting for projects and spent many hours in remote Spanish archives, from which he sent back detailed and enthusiastic letters, and he would discourse at length about his innovative, even idiosyncratic, readings of classical texts. But, ever the perfectionist, he aired few of his ideas and discoveries in print. Early on, he collaborated on an article concerning manuscript problems in the *Song of Roland*, and published a piece on *Cervantes*. Later, he authored a pair of essays on Spanish language and culture. After his retirement, when one would often see him in Olin Library, he devoted himself to the complex and debated question of the authorship of the picaresque narrative, *Lazarillo de Tormes*, publishing some of his findings in *Hispania*, a journal widely circulated in the field. As recently as 1987 and 1992, two of his puzzle breakers appeared in a distinguished journal in Spain, the *Boletín de la Biblioteca de Menéndez Pelayo*.

Teaching was Dalai’s true passion, undergraduate teaching in particular, and it had for him an almost sacramental attraction. He held strong and unwavering views on how language should be taught, involved himself in university-wide committees on teacher preparation in foreign languages, and monitored teacher-trainees at Ithaca High

School. For many years, as the lone instructor in Spanish literature, he carried an overload in order to sustain the severely understaffed offerings, yet, approachable and generous to a fault, he maintained an open-door policy with students, devoting hours of conference time to them and much energy to program development. The core structure of the undergraduate major in Spanish still bears his stamp. He also helped to guide the occasional graduate student towards a successful career; those who worked with him recall him as a wise and worldly mentor. Once during the 1960s, he accompanied a student talent group on an adventurous Latin American tour designed to promote relations between the United States and its neighbors. He served several terms as acting chair of the department, but his most vigorous service contribution to Cornell was as a member of the Arts College Admissions Committee. He labored devotedly in this capacity for many years both before and after his retirement and, according to the testimony of the director of admissions, interviewed more applicants than any other faculty member.

Perhaps because he came late to the academy, Dalai always had an unorthodox take on things. Just as he never lost the lilt of his first language, he carried with him his upbringing in Central America and often clashed with a conformist world. There was a mystical side to Dalai, and conversations with him could be both rewarding and baffling. Whether the scene was Cornell faculty meetings or community school board sessions, he was outspoken and sometimes embattled, and from his home in Lansing he fired off long, thoughtful, and impassioned missives to the local newspapers, where his name regularly graced the editorial pages. Highly principled and a defender of academic freedom, he held committed political views and championed causes like freedom of speech and social justice.

Dalai was a gentle man and a gentleman. He embodied the remnants of a now bygone age of civility, and in the last years of his career he was witness to dramatic growth and to entirely new directions in his department at Cornell and in his discipline. He believed in courtesy, punctuality, attentiveness, personal responsibility, and other virtues whose diminished currency he deplored and which he saw fit to defend with patience but persistence. Although he would be able to indulge his bent for travel and photography, he retired from teaching with great reluctance at a moment when the institution, not the individual, still determined the timing of that final step. Yet he exited the academic stage with a record of humane traits—humility, honesty, elegance, rigor—that are to be prized even in the face of changing fashions in teaching and scholarship.

David I. Grossvogel, Alain Seznec, Maria N. Stycos, John W. Kronik

Herbert W. Briggs

May 14, 1900 — January 6, 1990

Herbert W. Briggs would not want this memorial statement to be written. We submit it reluctantly. We do it for the selfish joy of our own recollection, a joy that will be shared by others who had the good fortune to know him.

Briggs (an abbreviation he always employed professionally and sometimes personally) would command us to “get on with it.” So we will, at least with the formal record.

Briggs was born in Wilmington, Delaware, in 1900. He received his A.B. degree from West Virginia University in 1921, and his Ph.D. degree from Johns Hopkins in 1925. After teaching first at Johns Hopkins and Oberlin, he came to Cornell in 1929, and taught international law and international politics until his retirement in 1969. In addition to international relations courses focusing on the Atlantic Community, he regularly taught the Far Eastern Policy of the United States and U.S.-Latin American Relations courses.

He was appointed professor of international law in 1947, and in 1958 was named the Goldwin Smith Professor of International Law in the Department of Government and the Cornell Law School. From 1946 to 1952 he served as chairman of the Department of Government, and along with the late Robert Cushman, should be regarded as one of the founders of the department.

His lectures outside of Ithaca included a year as Fulbright Professor at the University of Copenhagen Law Faculty, and addresses to the Turkish Institute of International Law, the University of Aarhus, the University of Oslo, the Hague Academy of International Law, and the U.S. Naval War College.

Stephen M. Schwebel, a judge of the International Court of Justice recently noted in the *American Journal of International Law*:

“Briggs was perhaps best known for his casebook, *The Law of Nations: Cases. Documents and Notes*, first published in 1938. A work of exceptional pith and insight, it was one of the major teaching tools of international legal education in the United States for many years and a work that was highly regarded abroad. He was the author of *The Doctrine of Continuous Voyage* (1926), The International Law Commission (1965), two sets of lectures at the Hague Academy, and some 85 articles in legal and other Journals, above all the *American Journal of International Law*...

“Professor Briggs was a member of the Board of Editors of the *Journal* from 1939 until his death. He served with distinction as Editor in Chief (1955-1962) and as president of the American Society of International Law (1959-1960). A major figure in the Society and on the *Journal* for more than 50 years, Briggs brought to these and other activities an intellectual and personal vivacity that won universal regard and affection. His appearance and aptitude were unchanged over the decades; his red face, white hair and blue eyes may be said to have been the only nationalistic characteristics he displayed.

“Briggs ably served from 1962 to 1966 as a member of the UN International Law Commission, whose procedures and product he had been studying in depth at the time of his election. The codification of international law was a longstanding interest, to which he had contributed in the Harvard Research in International Law, the Harvard Draft Convention on International Responsibility of States for Injuries to Aliens, and the work of the Institut de Droit International. He served as counsel for Honduras, Spain and Libya in four cases before the International Court of Justice (and contributed to the analysis of the Court’s jurisdiction and jurisprudence in his writings). He also served as counsel to Chile and Canada in international arbitral proceedings. Briggs was a member of the United States delegation to the Vienna Conference on the Law of Treaties in 1969.

“A mark of the professional esteem in which Briggs was held was his appointment in 1975 by the Governments of the United Kingdom and France as one of five members of a court of arbitration on the delimitation of a portion of the continental shelf in the English Channel.”

That’s the record.

But Herbert was so much more than Briggs’s distinguished scholarly and professional record. He was a vital man whose personal characteristics were transparently contradictory. He was gruff; he was patient; he was empirical; he was sensitive; he was a workaholic; he liked real alcohol; his tastes were Spartan; he was a bon vivant; he was a great raconteur of funny stories; he was a serious and committed scholar; he was detached; he was ebulliently involved.

To recall one’s association with Herbert Briggs—particularly for those who were his junior colleagues—is to evoke a Shakespearean lament:

He was a man, take him for all in all,
I shall not look upon his like again.

Earl Brooks

March 7, 1914 — May 30, 1994

Earl Brooks, aged eighty, died unexpectedly of a heart attack on May 30, 1994 at his home in Ithaca.

Earl Brooks joined Cornell University in 1947 after World War II service in the U.S. Navy. His initial teaching was in the New York State School of Industrial and Labor Relations as a Professor of Personnel Management, but in 1955, he accepted an invitation to join the Graduate School of Business and Public Administration (the original name of the current Samuel Curtis Johnson Graduate School of Management). Earl also headed up the School's Executive Education Program for a decade and was a major contributor to that program for over thirty years. In recent years, Earl taught in the School of Hotel Administration and in executive programs.

While Earl's courses were in the area of human resource management (personnel management and negotiations), they were characterized by Earl's sense of humor and insights into people. There was frequent laughter followed by interesting insights and conclusions. Many of the School's most successful alumni, when asked what courses in their M.B.A. program they found most useful, would answer "Earl Brooks' courses". As one graduate wrote to Dean Tarr in 1984: "Earl Brooks was and continues to be a very special person to many of us who graduated from the School. He influenced us in a profound, but common sense way that found immediate application in the real world."

Once asked by a student his opinion of a sycophant, Earl quoted a CEO he knew, "I don't want just 'yes' men around me in the office. Hell, when I say 'no', I want them to say 'no' too."

Earl did considerable consulting that involved a large amount of travel. He was very proud of the fact that he never missed a class and would go to extraordinary lengths to make it back to Ithaca in time.

Earl was the first recipient of the General Electric Crotonville Bell Ringer Award in recognition of over 28 years of distinguished service in their Management Development Institute; and was very proud of being the fourth Distinguished Alumnus Award recipient from Bowling Green State University in 1963.

Earl loved athletics of all types. In his early days, he played baseball and was an outstanding pitcher. We suspect that he would effectively make his point both with the hitters and with the umpires. He was also a fine golfer.

Earl's personality and motivations were strongly shaped by his upbringing on a farm in Ohio during the great depression of the thirties and by his U.S. Navy experiences in World War II. He had a deep pride in his teaching

and expected his students to be in class and to be prepared. Those who did not make the effort paid a severe price. He did not accept lack of effort and he had a wide range of facial expressions indicating displeasure. Students stayed awake in Earl's classes, laughed, and learned. Few professors worked harder to educate or had greater concern for their students.

Earl never seriously considered retirement. Teaching was fun for him, and he would have done it without monetary compensation (but he intelligently kept this a secret from the deans). The community of teachers was fortunate in having Earl in their group, and future students are going to miss a rewarding learning experience with Earl gone.

Earl Brooks served Cornell University effectively for 47 years. His dedication to his students met the highest standard.

Thomas R. Dyckman, Alan K. McAdams, L. Joseph Thomas, Harold Bierman, Jr.

Stuart M. Brown, Jr.

March 14, 1916 — March 18, 1996

Stuart M. Brown was born in Concord, North Carolina, on March 14, 1916, the son of Stuart M. Brown and Maud (Reynolds) Brown. He grew up in Camp Hill, Pennsylvania and Indianapolis, before moving to Ithaca with his family in the early 1930s. By far the largest part of his life was spent in Ithaca, and during most of it he was associated with Cornell. He graduated from Ithaca High School in 1933, and from Cornell's College of Agriculture, where he majored in biology, in 1937. After a brief term as Instructor of zoology at Massachusetts State College in Amherst (now the University of Massachusetts), he returned to Cornell to do graduate work in philosophy, and was awarded the Ph.D. degree in 1942, with a dissertation titled "Schleiermacher's Philosophy of Religion." He was briefly an Instructor in philosophy at Cornell before entering the United States Army in 1943. He served in the U.S. Army Signal Corps from 1943-46, some of that time in eastern Europe, and attained the rank of Master Sergeant. He returned to Cornell in 1946 as an Assistant Professor, was promoted to Associate Professor in 1949 and to Professor in 1956. From 1953-63, he was Chairman of the Department of Philosophy. He served two terms as Managing Editor of *The Philosophical Review*. In 1964, he became Dean of the College of Arts and Sciences, a position he held until 1969. He was Vice President for Academic Affairs from 1968-70. In 1970, he left Cornell to become Vice President for Academic Affairs at the University of Hawaii. When he returned to Cornell in 1974 as Professor of Philosophy, he became a member of the Science, Technology, and Society Program, and from 1974-76, was Executive Director of the Humanities, Science and Technology Unit of the program. Here his philosophical interests and his biological interests came together. He was actively involved in the development of the new Biology and Society major, and he introduced a new course in medical ethics, which he taught for many years. He retired and became Professor Emeritus in 1981.

Brown's philosophical work was primarily in the area of moral philosophy. He published a number of articles in *The Philosophical Review* and other philosophical journals, dealing with the work of such philosophers as Kant and Hobbes, and with such topics as inalienable rights and civil disobedience. In his later years, his concern was mainly with topics in applied ethics—his last philosophical publications include a paper entitled "The Social Control of Genetic Engineering."

In 1947-48, Brown was a Rockefeller Post-War Fellow in philosophy, and in 1957 he was awarded a Guggenheim Fellowship. He was a member of the American Philosophical Association, the American Society for Political and Legal Philosophy, and the Academy of Political Science.

The period in which Brown was Chairman of the Philosophy Department was one in which the Department was changing and growing, and in which its members included some very forceful personalities; that a very harmonious atmosphere nevertheless prevailed within the Department was due at least in part to Brown's skillful stewardship. Those who were junior members of the Department during that period remember him as warm, kind, and extremely helpful. He had very strong opinions on pedagogical matters, but was always ready to listen to dissenting opinions and to give in with good grace when he found himself in the minority.

Brown married Catherine D. Hemphill ("Kitty") on June 21, 1941, and they remained together for the remainder of his life—nearly fifty-five years. Among the many interests they shared was the raising and showing of giant schnauzers. (Brown's publications include articles in the *American Kennel Gazette*) Among his other interests were travel, swimming and skin-diving (he spent one sabbatic leave in the Caribbean), raising orchids, and listening to music, particularly opera.

Brown is survived by his wife; a sister, Margaret Brown Coryell of Sebastian, Florida; and his children, James Hemphill Brown of Corrales, New Mexico; Deborah Brown New of Canastota, New York; and Margaret Brown Cassidy of Putney, Vermont. A son, Peter, died in 1981.

Norman Kretzmann, Nicholas Sturgeon, Sydney Shoemaker

William L. Brown, Jr.

June 1, 1922 — March 30, 1997

In the early 1930s, when the summer weekend weather was clear, Bill and Beulah Brown liked to load their two sons into the car and drive from their Philadelphia home to the Jersey shore for a day at the beach. They made one stop along the way, however, so that their older boy, Bill Jr., could disembark at a familiar crossroads in the middle of the Jersey Pine Barrens. In accord with family custom, he would be picked up at the same location at the end of the day. In the meantime, equipped with collecting gear and a lunch packed by his mother, the young naturalist roamed the stark and beautiful solitude of the Barrens, observing and collecting ants and other insects. Bill Brown's first scientific paper, published in 1943, described a new ant species discovered during one of those boyhood treks, *Monomorium viride*. In years yet to come, he would likewise roam the forests and savannahs of six continents, reporting on what he learned in 273 scientific publications.

Bill Brown received a B.S. degree in Zoology and Entomology from Penn State in 1947 and a Ph.D. degree in Biology from Harvard in 1950. He interrupted his undergraduate studies from 1943-46 in order to serve with the USAAF 36th Malaria Survey Unit and in an air-ground rescue unit, primarily in western China, but with some malaria work in India. From 1950-52, Bill conducted research in Australia as a Harvard Parker Traveling Fellow and as the first Fulbright Research Scholar to Australia. From 1952-60, Bill served as an Assistant and Associate Curator of Entomology at the Museum of Comparative Zoology at Harvard, and in 1960, he assumed a professorship in the Department of Entomology at Cornell University, attaining emeritus status in 1991. In 1973, Bill received a Guggenheim fellowship. He maintained strong ties with Harvard as an Associate Curator of Entomology until the time of his death. At Cornell, Bill taught courses in evolution, insect systematics, insect physiology, systematic theory, and paleobiology. He mentored 21 graduate students.

Bill was the antithesis of the stereotypical ivory-tower stuffed-shirt academic. He arose from working-class origins and shot to the top of his field through sheer force of intellect and knowledge. A staunch but irreverent political liberal, he liked to poke fun at pomposity and self-importance whenever he saw the opportunity, and it has been said that he knew the word for "beer" in over fifty languages and dialects. Thankfully, some of the personal side of Bill's life in science has been recorded in the recent book, *The Earth Dwellers: Adventures in the Land of Ants*, by Erich Hoyt (1996).

Of Bill's 273 publications, 223 are about ants. Bill recorded discoveries in many aspects of ant biology, but his primary interest was ant systematics and his primary goal the clear and stable delineation of ant species and higher taxa. Since there are an estimated 15,000 species of ants, this represents a massive task. Bill made contributions to the systematics of most ant groups, but the two groups that received his greatest attention were the tribe Dacetini (subfamily Myrmicinae) and the subfamily Ponerinae. The Dacetini, a tribe of mostly minute, exquisitely sculptured ants, are speciose and worldwide in distribution, but because of their size they had been collected rarely and thus were very poorly known. Portions of Bill's dacetine revision appeared in 1948, during his first year as a graduate student. In all, he published 69 papers on dacetine ants over the course of four decades; 36 of those papers, published during a period spanning 20 years, constitute a revision of *Strumigenys*, the most speciose dacetine genus.

Bill's other primary focus was the ant subfamily Ponerinae, a heterogeneous group containing both "primitive" and highly derived ants. Bill's ponerine studies were reported in diverse publications, but were concentrated especially in a series entitled, "Contributions toward a reclassification of the Formicidae," which, in Bill's (unpublished) words, "was begun about 1951 in a hopeful but tentative way, and was aimed at revising to genus level the entire family. The 'Contributions to...' hedged the prospect of a task so huge and unmanageable that it might well never be completed as originally conceived, at least by this investigator." In all, there were seven publications in this series that spanned the years 1951-78 (Parts I-V, Parts VIA and VIB), that made important and lasting changes in our understanding of this fascinating group of ants. For the fifteen years prior to his death, Bill worked daily on Part VIIA, which was to treat the difficult genera *Diacamma* and *Pachycondyla*, and he had prepared extensive notes for VIIB and VIIC. Even in unpublished form, this work has had strong influence among ant biologists: many of the taxonomic implications are incorporated into the ponerine classification of Bolton's (1994) *Identification Guide to the Ant Genera of the World*, and "test versions" of Bill's keys have been circulating for two decades.

As is well known, Bill was an accomplished general naturalist, and was, as Ed Wilson has recently observed, arguably the most well-traveled field biologist in history. Based on years of careful observation, Bill possessed an intimate knowledge of the patterns of distribution of plants and animals. This knowledge formed the basis for his important contributions to evolutionary theory, and may be contrasted to the majority of the literature, which is typically based on abstract models or isolated studies of particular "model organisms." The vastly influential paper (co-authored with E.O. Wilson in 1956), "Character displacement," was honored in 1986 as a Science Citation Classic, i.e., as one of the most frequently cited scientific papers of all time. Bill's general theory of speciation was

described in two papers, “Centrifugal speciation” (Brown, 1957) and “Speciation: The center and the periphery” (Brown, 1958). His theory of the mechanisms that drive speciation and adaptive radiation was set forth in “General adaptation and evolution” (1959). Perhaps the premier example of the power of natural history-based reasoning is Bill’s 1960 paper, “Ants, Acacias, and browsing mammals,” a tour de force in which he assembles all of the evidence in support of the idea that plants benefit from ant-plant symbioses. This idea, which seems common-sensical today, was opposed for decades following the vigorous refutations of W.M. Wheeler and others in the first half of this century. Within a few years of the publication of Bill’s paper, Dan Janzen and subsequently a host of other ecologists, had proven experimentally what Brown had demonstrated by deduction.

Ant systematics has had some truly great scientists, in particular Gustav Mayr and Carlo Emery, but it may be argued that Bill’s constellation outshines them all. This is so for a number of reasons. First, Bill carried the evolutionary “Modern Synthesis” into ant systematics by emphasizing Mayrian population-level thinking in the critical process of delineating ant species. Inevitable by-products of this emphasis were Wilson and Brown’s (1953) and Brown and Wilson’s (1954) vigorous attacks on the taxonomic subspecies, which had a tremendous effect on zoological systematics in general. Second, Bill repeatedly emphasized that taxonomic revisions should be carried out on a world basis, rightly asserting that species and higher taxa can only be properly recognized and understood when their total diversity is surveyed. Third, Bill introduced the use of repeatable, quantitative measurements into ant systematics. Fourth, Bill maintained that his greatest contribution to science was the specimens that he had collected. These specimens, from remote locations all over the world, constitute an immensely important and in many cases unique source of biological information that will serve future generations in ways we have yet to imagine.

Bill is survived by his beloved wife, Doris, of Ithaca, New York; and by his son, Creighton Brown, of New York City. The tragic deaths of two daughters, Dorothy and Alison, preceded Bill’s. Bill’s five grandchildren include Creighton and wife Jennifer’s children, Simon, Ezra, and Willa; and Dorothy and husband Richard Anderson’s two children, Katherine and Stephen. In a fitting tribute to Bill’s memory, Doris has established an endowment for training Latin American students in tropical ecology. Tax-deductible gifts may be sent to: O.T.S. William L. Brown Fellowship, P.O. Box 90630, Durham, NC 27708-0630.

When the time came to place Bill’s body in the ground, his wife, Doris, and son, Creighton, wisely chose to dress him in his worn and weathered collecting clothes. When we think of Bill now, we think of the solitary boy in the Pine Barrens, shaded from the hot noonday sun under a pine tree, eating his lunch and watching *Monomorium*

viride workers come and go from their nest entrance. The wonder he experienced then, and the wonder he experienced subsequently in the wild places of the world, are generously shared with us in 273 publications and countless ant specimens that, together with the trajectories of the many lives he touched, constitute the unique and lasting legacy of Bill Brown.

Ted R. Schultz, Richard B. Root, Thomas Eisner

Robert Lee Bruce

April 14, 1925 — June 18, 1990

Professor Robert Lee Bruce, a faculty member at Cornell since September 1961, died June 18, 1990 after a short illness. Over his three decades at Cornell he provided leadership to more than one hundred graduate students, serving as chairperson of more than 70 graduate study committees. His academic leadership in the area of adult and extension education, evaluation and program development formed the basis for his teaching career. The word mentor best describes him. He was more than an excellent teacher; he was a tutor, an advisor, one who unlocked the ability to learn in students from cultures all around the world. His knowledge of cultures and history was extensive and enhanced by visiting professorships at the University of Reading, England (1967-68, 1989), at the University of Saskatchewan, Canada (1975), at University Pertanian Malaysia (1982-83), and at the University of British Columbia at Vancouver (1983).

As a university citizen he was a faculty fellow for Ecology House and served on numerous university committees. His service to his department (Education, College of Agriculture and Life Sciences) was described by colleagues as that of a valued team member whose judgement, sagacity, and wisdom were sought after. His “just plain horse-sense,” his ability to face crises and take charge when necessary drew people to him as a trusted colleague. He served as graduate field representative for the department from 1984-86 and as coordinator of the Adult, Extension, and Continuing Education Program.

That down-to-earth quality, a rare and wonderful find in academic circles, came from his farm boyhood in Nebraska where he was born April 14, 1925. After service in World War II as an infantry sergeant in the European Theater of Operations, he received his B.S. degree from the University of Nebraska. He was a county extension agent in Nebraska before receiving his M.S. degree from Cornell in 1951. For the next nine years he was at the University of Maryland, first as publications editor and later as assistant state leader for agricultural extension. He received his Ph.D. degree from Cornell in 1960.

Professor Bruce served on the board of trustees of Tompkins Cortland Community College for ten years. He strongly believed in the community college concept—the need to translate the finding of scholars to the workers of our society. The president of the College, Dr. Edwardo Marti stated: “His stewardship transcended budget difficulties, personal viewpoints, or political feelings. His sharply focused mind was a welcome presence....”

Professor Brace's community service also included five years as a member of the Tompkins County Board of Representatives, as a member of the Tompkins County Board of Mental Health, and as an elder of the First Presbyterian Church of Ithaca.

Professor Bruce and his wife, Charlotte, opened their home to students on a regular basis. Their genuine interest in others, their sense of humor, love of food and its growing and preparation provided an informal setting for good companionship and stimulating conversation. His talents also included photography and Chinese brush painting.

Professor Bruce's love of language and literature provided him strength during his illness. He selected this Tennyson quotation for the memorial services held following his death.

“Our little systems have their days;
They have their day and ceased to be;
They are but broken lights of thee,
And thou, O Lord, art more than they.”

In addition to his wife, Professor Bruce is also survived by his son, Thomas. A daughter, Ann Lynn, died in 1970.

Joseph P. Bail, Richard E. Ripple, Jane W. McGonigal

Dorsey William Bruner

December 25, 1906 — September 1, 1996

Professor Emeritus of Veterinary Microbiology, Dorsey William Bruner, was a lifetime resolute and undaunted optimist, absolutely certain that he would live to age 90! But following an illness of several months, the Lachesian thread was cut short by just four months.

Born in Windber and raised in Paxtonville, Pennsylvania, in the heart of the “Dutch country”, he was as fluent in the Germanic dialect as he was in English. He attended grammar school in Paxtonville and, in 1925, was graduated from high school in nearby Middleburg.

In 1929, he completed the requirements for a B.S. degree from Albright College, and taught mathematics and biology in the Middleburg High School in 1929 and 1930.

He became fascinated by the science of bacteriology and was particularly intrigued by the scholarly reputation of William Arthur Hagan of Cornell University. Hagan was especially knowledgeable about the elusive, filament-forming acid-fast bacteria, especially *Mycobacterium tuberculosis* and *Mycobacterium paratuberculosis*. Consequently, in 1931, Dorsey was admitted to the Graduate School of Cornell University as a Ph.D. degree candidate, studying under the guidance of Dr. Hagan. The title of his thesis was “The Influence of Nutritive Conditions on Acid-fastness of Bacteria”. Acid-fastness of mycobacteria, due to high lipid concentration in the cytoplasm of mature organisms, is one of its most elusive characteristics. Dorsey Bruner found that the acid-fast determining requisite is nascent carbon. Carbon deprivation will obviate acid-fastness. Most interesting was his determination that mycobacteria, which retain acid-fastness when cultured on carbon-deficient media, are able to utilize the carbon in CO₂ of air, thus compensating for carbon deficiency in the culture medium!

Dr. William A. Hagan, who served on the faculty of the College of Veterinary Medicine since 1917, was named Dean of the College in 1932, the year after Dorsey Bruner began his graduate studies. He became so impressed by Dorsey’s personal and academic talents and scholarly attributes that he offered him an instructorship in bacteriology, and urged him to matriculate simultaneously as a candidate for the DVM degree. Consequently, Dorsey completed the requirements for the Ph.D. degree in 1933, and the Doctor of Veterinary Medicine (D.V.M.) degree in 1937.

In 1937, Dorsey W. Bruner, B.S., Ph.D., D.V.M., was appointed as a veterinary bacteriologist in the Department of Animal Pathology, Kentucky Agricultural Experiment Station, University of Kentucky in Lexington. It was there that Dorsey became a co-worker with Dr. Philip R. Edwards, a world-recognized microbiologist who had special expertise in the enteric (intestinal) disease-producing *Enterobacteriaceae*: notably those of the genera *Salmonella*, *Escherichia*, and *Shigella*; bacteria notable for causing life-threatening dysentery. His collaboration with Philip R. Edwards (and later with William H. Ewing) stimulated his abiding interest in the antigenic analysis of *Salmonella* species, of which more than 2000 serotypes have been isolated and classified.

Particularly impressive is that the 2000+ varieties of serologic types are in the genus *Salmonella*, a genus named for Daniel Elmer Salmon, the first student of James Law to qualify for a veterinary doctorate degree from Cornell University. The antigenic analysis of these serotypes is so complicated that they have been assigned complex identification codes, all appearing to be imposingly esoteric! Analysis is carried out by observing agglutination of pure cultures in specific rabbit antisera prepared against O (somatic) antigens, or flocculation of cultures in specific antisera prepared against H (flagellar) antigens. Dorsey Bruner, one of a few great world authorities on antigenic analysis of *Salmonella* species, who carried out many of the pioneering studies in this system, is considered to be one of the scholarly giants in *Salmonella* epidemiology. Serological type identification undergirds the modus operandi of epidemiologists who follow epidemics, predict flow patterns, and develop strategies against devastating infectious diseases, such as intestinal infections of animals or people housed under crowded, and often unsanitary, conditions.

For accurate diagnosis of serotypes (serologic variants or varieties within *Salmonella* species) it is essential that reagents are prepared with scrupulous precision. Antigens must be purified, classified and monitored, and antisera produced against them in rabbits also must be prepared and tested fastidiously. The work involved is highly sophisticated and demanding. It is in this arena of science, antigenic analysis, (genetic mapping for epidemiological purposes), that Dorsey Bruner devoted much of his professional life. In addition to his scientific achievements in serological analysis of *Salmonella* antigens, Dorsey described a baffling blood dyscrasia in newborn foals, which he named *neonatal isoerythrolysis*, a genetic disease resembling Rh isoerythrolysis (erythroblastosis fetalis, or Pfannenstiel's syndrome) in human neonates.

From 1942-46, Dorsey served as a bacteriologist in the Fifteenth General Medical Laboratory of the Fifth American Army, stationed in Naples, Italy. He attained the rank of Major, and in addition to earning 5 battle stars (4 for Italian campaigns and one in France), he was awarded a Bronze Star medal for heroic or meritorious service in

combat. Also, he was awarded the American Campaign Service Medal, and the European-African-Middle East Service Medal.

According to Alvin F. Sellers, V.M.D., M.S., Ph.D., Professor Emeritus of Physiology, College of Veterinary Medicine at Cornell, who served in the First Medical Laboratory (which was a field laboratory temporarily attached to the Fifteenth Medical Laboratory upon arrival from service in North Africa), Dorsey served alongside William Howell Ewing, a preeminent bacteriologist with special expertise in antigenic analysis of disease-producing genera of enteric microorganisms. Ewing, in collaboration with P.R. Edwards, devised a biochemical system for antigenic analysis and classification of enteric bacterial organisms, a refinement of the prestigious world-renowned Kauffmann-White serological system.

In the Fifteenth General Medical Laboratory of the Fifth Army during World War II, the rapid and accurate diagnosis of bacteria responsible for gastroenteritis among military personnel was extremely important and urgent. Dysentery caused by Salmonella and Shigella bacteria was a major problem in the military theater. Dr. Sellers stated that Dorsey Bruner was the key bacteriologist for antigenic analysis (diagnosis) of Salmonella species, and Bill Ewing was the key microbiologist for antigenic analysis of Shigella species.

Dorsey Bruner returned to the University of Kentucky in 1946, upon his discharge from the army. He transferred as a retired officer to the Veterinary Corps, U.S. Army Reserves, and attained the rank of Lieutenant Colonel.

On August 25, 1940, Dorsey married Beatrice D.E. Christman. She was the daughter of an Ithaca optometrist. “Bea” had been a student of Dorsey’s at Cornell and was 6 years younger than Bea. Their marriage extended over a period of 49 years, until Bea’s death in 1991. They had no children but were very fond of their nieces and nephews. Further, throughout his teaching career, all sophomore veterinary students were invited in small groups to the Bruner home for dinner.

Dorsey Bruner’s life style was that of a legendary traditionalist. Every Thursday night he would prepare dinner, often employing Pennsylvania-Dutch recipes. And frequently on Saturday night, he and his wife, Bea, would dine at local restaurants. She would choose the restaurant on one Saturday; Dorsey the next. They played bridge often, but never on an evening where a major sports event was scheduled on the Cornell Campus (or on television)! Dorsey and Bea were enthusiastic gardeners and both enjoyed hiking and international travelling.

In 1949, Dorsey W. Bruner, B.S., Ph.D., D.V.M., was recruited by his mentor, William A. Hagan, to fill a vacant position at Cornell University for teaching bacteriology in the veterinary curriculum. He served as Professor of

Bacteriology in the Department of Pathology and Bacteriology from 1949-65, teaching veterinary students and graduate students and continuing his research and publishing on antigenic analysis of Salmonella species.

In 1965, Dorsey was named chairman of a newly formed Department of Microbiology (which also embraced the Veterinary Virus Research Institute). This department was split off from the Department of Pathology primarily because of the growth and expansion of microbiology and immunology. Dorsey continued to serve as chairman until his retirement on June 30, 1972. He was especially appreciated for his astute qualities as an administrator of an excellent but diverse department, and admired for his patience, no-nonsense determination, and sense of urgency. In the sweep of time, D.W. Bruner taught bacteriology at Cornell from 1931-37, and then again from 1949-72, for a total of 29 years of dedicated service.

Dorsey Bruner served as co-author of the second through the fourth editions, and then principal author for the fifth and sixth editions of *Hagan's Infectious Diseases of Domestic Animals*, a classic textbook for students and practitioners of veterinary medicine. To honor his participation in six editions of this magnificent textbook, the seventh and eighth editions have included his name in the revised title, *Hagan and Bruner's Microbiology and Infectious Diseases of Domestic Animals*. Also, he authored or co-authored over 140 scientific papers that were published in highly reputable peer-reviewed journals.

The Cornell Veterinarian, a professional journal issued quarterly, was published continuously for 82 years; between 1911 and January 1994. Although called "The Cornell Veterinarian", its Board of Directors published the journal independently of Cornell University, despite the fact that most of the directors were Cornell faculty members. Dorsey Bruner was editor for 20 years, from 1951 to June 1972.

Dorsey was an avid enthusiast for all competitive sports. He played baseball during his public school and collegiate student years. And while serving on the faculty of the Veterinary College during his graduate student days, he played on a faculty baseball team with W.A. Hagan, Peter Olafson, Alexander Zeissig, and other Cornell academic giants.

The prestigious, Twelfth International Veterinary Congress Prize, awarded by the American Veterinary Medical Association (AVMA), was established in 1936. It is awarded annually to a member of the AVMA upon selection of the AVMA Executive Board, in recognition of outstanding service by one who has contributed to international understanding of veterinary medicine. Nominated by Professor of Microbiology and Chairman of the Department of Microbiology, James H. Gillespie (Dorsey Bruner's successor) in 1972, and endorsed in writing by every member

of the department, Dorsey W. Bruner was commended to the executive board, and by acclamation was awarded the prize in 1972.

Dorsey received a citation for outstanding work in science from Albright College in 1949. He is listed in *Who's Who in America*, *American Men of Science*, and *Who's Who in Science*.

Dorsey served as Chairman of the Bacteriology and Mycology Study Section, National Institutes of Health, between 1962-66, and as a member of the Training Grant Committee in the same organization, 1968-72. He was a Charter Diplomate of the American College of Veterinary Microbiologists, a Diplomate of the American Board of Microbiologists, a member of the American Society of Microbiologists, and of the Society for Experimental Biology and Medicine. Further, he held memberships in the American Association for the Advancement of Science, the American Veterinary Medical Association, the New York State Veterinary Medical Society, and also the Societies of Pi Gamma Mu, Sigma Xi, Phi Zeta, and Phi Kappa Phi.

Dorsey retired on June 30, 1972 and was named Professor Emeritus of Microbiology by the Trustees of Cornell University. His independent, orderly, visionary, and well-disciplined life style, and his tenacious, critical attention to detail, especially in the laboratory, have left preeminent imprints, particularly in his graduate students and colleagues who probe the mysteries of the silent, invisible world of the microbes, which, according to Dr. Paul De Kruif "occupies that hazy borderland between life and lifelessness".

Roger J. Avery, S. Gordon Campbell, James H. Gillespie, George C. Poppensiek

Max Edwin Brunk

September 12, 1914 — April 8, 1999

Max E. Brunk, Professor Emeritus of Marketing, died at his retirement home at Kendal at Ithaca, New York at age 84. He was born in Roswell, New Mexico but spent much of his youth in the State of Florida. He attended Clemson College (1934-35) and then transferred to the University of Florida where he received his B.S. degree in 1938 from the College of Agriculture. He worked for a year as a statistician for the Federal Land Bank of Columbia, South Carolina before entering Graduate School at Cornell University where he received his M.S. degree, majoring in Agricultural Economics, in February 1941.

Brunk returned to the University of Florida in 1941, as an Assistant Agricultural Economist to work in their agricultural research and extension programs. He was promoted to Associate Agricultural Economist in 1944, and published five experiment station bulletins, emphasizing methods of improving efficiency in the use of labor and materials in the production of marketing of crops. In 1945, he returned to Cornell University, where he completed his Doctorate in Agricultural Economics in 1947.

He was immediately appointed Associate Professor of Marketing with tenure at Cornell after completing his degree, recognizing his faculty experience and the quality of his research at the University of Florida. He was promoted to Professor in 1951 and continued as a productive and provocative member of the Cornell Faculty until his retirement in 1982, after 35 years of service in teaching, research, and extension.

One stream of Brunk's early research centered on work simplification in harvesting and marketing perishable crops. In Florida, he worked with a team to reduce labor in the harvest and marketing of celery, combining many of the necessary procedures in the field, and bypassing the packing shed, a forerunner of the mechanized harvest procedures we take for granted today. He established a time and motion laboratory looking for ways to save both time and materials in marketing perishables, from roses to fresh market apples. This work received almost immediate application by producers and handlers and national acclaim by industry leaders. He received the first of many national awards, the Charles W. Hauck Award, for his contributions to produce packaging between 1950-53.

Simultaneously Brunk was pioneering research on the use of experimental methods in merchandising perishable products in supermarkets with his colleague in Biometrics, Professor Walter Federer. He saw the possibilities of using polyethylene bags to prepackage fresh fruits and vegetables and the cost savings this would allow throughout the whole marketing process. His students tested these ideas with increasingly complex Latin Square designs in

stores to observe what consumers did, not what they said they would like. The experimental designs were novel and the success of these early merchandising studies were striking. In the stores where they were run, it was sometimes difficult to keep the managers from interfering with the experiments in their haste to adopt the new merchandising methods, which were working so effectively in selling produce. Industry response was prompt and widespread. Brunk received the National Apple Institute Award in 1954 for his outstanding service to the apple industry. He was likewise cited in 1954 by the Foundation for Floriculture for the most significant research in floriculture in that year.

These early successes in merchandising perishables led to an expanded research program and a substantial flow of speeches through the country to producer groups, handlers, packers, and the supermarket industry. He and his students worked on marketing problems and merchandising opportunities with fruit, vegetables, milk, meat, and a range of horticultural products. Periodically he served as a consultant to the United States Department of Agriculture, the Society of American Florists, the National Apple Institute, the American Meat Institute, the National Broiler Council and the Netherlands Bulb Institute.

Max was a wonderful graduate teacher. He had a fertile mind, with lots of ideas, and suggestions for thesis topics, but his students soon learned they had to develop and build their own research designs. He believed in the Cornell tradition of “freedom and responsibility” and let students learn from their own mistakes, then providing encouragement, suggestions and support at crucial points along the way. Writing a thesis with Brunk was a memorable experience for the 52 Master’s students and 35 Ph.D. students for whom he served as chairman in 35 years; most of whom improved their skills in written expressions as well as learning much more about applied economics, statistics, and experimental design along the way.

Brunk is co-author with Dr. L.B. Darrah of the widely used textbook, *Marketing Agricultural Products*. He is also co-author of a technical manual, *Time and Skill Requirements*, which summarized his early work on time and motion study. Much of his research was co-authored with his students in experiment station bulletins, journal articles, departmental reports, and trade publications. His speeches were often reproduced because of popular demand from producers and professionals working with perishable products. A small book, *Brunk at AMI*, was issued by the American Meat Institute containing ten speeches presented at their national conferences.

One gets a sense of his impact outside the university from the honors and awards he received throughout his productive career. His national and international honors included those provided by the National Apple

Institute, the Foundation for Floriculture, the American Farm Bureau, the Livestock Merchandising Institute, the International Apple Institute, the Netherlands Bulb Institute, the National Broiler Council, the Agricultural Institute of Canada, the American Meat Institute, and the New York State Agricultural Society. People came to national meetings to hear what Brunk had to say and greatly appreciated his ideas and wise counsel.

Max left indelible impressions on students, faculty colleagues, and the producers and industry people with whom he worked. He was full of ideas, had creative suggestions, and was a born optimist. He was a hard-driving individual with a wonderful sense of humor. He enjoyed playing practical jokes and expected to receive his share in return. Life in Warren Hall was always lively when Max was in the building. He had a “cabin” in the hills near Berkshire where he wrote and relaxed. For many years, he hosted an annual departmental picnic there in late August or September to welcome new graduate students to the department and to provide a send-off for the new academic year. As many as 200 would attend the chicken barbecue, swimming in the pond, playing softball and volleyball in the fields, and relaxing with a bonfire in the evening. It provided a sense of community for faculty, students and staff that all of us enjoyed and appreciated. The Brunk family cared and shared generously with their colleagues.

Max also conducted his non-professional life with great intensity. He was an avid gardener and kept the grounds around his home landscaped and manicured. His vegetable garden was usually weed-free and the Brunks were generous in sharing their raspberries, asparagus, melons and squash. Not surprisingly, roses were near and dear to him and he grew all the different types: miniatures, floribundas, teas, and grandifloras. If there was a new variety, Max was likely to be testing it in his garden and then sharing the blooms with friends and neighbors.

One of Max’s enduring hobbies was cutting and polishing gemstones. He obtained a professional set of equipment and over time, a wide set of materials on which to work. On his first speaking trip to Australia, he brought home basic minerals from their opal mines. From these wonderful materials, he fashioned rings and pendants which became some of his wife’s favorite jewelry, and which provided memorable gifts to family and friends.

Max and Letta were also collectors of ornamental glass. Any visitor to their home enjoyed the tasteful displays of period pieces from the time of Tiffany and the art glass of the late nineteenth and early twentieth centuries. Their home was regularly open to their students and colleagues. They were enthusiastic and generous hosts; conversation was always lively; guests were quickly put at ease. When a “night blooming cereus,” that the Brunks had carefully tended in their bedroom, finally decided to display its huge bloom, there was a spontaneous party to watch the long-awaited event. Such was the open and generous way in which the Brunks shared their life and hobbies.

Fortuitously, in the summer before Brunk's death, a group of Max's former Ph.D. students from the late 1960s and early 1970s, gathered at the Cornell Plantations for a small picnic to honor the Brunks. They came from England, Ireland, Washington, Texas, Pennsylvania, and New York to see each other and enjoy the company of their old mentor and the campus they had come to love. It was a lovely afternoon on the Comstock Knoll, a memorable day everyone enjoyed. Love, honor and respect along with lots of laughter were the orders of the day.

Max is survived by his wife, Letta Olga Reck; two daughters, Norma Marie Sullivan, of Shawnee, Kansas and Kathryn Sue Brennan, of Berkshire, New York; five grandchildren; and four great grandchildren. Mrs. Brunk continues to live at their home in Kendal at Ithaca.

Gene German, Robert Story, Bernard Stanton

Nelson Howard Bryant

September 19, 1917 — December 22, 1994

Nelson Howard Bryant was born in Greene, New York, on September 19, 1917. After obtaining the E.E. degree from Cornell in June 1939, Nelson joined the Westinghouse Lamp Division in Bloomfield, New Jersey, where he developed systems that led to patents on methods of carbonizing thoriated tungsten filaments and devised ferro-resonant circuits for starting fluorescent lamps. In 1944, he became a U.S. Naval Reserve Electronics Officer, attended radar schools at Bowdoin College and Massachusetts Institute of Technology, and supervised the installation and repair of radar and loran equipment at the Brooklyn Navy Yard and other bases until September 1946, when he returned to Cornell as a graduate student and Instructor in the School of Electrical Engineering. He received the M.E.E. degree in June 1949, was appointed an Assistant Professor in July of that year, became an Associate Professor in 1953, and attained full professorial rank in 1973. Nelson retired as Professor Emeritus in 1985, but he continued as a part-time Instructor designing laboratory experiments and demonstrations for use in the teaching laboratories until the spring term of 1994. During his overall 48-year academic career, Nelson mastered many of the complex electrical engineering technologies that evolved over the years and formed them into a vital part of his classroom activities.

Consistent with his early interest in the design of electronic circuits and systems—an interest that he maintained throughout his professional career—Nelson’s graduate research was concerned with the design, development, construction, and testing of a novel controlled-mercury-arc-rectifier tube that had potential for use as a high-power amplifier. Since the operating principle was based on the characteristics of the mercury-vapor plasma within the tube, Nelson was a very early investigator at Cornell in the field of plasma studies that is now an important area of research in the EE School. As a graduate student, and for several years after his appointment as an Assistant Professor, Nelson taught in the electrical engineering “service courses,” also known as “Electrical Engineering for Non-Electrical Engineers,” where he was responsible for the electronic segments of those courses. This work resulted in a collaboration with Professor William H. Erickson and the publication in 1952 of the first edition of their popular text, *Electrical Engineering, Theory and Practice*. A second edition was published in 1959, followed by a paperback edition in 1975.

During his academic career Nelson initiated and taught many courses and directed graduate study in electronic-circuit design, digital-electronic circuits, and control systems. In the early 1970s, students in the EE School were

expressing great concern about the absence of electronic-design courses in the EE curriculum. Nelson corrected this deficiency by developing two new lecture/laboratory courses in electronic-circuit design that became known for their scholarly rigor and relevance to engineering practice. These two courses were among the most popular in the EE curriculum for many years, formed the basis for the eventual complete overhaul of the EE undergraduate laboratories, and represent one of Nelson's major contributions to the School. In addition to his concern with undergraduate education in the classroom, he was a perennial undergraduate class adviser and a member of the Division of Basic Studies Academic Standards Committee. He was elected to serve three separate terms on the respected EE Faculty Committee and also served on many university committees. Nelson was a mainstay in the Master of Engineering Program, directed a multitude of M.Eng. (Elec.) design projects, and served on the Master of Engineering Committee in the College of Engineering, where he was a key contributor to the development of the Program and its required M.Eng. design project. As a favorite professor among his students, he was runner-up in the 1973 Tau Beta Pi Engineering Honor Society "Excellence In Teaching Award" was one of the top ten contenders for the same award in 1976, and received the IEEE School of Electrical Engineering "Excellence in Teaching Award" in 1978 and again in 1982.

Nelson took his first sabbatical leave in 1955-56 at Stanford University where he studied radio-wave scattering phenomena from a turbulent atmosphere. Upon his return to the campus he became interested in the design and development of electronic instrumentation for the measurement of biological phenomena, thereby becoming one of the first Cornell faculty members to work in the field of bioengineering. In 1962-63 Nelson took another sabbatical at the University of Pennsylvania Johnson Foundation for Medical Research. Through 1967 he continued to work in bioengineering and directed a number of master's theses and senior projects with special emphases on blood-chemistry instrumentation applied to automated differentiation of white-corpuscle types and the control of oxygen content in the blood. In later years, as a consultant to Powers Manufacturing Company in Elmira, New York, his knowledge of solid-state microprocessors and electronic-control methods enabled him to transform previously limited purely mechanical techniques into a modern system for automatic quality control in the manufacture of bottles. The variety of problems he encountered in this work significantly influenced the design of the laboratory classwork for his students in the EE School.

Nelson was a member of the American Institute of Electrical Engineers and served as Chairman of the Ithaca Section in 1956-57. When that organization became the Institute of Electrical and Electronic Engineers (IEEE) he continued his membership and was named a Life Member of IEEE in 1983. He was elected to the engineering honor

societies Tau Beta Pi and Eta Kappa Nu and was a member of the American Association for the Advancement of Science and the American Association of University Professors.

Nelson measured his accomplishments by the long-term success of his students, particularly those whom he inspired to pursue careers in bioengineering. He was uniquely able to recognize creative and unusual students and encouraged them to acquire the kind of deep fundamental understanding that contributes to a sense of accomplishment—even a sense of competence and power. Nelson became the mentor of several of these students and formed long-term friendships with them. He was technically thorough, imaginative, possessed an analytical mind, and had a remarkable ability to visualize the physical behavior of electronic circuits. His mastery of first principles made him a valued resource to colleagues and students. Highly regarded by everyone who knew him, Nelson was warmly admired for his personal attributes of complete integrity, honesty, patience, and good-humored generosity of time and effort.

In addition to his academic interests, Nelson was a naturalist, particularly of plant life and birds, and an enthusiastic gardener. Hiking was a favorite pastime, and he often went on camping trips in the Rocky Mountains and the Adirondacks with friends and colleagues. He was an accomplished musician, and he played the trumpet with the Cornell University Orchestra and the Ithaca Concert Band for many years. As an early-jazz aficionado, he derived considerable pleasure from introducing present-day “rock-and-rollers” to the delights of Dixieland and noting their immediate reaction and declaration that “this is the right stuff” In addition, EE School members who used to bowl in the old Franklin Hall League recall that Nelson achieved the top all-time average in that energetic group.

Nelson and Tommie Thomson were married on June 19, 1943 in New York City. The majority of their 51 years together was spent in Ithaca. Nelson is survived by his wife, who lives in Ithaca; a son, Bruce and his wife Linda, and two grandchildren of Elkins Park, Pennsylvania; a daughter, Jane of Boulder, Colorado; a brother, Robert of New Smyrna Beach, Florida; a brother, Stanley of Clover, South Carolina; a brother, Lincoln of Greene, New York; a sister, Madeleine Lewis of Ithaca, New York; and a sister, Ruth Rubright of Wernersville, Pennsylvania.

Nelson Bryant will be long remembered as a dedicated teacher and adviser, an outstanding engineer, a highly respected colleague, and a true friend.

William H. Erickson, H.C. Torng, Norman M. Vrana, Simpson Linke

Arthur Houghton Burr

May 27, 1908 — November 5, 1993

Over sixty years of dedicated service to mechanical engineering, mechanical engineering education, and mechanical engineering educators came to an end on November 5, 1993 with the death, due to congestive heart failure, of Arthur Houghton Burr, Hiram Sibley Professor Emeritus, in Austin, Texas. Art was born in Worcester, Massachusetts, where he attended schools through graduation from Worcester Polytechnic Institution in 1929, earning the degree of B.S. in Mechanical Engineering, with Distinction.

Art then accepted a position as Research Engineer at the Research Laboratories of the Westinghouse Electric Company, East Pittsburgh, Pennsylvania. His work there was primarily related to investigating the mechanisms of gear-tooth failure. His experimental study of surface pitting was particularly important in that he was the first person to obtain pitting under laboratory conditions. He began graduate study in a joint program between the Westinghouse Mechanical Design School and the University of Pittsburgh, from which he received the degree of M.S. in Mechanical Engineering in 1931. He then began the somewhat daunting task of looking, in the depth of the depression, for a teaching position at an engineering college. In 1933, he found a position as Instructor in Mechanical Engineering at the Rice Institute (now William Marsh Rice University) in Houston, Texas. This was the beginning of Art and Phyllis Burrs' love affair with the Southwest, and it was also an excellent opportunity for a beginning teacher in mechanical engineering. The school was small and Art taught practically every course in the field. He also gained valuable practical experience working part-time during the winter and full-time during the summers with local companies, such as the Emsco Derrick and Equipment Company and the Houston Lighting and Power Company. In the late 1930s, Art began part-time study towards the Ph.D. degree in Engineering Mechanics at the University of Michigan and started looking around for another teaching position, as the depression was still on in Texas. In 1941, he accepted a position as Assistant Professor at the University of Missouri, Columbia, where he taught courses in machine design, metallurgy, advanced strength of materials, and mechanical vibrations. In 1944, he was promoted to Associate Professor and took a leave of absence to join the war effort at the Aerial Measurements Laboratory at Northwestern University where, in June 1945, he was promoted to Executive Officer (Chief Engineer and Assistant Director).

The year 1947 was a time for momentous decisions for almost everyone. In Art's case, it was the perfect time for redirecting his career, since he had received his Ph.D. degree from Michigan and the Aerial Measurements

Laboratory was winding down. His move was to accept an offer from Cornell University to become Professor and Head of the Department of Machine Design in the Sibley School of Mechanical Engineering—a move that was most fortuitous for Cornell and those of us who came to Cornell to study and/or teach.

In 1947, there were still eight semi-autonomous departments in Mechanical Engineering, the result of the College of Engineering being formed in 1921 by the consolidation of the Colleges of Civil and Mechanical Engineering. The school was faced with accommodating a horde of highly-motivated veterans returning to complete their educations for the existing four-year bachelor's degree while simultaneously admitting a freshman class entering a new, not completely defined, five-year program. The department had lost four senior professors due to retirement and departing for other positions. Upon his arrival in September 1947, Art found the remaining staff, three professors and two instructors, was being augmented by the hiring of an associate professor and four instructors. The professor came from a “high-tech” industry (aircraft engines) and the instructors were veterans with one or more degrees and considerable practical experience. Instructors were hired, generally, as full-time teachers with the opportunity for doing graduate work. There were no teaching assistants. Since the four departmental required courses were upper-class courses, Art had some time for hiring the necessary additional staff.

The rapidity with which the collection of individuals with widely different interests, backgrounds, and capabilities was transformed into a cohesive educational department can only be attributed to Art's managerial style—which in essence was to be supportive in every way possible while providing the maximum practical freedom for independent thinking and action. Engineering at Cornell was a textbook example of democracy in action. Instructors were members of the faculty in all matters related to undergraduate programs and extra-curricular activities. For a number of years there were no large lecture sections and often there would be more instructors than professors teaching the multiple-section required courses. In several instances, instructors were responsible for single-section courses, and in one multiple-section course, an instructor was in charge of the course scheduling and putting together the common prelims. The main consequences of this mode of operation, encouraged by Art, were the many discussions—often heated—at lunch and at department meetings and the almost continuous, slow change in course content and emphasis.

Before 1948, there were few elective courses and almost no graduate courses, in machine design at any American school. Art had become convinced that there was a need and a place for a “real” graduate program in machine design; one of his immediate goals was to set up such a program. By 1949, the existing elective course, “Advanced Machine Design”, had been augmented by five courses covering topics from creative design through kinematics

and vibrations to laboratory work in machinery development. These courses were built upon the unique areas of knowledge brought in by instructors as well as professors. The courses related to vibrations and machinery development were among the very first courses to utilize the “war-effort developed, state-of-the-art” instrumentation in college laboratory studies of machine elements and machines.

Historically, research in the department had been sporadic, at best; another of Art’s goals was to get the department involved on a continuous basis. Pure luck led to a quantum jump in research when in the fall of 1947 the National Advisory Committee for Aeronautics (NACA, now NASA) approached a number of universities with the idea of sponsoring experimental and theoretical research on high-speed journal bearings, an area of great importance in relation to the recently developed aircraft gas turbine engine. Art immediately saw that Cornell was the ideal place, because the professor just hired from the aircraft engine industry, George B. DuBois, was the ideal person to head up such a project. The selection committee wasted little time in awarding the contract to Cornell. In a few years the Department of Machine Design was recognized as one of the world’s leading centers for lubrication research. Practically everyone in the department, including Art Burr, was actively involved at some point in the eleven-year life of the project. Theoretical lubrication research continues to this day.

The turnover in staff, the returning older veterans, the influx of highly selected high-school graduates, and a legal age of eighteen for drinking alcoholic beverages combined to make Cornell a very socially active place with almost weekly meetings of student organizations and faculty groups, but they were all eclipsed by the Department’s social activities—which had to meet the standards of Phyllis and Art Burr! In effect, the Burrs adopted the entire department, including families. The fall, winter, and spring outdoor activities were wonderful opportunities for families to get to know each other and the annual Christmas party (for adults) at the Burr home was the event of the year. Phyllis and Art were the consummate party givers and party goers!

Art was highly professionally oriented. He was a registered professional engineer in Illinois and he was active, locally and nationally, in the American Society of Mechanical Engineers (ASME) and the American Society for Engineering Education (ASEE). His deep sense of responsibility carried over to the mechanical engineers working in the region around Ithaca; he was a mainstay in the operation of the Southern Tier Section of ASME throughout his years in Ithaca. Art (and the School and the College) considered participation in activities of professional societies to be significant contributions to the educational program and he strongly encouraged participation by his staff.

Art was a consultant for a number of operations, notably the Cornell Aeronautical Laboratory, the Edlund Machine Company and the Boeing Airplane Company; but his major concern, along with being department head, was the education of students for careers in the broad field of machine design—or mechanical design as it was being renamed. He loved all aspects of teaching mechanical design—from collecting broken, deformed, or worn-out parts to show students, to organizing plant visits, to writing extensive volumes of classroom notes for use as up-to-the-minute textbooks for the required courses, “Design of Machine Elements” and “Design of Machines”. The notes were published, in effect, by the department. Art was the sole author of Mechanical Design Parts I and II, which first came out in 1952, and co-author with Professor DuBois of Parts III and IV, which first came out in 1955. The McGraw-Hill Book Company approached Burr and DuBois and a contract was signed. The book was never published for the simple reason that Art, a perfectionist, never reached the point where he could conclude that this was the best he could do and turn the manuscript in for publication. Although this was unfortunate for mechanical engineering education in general, for Cornell public relations, and for the financial well-being of the authors, it was beneficial for Cornell students in that they, in effect, had a new edition to use every year or so.

In 1953, Art was appointed the Hiram Sibley Professor of Mechanical Engineering.

The Burr family spent the academic year 1953-54 on sabbatical leave in Brazil where Art was a Visiting Professor at the Instituto Tecnológico de Aeronáutica, Sao Jose dos Campos, Sao Paulo. Their love affair with the Southwest had really gone south!

The appearance of Sputnik (and the resulting flood of U.S. government money for research), the development of the digital computer, and changes in the deanship of the college resulted in many educational and structural changes in engineering at Cornell. By 1965, when the undergraduate program was changed back to a four-year program, the number of departments in the Sibley School had decreased to three and the Department of Machine Design had become the Department of Machine Design and Manufacturing Processes. Several structural changes occurred in 1967 when administrative appointments were changed to term appointments from “lifetime” appointments, the Department of Industrial Engineering and Operations Research became the School of Industrial Engineering and Operations Research, and the remaining two departments—Machine Design and Manufacturing Processes and Thermal Engineering—became more autonomous than before. Professor Burr relinquished being Head of the Department and in 1969 the Department was renamed Mechanical Systems and Design. In 1972, the departments disappeared completely when the Schools of Aerospace and Mechanical Engineering combined to become the Sibley School of Mechanical and Aerospace Engineering.

Upon his return from Brazil, Art had foreseen many of the approaching changes and he began to concentrate his efforts on the upper-class/graduate level courses, “Advanced Mechanical Analysis” and “Mechanical Vibrations”. He had already concluded that at least at the graduate level, a course in mechanical design should be organized in terms of the principles of mechanics involved rather than in terms of named machine elements. The first edition of his new notes, *Advanced Mechanical Analysis*, was privately published in 1967 and the third edition in 1972.

Art spent the summer of 1966 as a Visiting Professor at the Pontificia Universidade de Catolica, Rio de Janeiro, Brazil. In August 1968, the Burrs began a long-delayed sabbatical leave that became an extended trip around the world with sightseeing intermixed with visits with past students and active teaching and consulting at several major universities; His appointments during this period were: (a) from August 1968 to December 1969, as Ford Foundation Visiting Professor at the Universidad de los Andes, Bogata, Colombia; (b) from January to April 1970, as Visiting Professor at the Indian Institute of Science, Bangalore, and (c) from April to June 1970, as Professor and Consultant at the Indian Institute of Technology, Bombay, and the P.S.G. College of Technology, Coimbatore, India.

With retirement approaching, Art and Phyllis began looking for the ideal situation in the ideal place—considering they wanted to be “South of the Border” and Art wanted to keep active professionally, with his major effort being directed towards preparing an expanded version of *Advanced Mechanical Analysis* for publication by a major publishing company. The newly established Universidad de los Americas at Puebla, Mexico appeared to offer everything the Burrs had hoped. Upon arrival, Art was appointed head of the department as well as Professor of Mechanical Engineering and thus was faced with all of the start-up problems of a new school. This was a time of student unrest in Mexico, too, and the University was essentially an armed camp. Art, and Phyllis, decided this was not really “Eden” and in 1976 he resigned from the University and they moved to Guadalajara, Mexico.

In 1981, his book, *Mechanical Design and Analysis*, was published by Elsevier. Although quite respectable, the response was not up to what Art had hoped for; the idea and the book were ahead of the times. However, the University of Texas, Austin was more forward looking and Art was contacted by a professor—who had received his Ph.D. at Cornell, with his dissertation in the area of lubrication—to see if he would be interested in an appointment as an adjunct professor. Art was delighted! This would be his first opportunity to teach using his new “hardcover” book, there would be no more trips back to the States for access to the quality of technical library needed for his work on the second edition of his book and for access to quality medical care, he would have an office and daily professional and social contact with friends of many years, and there would be no more hassles with the Mexican

bureaucracy. The Burrs moved to Austin in 1983 and Art served as an Adjunct Professor from 1984 to 1992. Always looking ahead, Art decided that a co-author would be a good idea for the second edition of *Mechanical Design and Analysis* and his choice was Professor John B. Cheatham, William Marsh Rice University. The new edition was scheduled for publication by Prentice-Hall in the spring of 1995.

Art was a Life Fellow of ASME, a Life Member of ASEE and a member of the honor societies Sigma Xi, Tau Beta Pi, Pi Tau Sigma, and Phi Kappa Phi.

He is survived by his wife Phyllis (Carter) Burr of Austin, Texas; three children; six grandchildren; and a sister. His son, Arthur H., Jr., is a biology professor at Simon Fraser University, Vancouver, British Columbia, Canada; daughter, Merrill (Burr) Hille, is a biology professor at the University of Washington, Seattle; and son, T. Shepard, is a certified public accountant in Orlando, Florida.

Art Burr will be remembered for his stellar performances as mechanical engineer, department head, teacher, author and colleague, but those who worked most closely with him will always think of him first as a true best friend.

John F. Booker, Robert L. Wehe, Richard M. Phelan

Malcolm Sandell Burton

March 26, 1918 — December 22, 1997

Malcolm Sandell Burton was born in Boston, Massachusetts, son of Reverend Charles Jewell and Ethel Sandell Burton. He graduated in 1940 from Worcester Polytechnic Institute in Mechanical Engineering, and in 1943 from Massachusetts Institute of Technology in Metallurgy with B.S. and M.S. degrees respectively. After a short stay at M.I.T., Malcolm Burton joined Cornell as an Assistant Professor in the School of Chemical and Metallurgical Engineering in 1946. He retired from Cornell in 1983 where he spent nearly his entire professional career.

In the early time, Malcolm Burton worked closely with Professor George V. Smith in the development of the Metallurgical Engineering Program, which was a part of the School of Chemical and Metallurgical Engineering. Professor Smith was in charge of the Metallurgical Program. They did research on iron and its alloys. Malcolm Burton's specialty was in metallurgical processing including casting, welding, and other joining processes, which was also the subject where he did his teaching. His teaching effort resulted in a textbook, *Applied Metallurgy for Engineers*, published by McGraw-Hill in 1956.

In the late 1950s, the Metallurgical Program began to expand as a result of a large governmental grant to develop Materials Science at Cornell. Funding was also available from the donation of Mr. Francis Norwood Bard (Cornell, 1904) to build a new and separate building for Metallurgical Engineering. Malcolm Burton played an important role in the planning and building of the new building, named Bard Hall. The build-up of Materials Science at Cornell resulted in the reorganization of academic programs. The Metallurgical Program merged into a new Department in Engineering Physics and Materials Science in 1964 from which another new Department in Materials Science and Engineering was created in 1965. During the transition period, Malcolm Burton was active in administrative matters first as the Assistant Director of the Department of Engineering Physics and Materials Science and later as the Acting Director of the new Department of Materials Science and Engineering. It was an exciting time in Materials Science at Cornell. New ideas and programs were created both in research and in teaching. Malcolm Burton's quiet and calm personality was effective amid all the excitement.

In the years following, Malcolm Burton shifted his interests to administrative activities. He joined the office of the Dean of Engineering as an Associate Dean in charge of undergraduate affairs. At that time, the first two years of an engineering undergraduate was a common curriculum administered by the College of Engineering. In his

position, Malcolm Burton was able to help a number of engineering undergraduates in their beginning years at Cornell.

Upon his retirement, he moved to California where he designed and built a new home.

Malcolm Burton will be remembered as a dedicated teacher and able administrator who served Cornell well.

Arthur Ruoff, Pete Scala, Che-Yu Li

John Carlton Cain

October 14, 1911 — June 16, 1998

If there ever was a true “rags to riches” story in the world of academe, John Carlton Cain was a prime example.

Born in Blakely, Georgia on October 14, 1911, John Cain was the son of poor, struggling sharecropper parents. Over the years, and because of the background and teachings of his mother and father, he gained respect and almost a love relationship with things growing in the soil. He also found out that having an education would allow him to become a better person and serve his fellow man in ways that he could only dream about as a child.

Eventually, he entered the University of Florida and was awarded a Bachelor of Science degree in Agriculture from that institution in 1935. Even before entering college, he had associated himself with the agricultural experiment station system of the United States, having worked as a Field Assistant at the Florida Sub-tropical Experiment Station from 1930-31 and then from 1931-35 at the Florida Agricultural Experiment Station as a Laboratory Technician.

After graduating from the University of Florida, he continued his stay at the Florida Experiment Station until 1940, first as a Research Assistant, then as an Assistant Horticulturist his last three years. His primary work was with citrus crops.

In 1940, he felt it important that he advance his educational standing and entered Cornell University to study in the field of Pomology. He also worked as an Instructor in Research in the Department of Pomology while obtaining his degree.

World War II interrupted his education temporarily. He entered the United States Army in 1942 and served as a commanding officer until his discharge in 1945. He had an outstanding military career and was awarded the Bronze Star for his achievements.

After the war, John Cain returned to Cornell University where he was awarded a Ph.D. degree in 1946. That same year, he was appointed an Associate Professor of Pomology at the New York State Agricultural Experiment Station in Geneva. In 1951, he was appointed to the position of Professor of Pomology.

This outstanding scientist came to the Geneva Experiment Station with a superb background. He had advanced training in the fields of pomology, plant physiology, plant biochemistry, and soils chemistry. While in Florida, he

gained considerable experience and knowledge of cold storage problems of citrus and other sub-tropical fruits. He also had conducted, before coming to Geneva, six years of research on the nutrition of deciduous fruits.

From the time he came to Geneva until his retirement in 1973, he expanded the horizons of his fellow colleagues and the fruit industry, not only in New York but also in other parts of the world, with his outstanding contributions in the field of plant nutrition. Other scientists universally recognized his studies demonstrating nutrient uptake and interactions in fruit plants. Later in his career, and working with agricultural engineers from the Ithaca campus of Cornell University, he turned his attention to the mechanical pruning and harvesting of trees and the design of orchards and trees. Many of the things that John Cain recommended during his career concerning nutrition, spacing, and planting of tree-fruit orchards have stood the test of time and are still being used today by leading fruit growers.

John Cain was always looking for something new to do, or some different tack to take with a particular project. In his private life, he developed a great affinity as an amateur astronomer. This interest in astronomy perhaps led him to one of his most fascinating cooperative projects with the astronauts in the Apollo Space Program. With the cooperation of some friends close to the astronauts involved in the program at the time, John got the astronauts on both Apollo Flights 10 and 13 to smuggle apple seeds in a fountain pen aboard those spacecrafts. The seeds were from the variety, Flower of Kent, grown at the Geneva Station. This variety was particularly suitable for a “zero-gravity” flight because this apple was the same variety that reputedly hit Newton on the head when he discovered the laws of gravity. Following the flights, John Cain and his colleagues at the Station grew seedlings from these seeds. For a number of years, there were three trees growing on the campus of the Station that represented these two flights. One of the astronauts involved in the project, James Lovell, sent Dr. Cain a letter of thanks for helping with this project.

Dr. Cain’s work was not confined to New York State. In 1954-55, he served as a horticultural advisor to the Catholic University in Santiago, Chile. Then, in 1964, he acted as a consultant at the Inter-American Institute for Agricultural Science in Turrialba, Costa Rica. In 1972, he was elected a Fellow of the American Society for Horticultural Science, the most prestigious award of that outstanding organization of scientists. Only a handful of individuals out of a membership that exceeds 3,500 are elected each year as Fellows. From 1972-73, he served as President of the Northeast Section of the American Society for Horticultural Science. He also was an Associate Editor for the Society for five years.

During his career at Geneva, he authored 73 scientific papers in the fields of fruit nutrition, mechanical harvesting and pruning, and orchard design. He was awarded the title of Emeritus Professor upon his retirement in 1973.

He and his wife, Marie, were married for 63 years, and the couple had two sons, James McRae and John Jr. Dr. Cain was 86 years of age when he died.

R.E. (Pat) Krauss, Charlotte Pratt, Roger D. Way

Joseph Kearns Campbell

October 30, 1927 — August 4, 1997

Joseph Kearns Campbell, Professor Emeritus of Agricultural and Biological Engineering, passed away peacefully at his home in Fredricksburg Texas on August 4, 1997. Professor Campbell is survived by his wife, Sigrid (Beicht); daughter, Sabine Hyland; son, Oliver; brother, John D. Campbell; and sisters, Ann Campbell and Susan Campbell Shell.

Joe was born and raised in Belleville, Pennsylvania. In 1945, he volunteered for the U.S. Navy and served three and one half years as a Radarman. In 1953, he earned a Bachelor of Science degree in Agricultural Engineering at Pennsylvania State College and then worked for eight years as a Design Engineer at New Holland Machine Company in New Holland, Pennsylvania. During the next four years, he worked at Allegheny Ballistics Laboratory in Maryland as part of the team that developed the Polaris missile launch system. In 1967, he completed a Master of Science degree in Agricultural Engineering at Cornell and joined the faculty as an Extension Engineer. Joe retired from Cornell in 1992 and he and Sigrid moved to Fredricksburg, Texas shortly thereafter.

Joe had a very successful career at Cornell University and was active in teaching, research and extension, serving as Department Extension Leader from 1983-89. His outgoing personality, formal training and practical “hands-on” engineering experience in industry made him a natural extension educator and a great university teacher. Joe’s leadership in extension was clearly evident as he inspired all those around him to expand their efforts in transferring information and technology into the farmer’s hands. To this end, he produced upwards of 150 articles and papers of practical content aimed toward production agriculture and technology transfer. A number of these publications received Blue Ribbon awards, a national recognition by the American Society of Agricultural Engineers. Joe was a registered Professional Engineer and held four U.S. Patents at the time of his retirement.

Joe was a recognized authority on tillage and implements appropriate for use by the smallholder farmer in the international community. To this end, he developed a popular undergraduate course, Agricultural Mechanization--an International Perspective, which he taught from 1981-86. Students learned about the simple tools and machines used in developing countries and drew upon the examples he had encountered in his many real world experiences. His course was a blend of engineering, production agriculture, and social and political science. This made his course unique in an engineering department, for he taught mechanization using examples of engineering principles which had in many cases evolved and been tested in agrarian cultures for hundreds of years. The fact that many of

the technical features of the “third world” tools formed key elements in modern machines made his course equally relevant to both international and domestic students.

Joe expanded his international agriculture expertise by spending sabbatical leaves at the International Rice Research Institute (IRRI) in the Philippines, and at the International Potato Center (CIP), in Lima, Peru. During his sabbatical at IRRI, he served as head of the Agricultural Engineering Department and wrote the textbook *Dibble Sticks, Donkeys, and Diesels*, which is a practical guide for appropriate technology transfer and sustainable agricultural mechanization. While at CIP, he focused on simple machines for cultivation and processing of potatoes. In addition to this formal international involvement, Joe worked as an engineering consultant with a number of international agencies on projects in Indonesia and Africa.

After Joe retired, he and Sigrid moved to Fredricksburg, Texas, a small town that has retained much of its German heritage. Joe and Sigrid busied themselves there with settling into their new home, writing the Campbell and Beicht family history, enjoying their new grandchildren and hosting a number of visitors from around the world. Joe continued to pursue his many hobbies, one of which was a long time association with a Model A Ford pickup. During this same time, Joe continued his battle with cancer.

What we remember most and appreciate most about Joe was his constant positive attitude. He was a role model to all that knew him and he was a person who led by example. Joe was always looking on the positive side of things and he was a constant source of new ideas and concepts. He always encouraged his students in the classroom and on the farm to “try it out”, to implement new technology and improved methods in a positive way in order to make work more efficient and labor less tedious. His office was often a beehive of activity featuring international visitors, graduate students, extension specialists and his Cornell peers discussing technology, research, or the latest extension information. Everyone appreciated his willingness to help solve problems, his creativity in making technology useful, and his ability and patience in explaining it all in printed and spoken words. He was an eternal optimist who sought to improve peoples’ lives by generously sharing his many talents. He was a mentor and a friend and we miss him deeply.

James A. Bartsch, Roger F. Sandsted, Michael B. Timmons

Samuel Gordon Campbell

December 10, 1933 — September 29, 1997

Dr. Samuel Gordon Campbell died on September 29, 1997 at age 63 years. He was born on the west coast of Scotland in Oban and was raised in the small town of Crieff where he learned and developed a liking for the rural life — especially animal agriculture, and particularly sheep husbandry. He chose veterinary medicine as his career and graduated from the School of Veterinary Medicine at Glasgow University at the young age of 22; after an internship at Glasgow University, he earned a Master of Science degree in Microbiology at the Guelph campus of the University of Toronto, Canada. He was then required to serve in the military in Britain and was posted as an officer of the Royal Army Veterinary Corps to a dog-training unit stationed in Malaya. Gordon then decided to pursue an academic career and came to Cornell University in 1961, obtaining his Ph.D. degree in Microbiology in 1964. Except for three years as a member of the faculty at the University of Melbourne, Australia, the rest of his career was spent at Cornell University, where he became an Assistant Professor in 1967 and achieved the rank of full Professor in 1978. He also held the post of Associate Dean for Academic Affairs at the College of Veterinary Medicine for five years; following this appointment, he became Director of International Programs. Thus, his contributions to Cornell University span over 30 years and incorporate a breadth of responsibilities including administration, research and teaching, for which he was given a distinguished teaching award in 1994 by the Agriculture Honor Society, Gamma Sigma Delta. This was not surprising since Gordon's lectures were spellbinding affairs richly decorated with amusing but relevant anecdotes. His research expertise encompassed the disciplines of bacteriology and immunology and he was always most interested in the practical application of his science. In fact, he engaged in a fair bit of sheep extension work in his own time and on top of his formal responsibilities. Gordon became involved in international affairs in part due to his experience in Malaya, and in part because small-ruminant husbandry represents a particularly important part of agriculture in developing countries. Always a supporter of the less privileged, he worked for many international aid organizations including the World Bank, the U.S. Agency for International Development and the Food and Agricultural Organization of the United Nations.

This catalogue of achievements does not define the personality of the man. Gordon's Scottish heritage (of which he was very proud) and his determination to retain and embellish his Scottish dialect (and harp and bagpipe skills) were combined with other Scottish traits such as being forthright in communication and requiring honesty and integrity from those with whom he interacted. As a member of the Cornell community, the needs of students were

foremost on Gordon's personal agenda, as was the need to have representation of the faculty in the major decisions concerning governance of the university. Gordon served with distinction (often as chair) on many college and university committees. At meetings of the faculty of the college, his Scottish brogue was heard loud and clear as it rang around these halls with forcefulness and passion, and his subtle sense of humor. Gordon's great wit and personal charisma also made him an excellent raconteur, and he was much in demand as an after dinner speaker.

He loved his profession and practiced it beyond Cornell, living on a farm in Dryden called "Hickory Ridge" with his wife, Elizabeth (Beth) and their sons, Rory, Kyle (Cornell 1990; Veterinary class of 2000), and Scott. He raised sheep, cattle and Border Collies, and bred and trained Collie sheep dogs. He was chairman of the Tompkins County SPCA and therefore practiced his profession to the ultimate level. Gordon and Beth Campbell were active in community affairs, and he was the founding president of the Rotary Club of Dryden. He enjoyed working with young people and on the day of his death had played soccer with some of the young men of the community. Thus, the Cornell and the Tompkins County communities have lost a person of great intellect, energy, enthusiasm and moral strength. However, he leaves a recorded legacy in the published minutes of the meetings of the faculty for future generations to emulate. In addition, the students, staff and faculty of the Department of Microbiology and Immunology, have planted a red oak tree in Gordon's memory at the entrance to the Veterinary Medical Center.

Hollis Erb, David Robertshaw, Roger Avery

Thomas Harrison Canfield, Sr.

January 19, 1916 — April 8, 1993

Thomas Harrison Canfield was born on January 19, 1916 in Butte, Montana, and received his Bachelor of Architecture degree from Ohio State University in 1939. During World War II (1942-46), he served with the Navy Strategic Bombing Survey in the Pacific Theatre, interpreting aerial reconnaissance photos for promising strategic targets in Japan, for which he was awarded the Army Commendation Medal.

In 1947, he joined the faculty of the College of Architecture where he taught Architectural Design and, for a number of years, Building Material and Construction. As a design critic, he was devoted to his students and constantly challenged them to do better. Nothing was ever good enough and he was a stickler for detail and for respecting the program. Two constant admonitions were: “Draw it, don’t talk about it!” and “Don’t worry about being original—be good!” One of his techniques for encouraging good work was to regularly schedule “crits” in his office, instead of just cruising in the studio, so that one had to bring all of one’s work for a substantive preliminary review. This lent a greater sense of urgency and responsibility to the process, as all who waited their turn out in the corridor will clearly remember.

Also, his studio was never his personal “atelier” and he never promoted a single point of view, but always encouraged students to pursue their own strengths and interests and to be the best at whatever they ultimately did, whether it be architecture, or technology or art, etc. On one occasion, he told a student, “I know you can be an architect, but can you be an artist?” The answer proved to be a resounding yes! Another time, he told a student who was considering a year in Europe, “If all you achieve is to learn something about French wines, consider your time well-spent.”

For many students, and new colleagues, he was also a mentor and friend. He often hired students for temporary drafting help on some of his personal projects or for work on his on-going renovations on his house on Eddy Street. Many distinguished alumni of the period regard him as the best and most influential teacher in their careers; one who played a pivotal role in shaping their attitudes.

Not only was he an active and dedicated teacher of architecture, he was also an active practitioner. Soon after he joined the faculty, he went into partnership with F.M. Wells, the head of architectural design, and together they designed a number of contemporary homes in the Ithaca area.

In the early 1960s, he headed up the design team of Tallman & Tallman, Architects, designing the new Ithaca College campus on south hill. This was a major challenge which he relished, single-handedly doing virtually all of the preliminary schematics. Colleagues from those days describe him as the consummate draftsman and designer who was so fast and so accurate and thorough that, as soon as the preliminaries were approved”, they could immediately proceed to the contract drawing stage. During those years he was virtually on a non-stop series of “Esquisses”, evenings and weekends working in his studio at home, cranking out endless preliminaries on yellow trace for building after building. He practiced what he preached. In 1970, Ithaca College awarded him an honorary Doctorate of Fine Arts. And, on a visit to the new campus, Governor Rockefeller remarked that it was the handsomest campus in the state.

But his interests and activities ranged even more broadly. In 1958-59, he joined Associate Dean Henry Detweiler, professor of architectural history, and others as the field architect for the Harvard-Cornell Archeological Expedition of Sardis, Turkey where they discovered and excavated the ruins of the ancient city of Croesus. And, in the mid-1960s, he and several other College faculty members worked together with several alumni to help them establish the first school of Architecture at the University of Puerto Rico in San Juan. One of the leaders of their effort, Jesus E. Amaral (B. Arch. '51), a former student, was appointed the first dean of the new program. During the 1968-69 academic year, Canfield spent his sabbatic leave teaching there as a visiting professor. He was also involved in local planning projects with the firm of Kelly, Parsons, Canfield and Stein, and from 1961-63 he served as a member of the Ithaca Planning Board.

Upon his retirement in 1976, Canfield moved out to the countryside in the Buttermilk Falls area, for a well-deserved rest from the hectic pace of his active years.

He will be remembered fondly by many Architecture, Art, and Planning alumni and former colleagues for the high quality of his teaching, his rigorous standards, his devotion to his students, his dedication to creative work, and his warm personality. He is survived by his wife, Dorothy Fogel Canfield of Ithaca, a son, a daughter, and a sister.

Charles W. Pearman, John Reps, Alexander Kira

Paul Jones Chapman

September 9, 1900 — October 6, 1993

Professor Paul Jones (Chappie) Chapman had a distinguished and productive career in research, extension and administration at Cornell's New York State Agricultural Experiment Station at Geneva and briefly on an extension assignment in Ithaca. He made a number of important contributions to the science of entomology that had very practical benefits for the fruit growers in New York, other states and around the world. He was widely recognized for his keen intellect, good judgment and far-sighted approach to future needs in crop protection from the ravages of arthropod pests.

He was born in Cazadero, California, the operating base for his father's lumber business. He was the sixth of seven children. In 1910, the family moved to Santa Rosa to provide proper education for the children. His father developed an interest in orcharding and owned several prune orchards. Chappie was more interested in this than lumbering, although he worked summers as a lumberjack to earn money for college. He was interested in bird and animal life and read all the books he could find on the subject. Horticulture became his career interest. He followed his two older brothers to Stanford University, but transferred to Oregon State University after one year to pursue his education in horticulture and related sciences. He received his B.S. degree in 1922.

Chappie then came to New York and was employed as a Special Field Assistant assigned to Genessee and Wyoming Counties, Departments of Entomology and Plant Pathology, Cornell University, from April through September, 1923. More about this activity later. He accepted an assistantship with Extension Professor Cy Crosby, and enrolled in the Graduate School with a major in Entomology. He chose a taxonomic problem on the Psocoptera Order because he could fit it into his assistantship extension responsibilities. In 1927, he studied six weeks at the Museum of Comparative Zoology, Harvard University. After receiving his Ph.D. degree in 1928, he went to the Virginia Truck Crop Experiment Station as an Entomologist in April 1928. He returned to Cornell at the New York State Agricultural Experiment Station in June 1930, to manage the new "Moths and Insect" project established by the State legislature with a \$50,000 appropriation. He was hired as Chief in Research (the equivalent of full professor) in the Division of Entomology at the age of 29. Chappie served as Head of the Department for 17 years from 1948 until 1965, and retired in 1968. From then until shortly before his death, he was active in research and in writing the history of the New York State Agricultural Experiment Station.

Even though his official extension duties were brief, he had an outstanding record. As an inexperienced special field assistant working with apple growers, he recommended the then not accepted spraying of apple trees in prebloom and late bloom with fungicides for control of apple scab. Chapman advised his growers to make two applications, just before and in late bloom, because of a heavy rain that year. His growers had clean fruit at harvest whereas others were badly damaged by apple scab. These outstanding results led to offers of graduate assistantships in plant pathology and entomology as well as an industry position. As a graduate assistant with the late Professor Crosby, he became involved in the controversy of the merits of spraying versus dusting for control of orchard insects and diseases. He believed that spraying was superior over all, which eventually was proven to be true.

Professor Chapman had a very distinguished career in research. He was author or co-author of 180 papers and a book. His research began as a graduate student with a classic study on the taxonomy of the insect order Psocoptera, a study which is still the reference standard. His two years in Virginia resulted in four publications on the biology and control of vegetable insect pests. Upon his return to New York, he undertook studies on three major pests of apple and developed a research program for fruit pest control in the Hudson Valley. He was an outstanding researcher in the field with his carefully planned experiments that have provided essential knowledge about the basic biology of fruit pests and their interactions with their hosts. He developed innovative control measures for pest control, such as determining that one-month storage of apples at 32-35°F kills all stages of apple maggots, thus making apples eligible for export to England and other markets where this insect is not present.

He collaborated with chemists at the New York State Agricultural Experiment Station in defining the mode of action of and characterizing those qualities in petroleum oils that contribute to their toxicity to insects and mites and to plant phytotoxicity. In this one area of research, he published over thirty papers and has set the specifications for plant spray oils now widely used on deciduous and citrus fruits for insect and mite control in New York and throughout the world.

After assuming headship of the Department of Entomology in 1948, Professor Chapman still continued active research, working in collaboration with the late Professors S.E. Lienk and horticulturist, Otis Curtis. They designed field experiments to determine the impact of mite foliage feeding on apple tree growth and yields. These studies demonstrated that heavy mite populations early in the season slowed tree growth and drastically reduced bloom and yield the following year. The Chapman-Lienk collaboration continued with a National Science Foundation grant to explore what happens to an introduced plant species (apple) entomologically. The study was limited to the Lepidopterous family Tortricidae.

The final report is a book, *Tortricid Fauna of Apple in New York*, published in 1971. It includes a wealth of information on cultivated and wild apples along with the biology and color plates of larval and adult stages of 54 tortricid species. After retiring, he and Lienk initiated studies on the flight periods of Macrolepidoptera. In 1991, at the age of 91, he published a 152 page Station bulletin summarizing the records of the flight periods of 676 species occurring in Western New York. He made Professor Lienk, his long-time collaborator and friend who died in 1988, the senior author.

As significant as Professor Chapman's research findings have been, his contributions as teacher of young faculty and his leadership of the Department of Entomology into a modern diversified unit are equally if not more important. He encouraged basic biological studies as essential to sound integrated pest management (even though he did not use that term). Because of his success with chemists in collaborative research on spray oils, he recognized the potentials for such collaboration. He was a pioneer in integrating other disciplines into the entomology profession, establishing toxicology, biological control and biochemistry positions in the department. The last one was to study the then new field of insect pheromones. By example and encouragement, he set the highest goals for the department's basic and applied research programs. He set very high standards in selecting new professorial staff. Besides great promise as scientists, he looked for balanced well-rounded persons. Of the ten faculty positions appointed during his tenure, six went on to chair departments of entomology. One of these also became a director, one a dean and one was elected a member of the National Academy of Sciences. A seventh professor moved directly into a directorship. He was very proud of his faculty and their accomplishments.

From retirement until a few months before his death, he came to his office and laboratory regularly where he continued work on the flight periods of moths and writing the history of the Station. He was always available to anyone for advice and counsel. The Department of Entomology was very important to Chappie, especially after his wife died in 1988. It became his primary interest and he was concerned for its future. In 1992, the Paul J. Chapman Graduate Student Fellowship in Entomology was established with a very generous gift from Chappie to Cornell University. This will ensure that "his" department can continue to inspire young entomologists to follow the principles and insights he had instilled in his colleagues.

Professor Chapman was an Honorary member of the Entomological Society of America where he served a term as President of the Eastern Branch and a term on the National Governing Board. The Eastern Branch honored him three times. In 1940 and 1942, he received the gold medal awarded for the best paper presented at the Eastern Branch meeting and in 1965 he was awarded the Certificate of Merit, only the third time this certificate had been

presented. He was a member of the American Association for the Advancement of Science (Fellow), American Institute of Biological Sciences and a member of Sigma Xi, Phi Kappa Phi, Gamma Alpha and Scabbard and Blade.

Professor Chapman was active in community affairs. He served as board member and president of the Geneva Civic Music Association; board member, president and Paul Harris Fellow of the Geneva Rotary Club; board member and first vice president of the Geneva General Hospital; and board member of the Geneva Free Library.

Chappie was an articulate, persuasive, reserved, polite, courtly gentleman. He was highly respected by staff at all levels for his keen intellect, wisdom and common sense. He had an instinct for doing the right thing and was a person people naturally turned to for counsel and advice.

He was predeceased by his wife in 1988. They had no children. Several members of his family still live in California.

Edward H. Glass, Haruo Tashiro, Wendell Roelofs

Nephi Albert Christensen

January 19, 1903 — April 12, 1996

Nephi Albert Christensen died on the morning of April 12, 1996, in his home in Albuquerque, New Mexico at the age of 93. His wife, Leda Lyman Christensen, predeceased him. He is survived by his youngest sister, Eva C. and her husband, John VanOrman; as well as his four children: Albert L. Christensen; Robert W. Christensen and his wife, Carrie; Marilyn C. and her husband, Dr. Jerome W. Bettman, Jr.; and Julianna McGregor; and nine grandchildren.

Born January 19, 1903, in Provo, Utah, Nephi was the second eldest child of seven born to Ellen Susanna Jorgensen and Chresten Carl Christensen. After receiving a Bachelor of Science degree from Brigham Young University, he taught high school in Cedar City, Utah in 1925-26. In 1928, he received a Bachelor of Science degree in Civil Engineering from the University of Wisconsin and then from 1928-33, he was Professor of Exact Science at Ricks College, Rexburg, Idaho. He was a member of the Hydraulic Research Laboratory of the Soil Conservation Service of the U.S. Department of Agriculture while completing Master of Science and Doctoral degrees from the California Institute of Technology in 1934 and 1939.

He became Dean of Engineering at Colorado State University in 1938, while simultaneously serving as Director of the Engineering Division of the Colorado Experiment Station for the next decade. He took leave from Colorado State during World War II to serve as chief engineer for the Ballistic Research Laboratory where he was promoted to Chief of Research for the Rocket Research Division in the Ordnance Research and Development Center, Aberdeen, Maryland.

In 1948, Dr. Christensen joined the Cornell faculty as Director of the School of Civil Engineering. Chris's tenure as Director of the School of Civil Engineering has to be viewed in the context of his times. In 1937, "Cornell was reported to be the worst housed and equipped among twenty-five top (engineering) schools in the country" and "virtually no research was done except that which the then new Director of Civil Engineering, Solomon Cady Hollister, started in the Hydraulic Laboratory." In the same year, Hollister became Dean of the College of Engineering and immediately undertook its revitalization. But Hollister's plans had only begun to bear fruit when World War II put them on hold. When Chris arrived in 1948, he found a faculty within civil engineering composed of experienced hands, tired from wartime teaching, and new hires with energy and ideas - but there was little that could be called research.

The picture was not completely bleak. Cornell was on the threshold of regaining a prominent role in engineering education by introducing a five-year undergraduate program and reviving long-delayed plans for new engineering buildings. In addition, the attitudes and funding required for the expansion of graduate study and research gained prominence. In civil engineering, Chris took advantage of these opportunities. Nationally, he was active in engineering educational planning circles. Locally, he oversaw the planning and the 1959 move from Lincoln Hall—tradition-rich but outmoded building—to Hollister Hall on the new Engineering quadrangle. A primary example of the progress in civil engineering was the transition in hydraulics from a largely empirical approach to one in which Cornell's historical status as a leader of the field was restored through the theoretical and experimental contributions of a new, younger faculty group.

The road to revival was not a smooth one, but when Chris retired, he could leave with pride and a sense of accomplishment in a school that was once again one of the undisputed leaders in civil engineering education and research. He remained director until 1966, and retired from Cornell in 1968 when he was named Professor Emeritus. He then led the Near East Foundation team assisting the Iranian Government in establishing an agricultural college at Rezaiyeh in northwestern Iran.

He was a member of Tau Beta Pi, Sigma Xi, Chi Epsilon, Sigma Tau, the American Geophysical Union, a National Director of the American Society of Civil Engineers, and the American Society for Engineering Education. For ASEE, he co-authored *Ethical Problems for Engineers* in 1965 with Philip Alger and Sterling Olmsted - an early reference and guide for engineering students and professionals. He was a trustee for the Village of Cayuga Heights in 1956 and a member of the New York State Flood Control Commission from 1954-60. He helped develop a comprehensive sewerage plan for Monroe County, New York in the late 1960s. He served as a consultant to the Brookhaven National Laboratory, the Argonne National Laboratory, and other national agencies.

Chris was a “hands-on” engineer who thoroughly enjoyed building things, including his own home five miles east of campus in Ellis Hollow and the Mormon Church in Ithaca. After returning from Iran in 1972, he became deeply involved in numerous building projects with his family and friends, including homes for several of his family, and also undertook the exacting pastime of building some 75 violins.

Nephi Christensen was a gentle, unassuming, honest, and honorable man who was kind to everyone. His sense of fairness and his dealings with people were exemplary. His philosophy of life continues to serve as a model for faculty members who become involved in administrative leadership positions in a university setting.

James H. Clancy

May 1, 1912 — March 3, 1993

James H. Clancy was born in 1912 in Oakland, California. He obtained his B.A. degree in theatre studies at San Jose State College in 1935 and continued at San Jose as an instructor of dramatic literature and history of the theatre. In 1940, he joined the United States Air Force, attaining the rank of Captain, then pursued advanced study at Stanford, obtaining a Ph.D. degree in 1947. He returned to San Jose to teach and serve as director of the University Theatre. Two years later he married Stella Pinoris.

During the next thirty years Jim Clancy established himself as one of the leaders in the American educational theatre, excelling separately and concurrently as administrator, teacher, and director. He contributed significantly to the national professional organization, the American Theatre Association, served (1957-59) as editor of its journal, the *Educational Theatre Journal*, and headed four of the country's most distinguished programs in theatre education.

He left San Jose in 1957 to become professor of dramatic literature and director of the University Theatre at the State University of Iowa. There he founded an experimental theatre which became one of the most important in the country. Within a few years, in fact, his achievement at San Jose and Iowa made him one of the ten American directors awarded grants-in-aid by the Ford Foundation in 1960 to study European theatre direction. Then in 1961 he returned to Stanford as professor of dramatic literature, director of the University Theatre, and director of Graduate Studies, and the following year he was appointed professor of drama at Dartmouth College and director of Dartmouth's Hopkins Center.

In 1967, Jim came from Dartmouth to Cornell to serve as department chair and director of the University Theatre. His major concern at this juncture was to guide the reorientation of the department, which had recently changed from a Department of Speech and Drama to one of Theatre Arts. Central to Jim's reorganization was the establishment of a professional training program in acting and directing and the organization of M.F.A. degrees in these areas to complement the program's already established M.A. and Ph.D. degrees. The establishment of these programs and the advanced students they attracted enabled the Cornell University Theatre to aim at more ambitious and more polished productions than had previously been undertaken, an important gain both for the department and the entire community. Within a short time, the "Clancy era" was firmly underway, and the evidence in interest and enthusiasm among undergraduates, graduate students, and community theatre buffs was

matched only by the steady intensity of activity at the Straight and Lincoln Hall theatres. Jim not only directed frequently (he once said that any director worth his salt directed at least three shows a year), he and his wife frequently joined their students as actors.

The improvement in the quality of theatrical productions under Jim's leadership served, among other things, to make more evident than ever the inadequacy of the University Theatre's aging facilities in the sub-basement of Willard Straight Hall. The eventual construction of the new University Theatre in Collegetown may be seen in significant measure as a response to the heightened awareness of the need for the support of quality theatre that Jim encouraged at Cornell.

Among his further contributions to such theatre, he was instrumental in 1970 in the formation of the Ithaca Summer Repertory, which developed into a joint venture supported also by Ithaca College and the Center for the Arts at Ithaca. The current highly successful Hangar Theatre is the direct descendant of this organization.

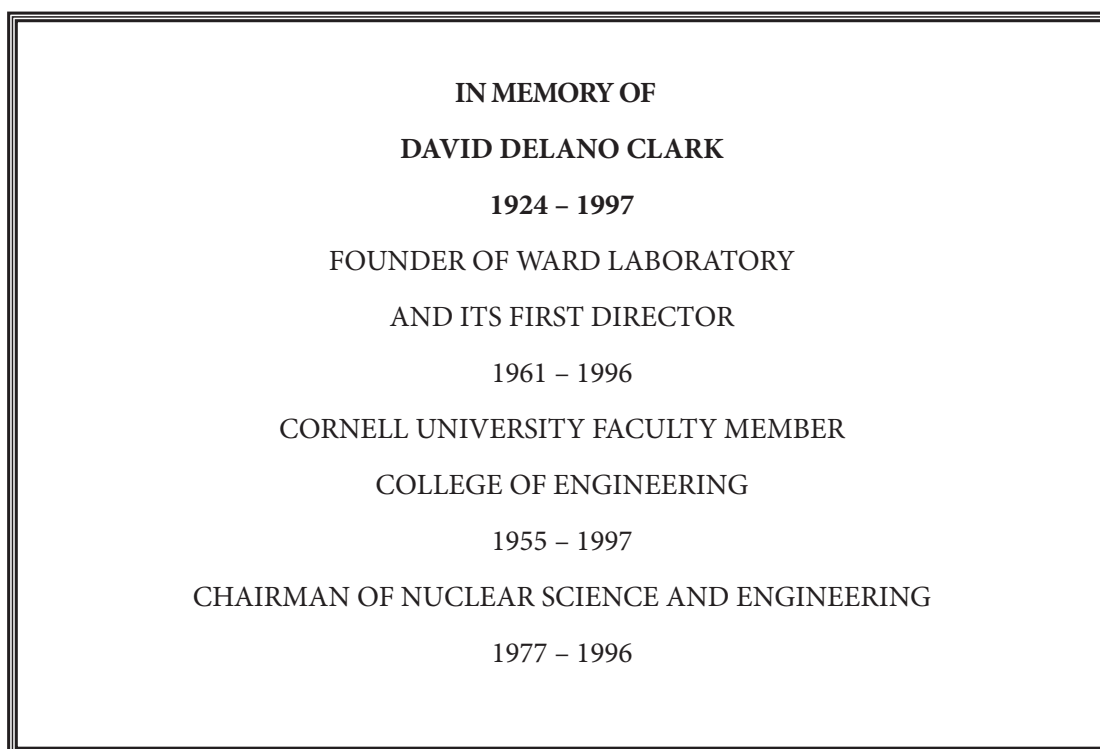
During his ten years at Cornell, Jim was widely admired and loved by students and colleagues alike for his infectious passion for and knowledge of theatre, his wit, his Irish charm, and his inspiring uncompromisingly high standards for the art of the theatre. His classes were lively and stimulating, and the productions he directed were always fresh and exciting, and frequently powerful and visually stunning. Upon his retirement he returned to California, and subsequently moved to southern Arizona, where he continued for some years to accept invitations to teach and direct. He is survived by his wife, two sons, a daughter, and grandchildren.

Anthony Caputi, Bert O. States, Marvin Carlson

David D. Clark

February 10, 1924 — December 22, 1997

David Delano Clark, Professor of Nuclear Science and Engineering, died at age 73 on December 22, 1997, at the Ward Laboratory of Nuclear Engineering. The memorial plaque in the lobby succinctly records his remarkable career at Cornell.



David was born in Austin, Texas. His undergraduate education at the University of Texas was interrupted by service in the U.S. Army Air Force in World War II. After the war, he enrolled at the University of California at Berkeley where he earned the B.S. degree in 1948 and the Ph.D. degree in 1953 under the supervision of Nobel Laureate, Owen Chamberlain. David was a post doctoral research associate at Brookhaven National Laboratory before joining the faculty of Cornell University in 1955.

David's most prominent contribution to Cornell is that he planned and oversaw the design and construction of the Ward Laboratory of Nuclear Engineering, and served as the laboratory director for 35 years. The Ward Laboratory houses the University's pulsing TRIGA Mark II nuclear research reactor. The formal program in Nuclear Science and Engineering at Cornell grew out of the Department of Engineering Physics in 1977, and David was its chairman for twenty years, 1977-96. The Ward Laboratory has contributed to the research of scores of faculty members and

students at Cornell since its completion, and thanks to David's leadership in the five years prior to his death, is playing a role in an increasingly broad range of research around the campus.

David was a Euratom fellow at Ispra, Italy in 1962; a Guggenheim fellow at the Niels Bohr Institute in Copenhagen in 1968-69; a Visiting Professor at the Technical University, Munich in 1976; a Visiting Scientist at Brookhaven National Laboratory in 1982; and a Guest Scientist at the Center for Analytic Chemistry of the National Institute of Standards and Technology, Maryland in 1990.

In 1996, David was elected a Fellow of the American Nuclear Society in recognition of

“the conception, design, and development of a succession of novel experimental facilities and instruments for the performance of unique research in nuclear science and engineering, including estimation of reactor physics parameters under isothermal conditions, determination of short-lived isomer decay schemes, measurement of delayed neutron energy spectra, and utilization of cold neutrons.”

He was also a member of the American Physical Society, Phi Beta Kappa, and Sigma Xi.

David was an outstanding teacher and helped develop graduate and undergraduate courses in nuclear science and in nuclear laboratory techniques. In 1964, he was a member of the College of Engineering committee that changed the five-year Bachelor of Engineering curricula to four-year Bachelor of Science curricula followed by fifth-year professional Master of Engineering degrees. Shortly before his death, David led the development of a multidisciplinary course, Art, Architecture, and Analysis, that was taken by a broad group of students from physics, classics, archeology, art, and engineering. The course showed scientists and non-scientists alike how nuclear techniques are applied. This course is a model of modern interdisciplinary science education.

In 1993, he led a successful petition by eleven universities to reverse the Nuclear Regulatory Commission decision to charge annual license fees (\$62,000 per year) for educational non-power reactors. This led to his realization of the importance of Cornell's research reactor to the rest of the university, and to the establishment in 1996 of the Ward Center for Nuclear Sciences, which took over the Ward Laboratory from the College of Engineering. David saw this as the correct direction for service-oriented laboratories in large, diverse universities.

David's research was extremely broad. He developed a fast rabbit system synchronized with the TRIGA reactor pulse to study nuclear isomers with half-lives from 25-milliseconds to several seconds; he conceived and developed the inner-shell vacancies; he developed a cold neutron source to be used with a totally reflecting neutron guide for

doing prompt gamma-ray analysis; and he invented a portable cold neutron irradiator for doing prompt gamma-ray analysis without the use of a reactor.

Using the pulsing capability of the Cornell TRIGA reactor, David and his students discovered or studied a number of nuclear isomers. He discovered the 24.6-second ground state of Ag-110, the 0.29-second isomer of Xe-134, and the 10.6-millisecond isomer of Sm-153. He measured properties of eleven other isomers: In-114m, In-116m, Xe-125m, Xe-127m, Ba-136m, Gd-155m, Dy-157m, Ta-182m, Ir-194m, Pa-235m, and U-236m.

In addition to all else, David was a great colleague. As director of Ward Laboratory and the Nuclear Science and Engineering Program, he listened to what others had to say about important issues. He also served as a quality control officer, reminding us what our responsibilities to students in nuclear science and engineering are. He always carried his teaching load even with his administrative duties. Finally, David tried to enable the rest of us in the program to accomplish our own research and teaching goals, no matter how different they were from his own. A commemorative plaque honoring this wonderful teacher, creative researcher, and great friend, is currently on display at the Ward Center for Nuclear Studies and will be moved to the Applied and Engineering Physics Lounge in Clark Hall.

David is survived by his wife of 48 years, Gladys Clark; two daughters; a son; and seven grandchildren.

David Hammer, Val Kostoun, Bing Cady

John C. Condry

December 6, 1938 — June 27, 1993

John Condry was one of those rare individuals whose professional life and private self were in harmony.

When we remember John, we remember his wonderful verve and enthusiasm for his profession. He loved teaching; he loved research; he loved to talk with colleagues about his latest idea. He generated enthusiasm in our responses because he was so obviously caught up himself with the intellectual challenge. And John's own enthusiasm for his work was mirrored in his research on intrinsic motivation—the impetus to work at something not because of external rewards but because it is the work itself that one finds compelling.

When we remember John, we also remember that, above all, John was a man of integrity. He maintained his honesty and his principles even when it was not expedient to do so. John was trusted even by people who disagreed with him. He acted on his belief that the academic profession was worth the best that is in us. And John's personal integrity was reflected in his major research, during the past two decades, on the truth and falsity (or at least distortion of the truth) presented by television and on the effects of television on children.

John founded the Center for Research on the Effects of Television and was its co-director. The Center created an archive that consisted of a representative sample of television programs and advertisements that spanned more than a decade. The archive is the only sample of its kind and became the raw material for John's research on the effects of government policy on television programming, the kinds of values and stereotypes conveyed by television, and the effects of television on children. For example, John and his collaborator, Cindy Scheibe, found that the people who are the most susceptible to what they see on television are those who have the most limited real-world knowledge with which to moderate or counteract what is presented on television—a population that includes but is not limited to children. Furthermore, children are especially susceptible to television presentations because, in addition to their limited knowledge, they also are less able to distinguish the fantasy that is often presented on television from reality. The archive continues to serve as a data base for researchers across the country.

John's research on the effects of television made him an acknowledged expert in this area and he was often called on to testify before Congressional committees and federal and state agencies. But it was another mark of his integrity that some of us did not realize how famous he had become: John never engaged in self-promotion; he did not dismiss his old friends even when his—or their—fortunes changed.

And when we remember John's capacity for friendship, we remember that his friendship was always refreshingly free of gender stereotypes—a characteristic that contributed tremendously to the way he related to colleagues. Moreover, John's own personal view of gender, in turn, informed his research on the social construction of gender. Some of this research was done collaboratively with John's wife, Sandra. Their classic work examined the perceptions of the behavior and motivations of children whose gender could not be determined from their physical appearance or from the way they sounded. John's and Sandra's research found that perceptions of children vary dramatically depending on whether the perceiver has been told that the children are female or male. The importance of this research was recognized by an award from the Association for Women in Psychology.

John grew up in West Virginia and graduated from West Virginia University with an A.B. degree in 1961 and an M.A. degree in 1962. He took his Ph.D. degree in social psychology in 1966 from the University of California at Los Angeles. John's entire teaching career was spent at Cornell with sabbaticals at the University of Kansas and at Stanford University. John received the Amoco award for excellence in teaching in 1991. In addition to being co-director of the Television Center, John was Associate Editor of the journal, *Motivation and Emotion* and was a member of the editorial board of the *Journal of Applied Developmental Psychology*. John also served as editorial consultant for the *Journal of Personality and Social Psychology*, *Child Development*, *Developmental Psychology*, *Sex Roles*, and the *Journal of Communication*. John's most recent book was *The Psychology of Television*, published by Lawrence Erlbaum Associates, Hillsdale, New Jersey, in 1989. John's last publication was an invited paper published in the winter 1993 issue of *Daedalus* and was entitled, "Television, A Thief of Time."

Throughout his life, John's main source of pride and strength was his family: his wife, Sandra McConnell Condry and their children, Ian, Kirsten and Jennifer. They were friends as well as family. They were his anchor.

Our grief at John's death is proportional to what he gave us in life.

Barbara Koslowski, George Suci, Jerome Ziegler

Bartholomew J. Conta

March 29, 1914 — November 1, 1993

Bart Conta had a long association with Cornell beginning with his M.S. degree in Experimental Engineering, awarded in 1937, and ending with his position of Emeritus Professor, which he became in 1979. In between he rose from an Instructor (1937) to a full Professor (1951) while for various periods having appointments at other universities and in industry.

Bart Conta was a loved teacher. He specialized in the thermal and fluid sciences but also taught courses in the history of technology and its social implications. He was in many ways the ideal undergraduate professor; engaging and clear with a kind voice and gentle manner. In the more formal courses he rarely used notes, unusual in science and engineering. After lectures and at office hours (which seemed to an outsider to be more like office days), there were usually lines of good-humored students. One of us, when walking across the quadrangle one day just around Bart's retirement, asked a passing student what courses she was going to take next semester. After naming a few she said "and I am going to take Bart's Thermodynamics since I hear he will retire soon". Thermodynamics is usually considered the bane of students, not the course one would normally talk about with high expectations because of its association with a particular professor. A partial list of technical courses taught by Bart is as follows: Physical Metallurgy, Strength of Materials, Thermodynamics, Fluid Mechanics, Heat Transfer, Gas Turbines, Internal Combustion Engines, Fuels and Combustion, Steam Power Generation, Refrigeration and the Thermodynamics of Fluid Flow. During World War II, the U.S. Navy sent shipboard engineering officers to Cornell to learn about diesel and steam power. As a young Professor of Heat-Power Engineering, Bart Conta performed a vital wartime service as a teacher in that program from 1941-44.

During the 1960s and 1970s, Bart was a beacon for the more radical engineering students who opposed the Vietnam War and were interested in alternative forms of technology. He became involved with social and environmental issues and their relation to engineering. His courses reflected the times and although they were not compulsory they were well attended. Some of their titles were: The Thermodynamics of Energy Husbandry, Biology and Society, Social Implications of Technology, and Technological, Society, and the Human Condition. His goal was to give students a historical perspective on technology and its societal consequences. He also taught a very popular course on solar energy. His interest in appropriate technology extended to becoming an active participant in the planning of Eco Village near Ithaca. He influenced many students, showing them that engineering could be different to that done by the large anonymous design teams associated with big industry and the military.

Bart was also active on University committees and boards. These included the University Faculty Council, Committee on Academic Freedom and Tenure, Committee on Academic Status of the Faculty, Committee on Academic Integrity. He was active on the Board of Directors of the Statler Club and president from 1966-67. He also was on the Board of Directors of the Center for Religion, Ethics and Social Policy (CRESP) and a member of its executive committee. He was a member of the American Society for Mechanical Engineers, American Society for Engineering Education, American Association of University Professors, American Association for the Advancement of Science and the Society for the History of Technology.

Apart from his years at Cornell, Bart spent periods with the Texaco Corporation (Research Engineer, 1940-41), Syracuse University (Professor, 1947-51), Dupont (1952-58) Universidad del Valle Cali, Columbia (Ford Foundation Visiting Professor, 1964-65), Berkeley (NSF Science Foundation Fellow, 1970) and the British Museum in London (1973). He married Ruth Fletcher in 1937 and they had three children in their long and happy relationship. After Ruth died in 1987, he married Claire Tallman in 1989. It was a joy to see this happy couple walking around the streets, and in the cafes of Ithaca; they showed a sprightliness that is too often lacking in people 50 years their junior. He is sadly missed.

Tob deBoer, Frank K. Moore, Zellman Warhaft

Alice H. Cook

November 28, 1903 — February 7, 1998

Professor Emerita Alice Hanson Cook died on February 7, 1998, just nine months short of her ninety-fifth birthday. Throughout her long and productive life, she dedicated herself to improving the lives of working women and men everywhere she went, not only at Cornell and across the United States, but around the world as well.

In her autobiography, *A Lifetime of Labor* (New York: The Feminist Press at the City University of New York, 1998), Alice refers to her “patchwork career”: student, social worker, YWCA Secretary, labor educator, post WWII advisor in Germany on reconstituting German labor unions, wife, mother, single parent of two boys and temporary parent to numerous others, professor, university ombudsman, world acclaimed researcher, and to the very end, an activist. What a remarkable example she set for living life to its fullest!

Labor education was Alice’s first vocation, and dedication to the enlightenment of working adults continued to engage her energy and attention throughout her life. Upon graduation from Northwestern University where she had been a student activist, Alice wondered where she could find work, which would implement her social ideals. She found that spot in the YWCA Industrial Department, which provided education and support to blue collar women. A talented educator even in her twenties, she volunteered to teach in other pioneering workers’ education movements of the time: Commonwealth College in Arkansas, Bryn Mawr Summer School in Pennsylvania, the Summer School for Workers in North Carolina. She applied her skills as an organizer and teacher while serving as Education Director for the Textile Workers Union and as Assistant to the President of the Amalgamated Clothing Workers Union Joint Board in Philadelphia.

Professor Cook had pursued graduate studies in Germany prior to the rise of Hitler, with special emphasis on the trade union movement there. Post-war, the U.S. Army turned to Alice for the task of reestablishing democratic unions in Germany through programs of adult education. Drawing on her prior knowledge of trade unions both in Germany and the U.S., and her fluency in the German language, Alice performed her assignment with distinction. Moreover, she developed contacts that became lifelong friends and sources of data for her later career as a scholar engaged in research and publication.

In 1952, Alice was recruited by ILR Extension to direct a foundation-funded project: Integrating of Unions and Community. The project brought Alice to Ithaca, where she remained for the rest of her life. M.P. Catherwood,

then the Dean of the ILR School, recognized her brilliance, and persuaded her to teach Labor History and Union Administration courses in the resident degree program.

Moving into a new career as a college professor, Alice contributed both to teaching and research, publishing such path breaking works as *Union Democracy: Practice and Ideal, Labor's Role in Community Affairs*; and after winning a Fulbright for a year's study in Japan, *An Introduction to Japanese Trade Unions*, plus dozens of articles. Her research was almost always ahead of its time, and often cited.

As a teacher, Alice was both devoted and demanding. Her lectures were a pleasure to listen to, and easy to take notes from; each sentence was complete, it nested where it belonged in a paragraph, which in turn supported a section of her presentation. Not surprisingly, she graded student papers on both form and substance.

Alice Cook's service to Cornell and other parts of the local community was legendary. On campus, she was co-founder of the Women's Studies Program and the Advisory Committee on the Status of Women. And she opened the once all-male Faculty Club lunch hour to women. Appointed by University President Dale Corson as Cornell's first Ombudsman, she received complaints from anybody in the community, and she helped resolve them with patience and diplomacy. The procedures for that office are essentially the same now, as they were when Alice instituted them in 1970.

Nearly every women's group in the Ithaca area also benefited from Alice's wise counsel and generous support. Among them were the Ithaca branch of the American Association of University Women, the Professional Skills Roster, Displaced Homemakers, the Tompkins County Chapter of the National Organization for Women (NOW), and Planned Parenthood of Tompkins County.

Alice Cook retired from Cornell in 1973, but retirement, for her, merely meant going on to other pursuits. Her first undertaking was a study for the Ford Foundation of working women around the world, a global enlargement of the courses she had often taught for ILR Extension during her tenure. An explosion of publications followed that study, and included, *The Working Mother*, among others. In this period, she filed three *amicus curae* briefs, two in Japan on gender and age discrimination, and one in Canada on gender discrimination, as well as writing or co-authoring numerous articles.

In 1975, Alice and her collaborator received a German Marshall Fund grant to study women and trade unions around the world. Once again, she donned her seven-league boots, and the two-volume report which followed this

exhaustive research, *Women and Trade Unions in Eleven Industrialized Countries*, made its appearance, along with *Working Women in Japan: Discrimination, Resistance and Reform*, and *The Most Difficult Revolution: Women and Trade Unions*, treasures all for anyone interested in comparative labor relations.

In 1983, which coincided with Alice's own 80th year, ILR celebrated her birthday by hosting an international conference on "Women Workers in Fifteen Countries" featuring speakers from the countries in which Alice had conducted her research. And in the years following, Alice Cook dedicated herself and her still remarkable energies to the study of comparable worth, and wrote two casebooks on the subject. Her research played an important role in public policy formulation and was the subject of a number of ILR Extension Conferences in which she was the lead speaker. Following the pattern of her youth, she continued to participate in summer schools for women workers as a teacher and speaker. And she found a winter home at the University of Hawaii's Industrial Relations Center, where, working at her computer, she turned out numerous articles, and finally many chapters in her autobiography.

Over the years, Alice Cook inspired and mentored thousands of students, trade unionists, and colleagues with her active mind, her interest in everything human, and her good and graceful spirit. She leaves a rich legacy for the next century.

Lois Gray, Francine Herman, Jennie Farley

Barbara Hope Cooper

September 1, 1953 — August 7, 1999

Barbara Hope Cooper, a leader in surface science and the first woman to be appointed a Professor of Physics at Cornell University, died of lung cancer on August 7, 1999 in Ithaca, New York.

Born in Lancaster, Pennsylvania on September 1, 1953, Barbara graduated from Cornell in 1976 with a B.A. degree in Physics and went on to earn a Ph.D. degree in Physics from Caltech in 1982. She remained at Caltech as a Postdoctoral Fellow until 1983, when Cornell's Physics Department recruited her to be an Assistant Professor. She became a full Professor in 1985.

Barbara is best known for innovative experimental studies of the scattering and trapping of low-energy ions at metallic surfaces. She began as a novice in this research field in 1983, with an empty laboratory and relatively little support, but within a few short years she had created one of the leading laboratories. She and her students designed and built a versatile ion scattering apparatus that could operate at ion energies from 10 to 1000 eV. With this apparatus, detailed information about the scattering potentials, energy transfer processes, scattering mechanisms, and the role of surface adsorbates was obtained from measurements and simulation of the energy and angular distribution of alkali and oxygen ions scattered from copper (100) and (110) surfaces.

She obtained particularly important results from scattering processes in which electron transfer occurred when the ion was near the surface. In addition to carrying out the experiments, she launched a parallel program in large-scale trajectory simulation using accurate potentials and systematically incorporating many-body effects. This initiative gradually led to a new understanding of the role of correlation effects in charge transfer processes and to a far deeper appreciation of these inherently complex dynamical phenomena.

More recently, Barbara extended her research program to investigate the manner in which low-energy ion bombardment affects the erosion and growth of metal surfaces and in thin film deposition. She used an *in situ* scanning tunneling microscope to gain atomic-resolution images coupled to real time and *in situ* synchrotron x-ray scattering to gain low-angle diffraction data for the surface structure during ion bombardment. She was able to observe pattern formation during sputtering of a gold surface and then to probe the competition between roughening and smoothing mechanisms during sputtering and annealing.

Throughout her career, Barbara had a keen eye for potential technological opportunities resulting from her research. However, always closest to her heart was a deep devotion to fundamental science. She was a superb research supervisor and successfully guided a dozen students through their Doctorates at Cornell.

Her impact went far beyond her own research group. In recent years, her scientific leadership talent for organizing large, diverse groups was increasingly vital to two of Cornell's multidisciplinary research centers, the Cornell Center for Materials Research (CCMR) and the Cornell High-Energy Synchrotron Source (CHESS). She was also a key leader in an initiative now under way to build a new facility at Cornell's CHESS that will provide a unique, dedicated x-ray facility for materials research.

Barbara's talents were widely recognized in the national and international physics communities. She received a Presidential Young Investigator Award from the National Science Foundation (1985-89), and faculty development awards from IBM and AT&T. She received the American Physical Society's Maria Goeppert-Mayer Award in 1992.

A truly dedicated teacher, she worked to develop more hands-on investigation of fundamental scientific concepts in several introductory physics courses at Cornell. Her eight-year-old daughter, Katie, inspired her to take a special interest in educational outreach programs introducing elementary school students to the wonders of science.

Barbara will be enduringly remembered for her dedication to science, her quiet and effective leadership skills, and her insight and courage to invent and develop new experimental methods. Her untimely death continues to affect all of us who had the great privilege of knowing her.

Douglas Fitchen, Wilson Ho, Neil Ashcroft

John Farnsworth Cornman

January 22, 1913 — January 6, 1998

John Farnsworth Cornman, Professor Emeritus of Ornamental Horticulture at Cornell University, died Tuesday, January 6, 1998, at the age of 84 in Ithaca, New York. He retired in 1973 after a 37-year affiliation with the College of Agriculture and Life Sciences. His spouse, Frances Davis, died on June 6, 1998. John and Frances are survived by their sons and daughters-in-law: David and Nancy Cornman of Pittsford, New York; Peter and Geraldine Cornman of Bonita Springs, Florida; and Stephen and Deborah Cornman of St. Augustine, Florida; two grandchildren; and two great-grandchildren.

John was born January 22, 1913, in Shelby, Ohio, and attended elementary school in Ohio and New York. John and Frances both grew up in Valois, New York on the shores of Seneca Lake. *The Watkins Review and Express*, reporting John's death, noted that he had been raised "in the big white house on the corner of Route 414 and Lake Street in Valois." Residents still refer to it as "the Cornman house". John designed a garden on the property for his parents during his college years. John and Frances both graduated from Watkins Glen High School and from Cornell University. John received his Ph.D. degree from Cornell in 1947. His doctoral thesis was considered a major contribution to the taxonomy of the genus *Juniperus*.

Before and during his college days, he worked as a landscape foreman, an estate head gardener, a horticulturist with the United States Golf Association Green Section, and an instructor at Cornell University.

He served with the United States Naval Air Training Command, United States Bureau of Aeronautics, as an Agronomist. He returned to Cornell in January 1946 as an Instructor in Ornamental Horticulture, and was promoted to Assistant Professor in April 1947, Associate Professor in July 1950, and Professor in July 1957. In the early years of his career, his major effort was directed toward teaching, research and extension in woody ornamentals and other plant materials. During the latter part, his responsibilities were in turfgrass management and, there were times in between when he covered all of these areas, which spoke well of his dedication to the university. Characteristically, John did it all without fanfare!

Perhaps Professor Cornman's principal interest was in turfgrass management and he was instrumental in developing this newly emerging field at Cornell. Teaching, research, and extension activities in turfgrass management were started under his direction in 1940. Initially shared with instruction in woody plant materials, these efforts became a full-time responsibility in 1961. Some of his many contributions included: assisting in the formation of

the New York State Turfgrass Association; the planning and development of twenty-six annual Cornell Turfgrass Conferences; the preparation, publication and the editing of the monthly *New York State Turfgrass Bulletin*; undergraduate and graduate instruction in the principles of turfgrass management; the establishment of turfgrass research and extension demonstration plots at Cornell and in Nassau County, Long Island; and the preparation of the annual *Cornell Recommendations for Turfgrass Pest Control and Cultural Management*; as well as numerous other articles and extension publications on turfgrass culture and maintenance.

Cornell Extension Bulletin 922, *Home Lawns*, authored by Professor Cornman, was for many years requested in greater numbers than any other Cornell extension publication. *Picture Clues for Turfgrass Problems*, also a Cornell extension publication, was one of the first field guides for diagnosing turfgrass problems. His special research interests were the selective control of turfgrass weeds, especially crabgrass and *Veronica filiformis*, thatch control in turfgrass, and new cultivar evaluation for New York State conditions. These continuing activities have provided the turfgrass professional and the consumer alike with pertinent and reliable information that has contributed significantly to improved culture and maintenance of turfgrass in New York State.

Professor Cornman was a familiar figure to extension field staff and audiences through the years as he traveled the meeting circuit and in other ways served as a resource person in home lawn, golf course and athletic field management, and in commercial sodgrass production. His quick wit and intolerance of the unnecessary was greatly appreciated by all.

Teaching of undergraduates and graduate students and of extension audiences was John's forte. He was a well-recognized authority in both plant materials and turfgrass science and had solid experience working in these fields. He brought his knowledge and experience to bear in his instruction in a most effective way. His lectures were beautifully illustrated with slides as well as with specimen materials, and were generously spiced with his bright and colorful humor.

He was a master of wit and understatement whether in the lecture room or the coffee room. His colleagues eagerly anticipated his succinct assessments of the most recent faculty meeting, committee session or local or national news development. John was convinced that meetings were the work of the devil!! His astuteness and insight enabled him to cut through to the heart of matters, to analyze the situation and to come to his conclusion on the necessary course of action long before others had finished debating the issue. He often left meetings early with a witty quip to the effect that "we beat this issue to death an hour ago!"

John took to the field with his courses. His excursions to the Rochester, New York and Washington, D.C. parks, gardens and even cemeteries, to introduce students to the rare as well as common plants and to show them an especially ancient or special specimen were great adventures as well as effective learning opportunities. His wit and humor again made these especially enjoyable events.

A major interest of John's was the development of the Cornell Plantations, the arboretum, botanical garden and natural preserves of the university. As a plant materials specialist, John saw the development of the university's living plant collections as essential for his as well as for other plant science courses and outreach programs. He served as Director of Cornell Plantations from 1947-52 at a time when the unit was a loosely organized patchwork of university lands and limited plant collections assigned for administration to the Department of Floriculture and Ornamental Horticulture. John had a permanent staff of one, Raymond Patno, his superintendent of operations. John and Ray, working with a few temporary staff, made considerable progress in forging Plantations into a more organized and functional unit. John served as Director in addition to his otherwise full-time responsibilities.

John Cornman was a member of the American Society of Agronomy, Weed Science Society of America, International Turfgrass Society, and the honorary societies Phi Kappa Phi and Sigma Xi. He was honored in 1979 by the New York State Turfgrass Association with the Citation of Merit for "dedication and for his 33 years of service to Cornell University and the turfgrass industry in New York State."

Professor John Cornman is remembered by alumni for his fierce independence, his stinging yet refreshing wit, and his concern for the quality of undergraduate instruction. Turfgrass professionals still remember and admire John for his no-nonsense, to-the-point approach to turfgrass technology. His insistence that all recommendations be based on sound science and research brought him great industry respect. John was proud of Cornell and frequently spoke of "the Hill" when discussing the university.

John Cornman will be remembered as a pioneer turfgrass scientist and teacher, a faculty member who truly appreciated and served well his students, and a friend whose wit and wisdom helped us all keep our perspective.

George L. Good, A. Martin Petrovic, Carl F. Gortzig

J Milton Cowan

February 22, 1907 — December 20, 1993

J Milton Cowan died in Holyoke, Massachusetts from complications following emergency hip-replacement surgery.

He was born in Salt Lake City, Utah. At his birth, his parents, hesitating between the first names James and John, decided to give him neither but to leave the choice for him to make later. In due time he rejected both alternatives; instead, when asked to give his full name, he would regularly cite it as “J, no period, Milton Cowan,” In the years that followed he acquired also a whole string of nicknames, different ones among different circles of friends. To the three of us preparing this memorial he was “Milt” and we shall call him that here.

Milt’s initial education was in his native city’s public schools. Then he proceeded to the University of Utah, where he distinguished himself both as a scholar and as a track-and-field athlete. The former pointed toward his career, but the latter also presaged later activities: he became, in the 1960s, one of the pioneers in scuba diving, and was still going on dives in his eighties. And on July 6, 1992, at age 85, he participated in a competitive 3.1-mile walk, jogging the last mile, and was named Athlete of the Week by radio station WHCU.

Milt’s college career was interrupted so that he could fulfil the duty required of all young Mormon men, to serve a period as a missionary. For this he spent 30 months in Germany in 1928-30, in the process achieving a solid command of German. He was also able to attend some lectures at the University of Leipzig.

Back in Utah, he earned a B.A. degree in 1931 and an M.A. degree in 1932. After a year (1932-33) in the University of California graduate school, he moved to the University of Iowa, where he spent the next decade. It was there that he met, courted, and in 1934 married Theodora (“Ted”) Mary Ronayne, originally of Austin, Texas. His work at the University, as student and as teacher, was in three departments, Psychology, Speech, and German. It was in the first of these that he obtained, in 1935, his Ph.D. degree; the focus of his research was on experimental phonetics, with a thesis on “Pitch, intensity, and rhythmic movements in American dramatic speech.” In 1938, he was elected to Sigma Xi. Starting some time before that, and until 1942, he was teaching, eventually in the Department of German; unfortunately, the available record of his appointments and promotions is not entirely clear.

In 1937, Milt joined the Linguistic Society of America. In 1941, he became its secretary-treasurer, a post he held through 1950; in 1966, he was the Society’s president. In 1941, he was chairman of the experimental phonetics section of the Modern Language Association; in 1941-42, a member of the Advisory Board to the journal, *American Speech*; and for many years a fellow of the Acoustical Society of America.

In April of 1942, Milt left Iowa to join the staff of the American Council of Learned Societies (ACLS), at that time still in Washington, DC, whence he came to Cornell in 1946 as Professor of Linguistics and Director of the newly established Division of Modern Languages. After his retirement in 1972, he remained in Ithaca, establishing and running a publishing firm, Spoken Language Services.

Milt's coming to Cornell was a direct consequence of his work at the ACLS. Since the mid-1930s, that organization's secretary, F. Mortimer Graves, had recognized that the United States was in sore need of persons with competence in "strategic languages," including many not taught at any college in the country. Even before war broke out in 1939, the ACLS had begun to sponsor a series of pilot courses in some of these languages in its Intensive Language Program. These courses were built on a triad of fundamental principles: (1) the primacy of speech over writing, which means the learner must hear, imitate, and understand native (or near-native) speakers of the target language; (2) intensive concentration—as many hours per day as possible; and (3) guidance by someone trained in linguistic analysis, in order to focus on the real differences between the learner's native language and that being acquired and to avoid the multitudinous time-wasting traps that arise from popular misconceptions about the nature of language. The partly independent work begun somewhat later at "165 Broadway/' as it was familiarly referred to (officially the Language Section, Education Branch, Information and Education Division, Army Service Forces, located in New York City at that address) under Milt's close friend and colleague Henry L. ("Haxie") Smith Jr., was based on the same premisses.

Milt's role in the ACLS was as peripatetic overseer of this enterprise, initially small but very shortly expanded by the military authorities into the large-scale Army Specialized Training Program, involving thousands of soldier-students and many universities. Wherever all three of the principles were followed, these courses were eminently successful.

One of the successful operations was at Cornell, where, in 1944-45, there were Army Specialized Training Program groups in Russian and Italian. Their supervisor was the then Dean of Arts and Sciences, Cornell's Willem ("Dick") De Kiewiet, who had earlier been a colleague of Milt's at Iowa. Impressed by the success of the Army's program, De Kiewiet took advantage of several impending faculty retirements and other campus changes to persuade the Arts College to institute a radical revision of foreign-language teaching, involving an adaptation of the principles of the Intensive Language Program to civilian conditions. Milt came as Director of the newly established Division, and was joined by a number of young linguists experienced in the languages to be taught.

The story of Milt's career at Cornell is the story of the Division of Modern Languages, because upon his retirement the remaining members of the Division took the initiative in changing its official status and its name: with the approval of the College it became, in 1972, the Department of Modern Languages and Linguistics. The details of that story belong elsewhere, but it must be recorded here that under Milt's leadership there took place at Cornell some of the most efficient and effective foreign-language learning ever seen as part of a regular college curriculum (that is, as over against special intensive programs that leave little or no time for anything else). The bulk of this activity was, to be sure, in the handful of Western European languages traditional in American universities. But almost as much effort went to Russian and Chinese, and a good deal even farther afield: in fact, at one time or another instruction was offered in a total of thirty-four different languages.

This effectiveness and diversity led also to many productive collaborations with other organizations. On campus, these were especially with the Literature departments, Far Eastern Studies, and Anthropology. Off campus, there were joint programs with, once again, the ACLS (including the preparation of a series of introductory courses in English for speakers of other languages); with the Language Training Section of the Foreign Service Institute of the Department of State, to which Haxie Smith had moved after the War; and with Standard Oil of Venezuela, Aramco (Arabian-American Oil Company), various National Defense Education Act Institutes, the Ford Foundation, and the Rockefeller Foundation. Various members of the Division, including Milt himself, were from time to time seconded to diverse parts of the world in connection with these cooperative enterprises; in his nonadministrative role in this, Milt became an Arabic expert.

Moreover, in its alter ego as the Field of Linguistics in the Graduate School, Milt's faculty awarded, during his twenty-six years as Director, a total of eighty-eight doctorates, whose recipients now hold positions all over the world.

Milt's role throughout his career—at Cornell and elsewhere—has been aptly characterized as that of an enabler. He was, to be sure, a scholar in his own right, but he published very little. He was also a teacher, and carried a share of the division's teaching load in German and in linguistics. But his great strength lay in having faith in the practical relevance of linguistics, in seeing what needed to be done, in finding people who were eager and able to do it, and in smoothing the way for them. As an administrator he occasionally took it on himself to make an unpopular decision—but usually, in the long run, it turned out to be the right one. He took great pride and joy in the achievements of those about him (including the undersigned), and in response to that we were devoted to his leadership and worked very hard to be worthy of his approval.

After Milt's retirement the newly named Department of Modern Languages and Linguistics carried on for a number of years in much the same spirit. But those years saw a sea-change in the field of linguistics. Milt and his original coworkers had believed firmly not only in the relevance of linguistics for second-language learning but also the reverse—that the practical enterprises of teaching and learning languages can afford valuable insights into the nature of language. The New Wave in linguistics saw no such connection, which meant that there came to be little reason for the two activities to be housed in a single department. These developments saddened Milt considerably: despite his essentially upbeat character, he felt, at times, that a lifetime of effort had been largely wasted.

Yet his own career after retirement from Cornell remained one of service to those in his field. Although Spoken Language Services (his publishing house) supported the preparation of some fine new beginning language courses and issued some important reference works, its main mission was to continue to make available the excellent foreign-language textbooks prepared during the war years under the sponsorship of the ACLS and "165 Broadway"—teaching materials whose quality has rarely been surpassed.

Milt's effectiveness as an enabling administrator was made possible by his remarkably warm and loyal nature. Any friend he made was a friend for life. In 1993, only months before his own death, he flew to California to be present at the memorial service for the just deceased writer Wallace Stegner, whom he had known since school days in Salt Lake City seventy years earlier. And in those same final months he was remarking to some of us that he should get back to Germany to see friends he had made there in the late 1920s; the few who survived were getting pretty old and feeble.

The network of friendships that Milt built around himself over the years was a blessing for the friends. It was also his own safety net, the framework of warm human relationships that more than anything else gave meaning to his life. That became particularly important after the death, in the fall of 1986, of his wife Ted. Happily, the net includes family survivors: son, J (no period!) Ronayne of Urbana, Illinois; son, Bruce Milton of Northampton Massachusetts; daughter, Julia Cowan Spurr of Los Altos, California; and grandchildren, Mitra and Mark of Urbana, Alexander and Julia of Northampton.

R.S. Hall Jr., C.F. Hockett, R.L. Leed

Robert Henry Crawford

October 10, 1924 — February 6, 1998

Dr. Robert H. Crawford died in Phoenix, Arizona at age 73. He was an Associate Professor in the Department of Communication Arts, now Communication, in the College of Agriculture and Life Sciences from 1967-81.

Educated at the University of California at Berkeley (B.A., 1951), and at Syracuse University (M.A., 1953; Ph.D., 1967), Dr. Crawford was engaged in publication, consulting, and distribution of publications in missionary Christian church organizations in Indonesia and the Philippines. This experience and background proved invaluable as he guided and advised overseas graduate students in their careers during his time at Cornell. He was faculty advisor to a majority of the foreign and minority students in the department during his tenure. He coordinated graduate studies in communication, including recruitment, admissions, financial aid, graduation requirements and liaison with the graduate school with an exemplary attention and concern for the best interests of the students and the department.

Other responsibilities in the department included extensive teaching of graduate and undergraduate students. Courses included communication in developing nations, news and science writing, communication history and mass media. In addition to teaching and advising, from 1971-74, Dr. Crawford developed and directed the Communication Specialists for Population Affairs (COSPA) program, designed to provide graduate training for use in family planning, population education and related efforts. His students from this program have gone on to useful careers worldwide, and current research projects in the department reflect these early beginnings in an important field.

As the Master of Professional Studies degree was developed in the college in the 1970s, he served the college on the committee and task force charged with setting standards and making recommendations for a new, practical approach to graduate study for those already active in professional fields. At the university level, he served as a member of the Faculty Council of Representatives, and on the Rural Development Committee of the Center for International Studies.

Dr. Crawford's international consulting assignments ranged widely, and included those with the World Health Organization, the Population Information Field Services Program and the East-West Communication Institute.

When he left Cornell in 1981 and moved to California, he became an independent communication consultant, working with students who needed assistance in completing their graduate studies. He is survived by his wife, Alice; daughter, Donna March; sons, Paul, James and Steven; and 14 grandchildren. He will be remembered as a person of strong convictions and missionary zeal in his dedication to help others.

Chester H. Freeman, Jane E. Hardy, Russell D. Martin

Willard F. Crosier

October 26, 1904 — October 24, 1996

Dr. Willard F. Crosier, a world leader in seed pathology and a Professor Emeritus at Cornell University's New York State Agricultural Experiment Station in Geneva, New York, died following a long illness.

Willard was born in Juanita, Nebraska. He was awarded an A.B. degree from the University of Kansas in 1927 and a Ph.D. degree from Cornell University in 1932. His Ph.D. research on late blight of potato was considered a major advance in the study of this disease. His active career at Cornell spanned 43 years before his retirement as Professor Emeritus in 1970. He authored or co-authored about 250 scientific articles in the fields of chemistry, entomology, mycology, plant pathology and seed technology. He was especially well known for his research into the detection and control of seed borne diseases. He served in numerous capacities in the field of seed technology, including chairing the Research Committee of the Association of Official Seed Analysts and editor of the Proceedings of that Association. He helped to organize the International Seed Pathology Congress in 1958 that was held in Cambridge, England. In addition, Willard served continuously as chair or co-chair of the Committee of Detection of Seedborne Diseases of the International Seed Testing Association from 1937 until his retirement in 1970. He enjoyed several sabbatical leaves in the important seed production areas in Idaho and Virginia and a three-month leave during which he attended the Tenth Congress of the International Seed Testing Association in Ireland and visited the best known seed testing stations in Europe.

During the 1940s, Willard was a member of Company K, the New York State Guard and served as its last commanding officer in 1947-48. He was Director of Civilian Protection in the town of Waterloo and trustee of Waterloo School District number 5. He was a member of the Board of Education of the Waterloo Central School District from 1973-77.

Following his retirement, he was employed as a caseworker with the Department of Social Services in Seneca County, as a substitute teacher, and a Fayette town assessor. Crosier was very active in promoting the cause of senior citizens in Seneca County and in the State of New York. He was elected to the state Senior Citizens Action Council where he served on the Constitution and Bylaws committees. He served in Seneca County as president of the Senior Citizens Action Council, was chairman of the board of the Seneca County Senior Center, member of the Seneca County Nutrition Advisory Council Board, and treasurer of the Seneca County Senior Center. For his efforts on behalf of seniors, Willard was named Seneca County Senior Citizen of the year in 1981.

His wife of 67 years, the former Lucille Maude Guilfus, three children, seven grandchildren, and seven great-grandchildren survived him. He also was survived by a sister, two nieces and two nephews.

Throughout his long life, Willard never outgrew his love of the earth and the beauty of and bounty brought forth from planting seeds.

Nathan Peck, Morrill Vittum, Gary Harman

John F. Cummings

September 3, 1936 — November 3, 1996

John F. Cummings, James Law Professor of Anatomy, played a major role in the College of Veterinary Medicine during his twenty-nine years as a faculty member. In addition to having primary responsibility for teaching histology and organology, an essential body of knowledge for all veterinary students, John mounted a significant research program in and made major contributions to the area of animal models of human neurologic disease. He was responsible for the early and sustained development of ultrastructural technology in the college. He also contributed greatly to the life of the college, at one time or another serving on most of the standing committees of the college and being the Secretary of the College for the last two years of his life.

John was born in Newark, New Jersey, where he lived until age fifteen, at which time he moved to Syracuse, New York. His high school years were spent at Seton Hall Preparatory School in Newark and at Christian Brothers Academy in Syracuse where, according to John, he received the rigorous training in study methods and critical thinking that became cornerstones for his professional life.

In the fall of 1954, John matriculated at Cornell University, where he earned a B.S. degree from the College of Agriculture in 1958, and then D.V.M., M.S., and Ph.D. degrees from the College of Veterinary Medicine in 1962, 1963, and 1965, respectively. In 1965, he was commissioned as a First Lieutenant in the Veterinary Corps of the U.S. Army and was assigned to the Department of Neurophysiology, Walter Reed Army Institute of Research in Washington, D.C. The Army granted him an honorary discharge with the rank of Captain in 1967.

John was appointed as Assistant Professor of Anatomy in the College of Veterinary Medicine in 1967 and given primary responsibility for the teaching of histology, organology, and ultrastructure to first year veterinary students. He was promoted to Associate Professor of Anatomy in 1971 and to Professor of Anatomy in 1977.

John's greatest contribution to the College of Veterinary Medicine was as a teacher. Although his primary efforts were directed toward the teaching of microscopic anatomy to first year students, he was a regular contributor to other courses in the curriculum. Scientists around the world looked to John as a valuable source of information on light microscopic and ultrastructural anatomy of domestic animals.

As a teacher of veterinary students, John's standards for excellence were high. He demanded superior performance but strived to help his students achieve it. He always was available to assist the students at any time of the day

or night. As much as students lamented his rigorous examinations, they truly respected his goals and efforts; moreover, they knew that they were well-prepared for their professional activities. John's constant "one liner" style of humor and his ability to correlate structure with function and with clinically relevant problems kept the undivided attention of his students.

Throughout his professional career, the goal of John's research was to identify neurological disorders in domestic animals that were models for similar human disorders. He recognized and described a variety of these models that ranged from acute to chronic peripheral neuropathies, to storage diseases due to inherited enzyme deficiencies, to numerous examples of central nervous system axonopathies, to delayed organophosphate intoxication, to muscle disorders, and to motor neuron disease.

There were two diseases in which his studies contributed the most to the understanding of comparable human disease. Early in his career, John described the clinical and pathological basis for polyradiculoneuritis of dogs (Coonhound paralysis) that was a model for the Landry-Guillain-Barre disease, the most common cause of total paralysis in people. Since 1990, John Cummings led the efforts in the recognition, description, and research of an acquired motor neuron disease in the horse that is a model for the sporadic form of motor neuron disease in people which is known as amyotrophic lateral sclerosis (ALS) or Lou Gehrig's disease. He made great strides in understanding the cause of this equine disease which had a direct impact on the understanding of the human disorder, and he was actively engaged in these efforts when his untimely death occurred.

John's extensive compilation of publications gave him an international reputation as an outstanding contributor to the knowledge of domestic animal peripheral nerve and motor neuronal disorders. John shared his knowledge enthusiastically and his peers considered him an ideal colleague for collaboration in their scholarly efforts.

John Cummings was one of the most popular and beloved professors at the Veterinary College. He was renown for his brilliant intellect, his wonderful sense of humor, his modesty, and his unrelenting willingness to help others. In 1994, he was honored by being elected Secretary of the Faculty, a position he held until his death. His mastery of the English language and keen sense of humor were greatly appreciated and guaranteed that each monthly edition of the faculty minutes was read by virtually every faculty member.

In 1995, in recognition of the esteem with which he was held by his colleagues for his distinguished career in comparative neurology and neuropathology, John was awarded the endowed title of James Law Professor of Anatomy. He was a member of Phi Zeta, Sigma Xi, Pi Kappa Phi, and Gamma Sigma Delta honor societies. The

Cornell University Veterinary College faculty and alumni further honored his memory by dedicating the 1997 Annual Conference as a celebration to his life. This was the first time in the hundred-year history of the college that the Annual Conference was dedicated to an individual.

In addition to the college and the university, John was also devoted to his family, his church, and his community. He spent many hours at Lynah Rink, Cass Park, the Lansing town ball fields, and other athletic venues as his children developed their prowess in hockey, baseball, softball, and other sports. On weekends and summer evenings, he was often in the yard with them, teaching the finer points of several sports. He was involved as well in their scholastic development and expected as much from them as he did from his students. The fruits of his labors shine in the success that each of his children has enjoyed.

John was convinced of the importance of athletics in child development and served for many years as a member and as the chair of the Town of Lansing Athletic Commission. During his tenure, the facilities available for athletic programs in the town were expanded significantly. A strong supporter of Cornell athletics, John frequently could be found at intercollegiate football and basketball games. He also served on the Committee on University-ROTC Relationships. He was a communicant of St. Catherine of Siena Parish, where he served as an usher and in many other capacities for more than twenty years.

John is survived by his wife, Mary Ellen Zolper Cummings; his children, Michael, Daniel, Tara Cummings Zigarelli, Patrick, and Mary Anne; and by six grandchildren.

Alexander deLahunta, Thomas J. Divers, Francis A. Kallfelz

Paul H. Darsie

October 2, 1916 — May 29, 1999

Paul Harold Darsie, a physician on the staff of Cornell University in the Department of University Health Services, died on May 29, 1999, at the age of 82. He was born October 2, 1916 in Lexington, Kentucky, the youngest of seven children of a third-generation Protestant minister. Paul's early years were spent in Lexington and Cynthiana, Kentucky. He went on to obtain his Bachelor's degree in 1938 from Washington and Lee University, and his M.D. degree in 1942 from the University of Rochester.

In college, Paul achieved exemplary grades in a broad spectrum of academic studies, while actively participating in a sports program that included basketball, tennis and track. Furthermore, he not only earned all his college expenses, but was able, by the time he graduated *magna cum laude* and with a Phi Beta Kappa key, to repay his parents completely for all the funds that they had advanced him toward his education. (At a time, before the computer age, when few college students knew how to type, Paul's skills as a typist and even as a stenographer, won him many income-producing opportunities.)

Paul interned at the Strong Memorial Hospital in Rochester, New York, then completed residences in internal medicine at the University of California Hospital in San Francisco, and at Columbia-Presbyterian Hospital in New York.

He initiated his medical practice in Cooperstown, New York, where he was affiliated with the Mary Imogene Bassett Hospital. After two years, Paul moved to Ithaca to join the staff of the recently formed Student Health Service at Cornell University, where he served for 34 years until his retirement in 1980, with the rank of Professor of Clinical and Preventive Medicine, Emeritus.

Paul derived much pleasure and professional satisfaction from his medical practice at Cornell. He found that the ambiance of teaching and learning that surrounded him was stimulating and motivating. From his earliest days in medical school, he was convinced that a medical encounter was never complete unless the persons seeking advice or treatment learned something about their problems and the ways to correct them and to prevent their recurrence. Crowded university curricula have seldom allowed time for formal courses in health education, but Paul found that his one-to-one contacts with his student-patients were ideal times to impart useful information as well as treatment. He was always a good listener and explainer, and the students who have sought his advice or treatment over the years have appreciated his talents.

Paul enjoyed his life among the Finger Lakes. He made good use of all the advantages that his surroundings afforded him. He loved fishing, hunting and sailing, and practiced these activities with his father as well as with his sons. He took an active part in the planning, building and maintenance of his home. (He was as methodical in the care of his home as he was in his medical practice. For example, when he decided that his house should be repainted every four years, he proceeded to paint one of the four sides of the house each year, to complete a four-year cycle.) He was proud of his skills as a gardener, and often-brought fruit and flowers from his garden to the clinic to share with his colleagues.

Paul was a member of the First Presbyterian Church of Ithaca, where he has served as a deacon and elder. He has been a compassionate and caring visitor to shut-ins and the elderly. He also was a member of the City Club of Ithaca, and of the Liberty Hyde Bailey Men's Garden Club.

Paul is survived by a loving family: his wife of 52 years, Peggy; three sons; a daughter; eight grandchildren; and a sister.

Leroy K. Young, Allyn Ley

Alice Davey

March 24, 1924 — January 27, 1997

Alice Davey received a Bachelor's degree from the University of Maryland in 1946, and taught junior and senior high school home economics in Maryland for three years. She came to Cornell as a graduate student in Household Economics and Management and was a teaching assistant for two years. She received a Master's degree in 1951. Subsequently, she taught and supervised home management houses at the University of Massachusetts from 1951-53 and at the University of Connecticut from 1953-58.

In 1958, Professor Davey was appointed Assistant Professor in the Department of Household Economics and Management at Cornell. She taught courses in family decision making and home management and supervised the residence for undergraduate students in Martha Van Rensselaer Hall. The residence course was required for high school teacher certification. She worked with the faculty in home economics education to develop appropriate placements for student teachers. In addition, she adapted her teaching to include experience in managing a low income household with food stamps and few resources. Thus, her students were prepared not only for teaching in high school courses, but also for working with modest income households in social welfare offices and in cooperative extension programs. Her handbook for home management residence courses was widely used. She has been recognized as a gifted teacher and advisor who held her students to the highest standard of intellectual integrity.

With her particular interest in teaching, Professor Davey became a consultant to the New York State Department of Education and worked with foreign visitors to help them understand home management in the United States. For several years, she served as graduate field representative for her department and developed orientation activities for new students. Her work with graduate students, particularly those assisting in the management house, provided life long friendships.

On campus, Professor Davey was active on the Board of Cornell United Religious Work, the Faculty Council of Representatives, and Omicron Nu. When the major in home economics education was terminated, Professor Davey served on the committee developing plans to combine preparation for teaching with the various majors in the college. To whatever committee assignment she accepted she gave her full attention and responsible leadership.

While teaching, Professor Davey continued her graduate education during summer school and during a leave of absence. She completed her doctoral work and received a Ph.D. degree from Michigan State University in

1971 under Professor Beatrice Paolucci in the areas of Family Ecology and Higher Education. On a subsequent sabbatical leave, Professor Davey worked on preparing the papers of Professor Paolucci for publication.

Professor Davey was a member of the American Association of University Women, Omicron Nu, Pi Lambda Delta, the American Home Economics Association, the New York State Association of Gerontological Educators, the National Education Association, and the National Council on Family Relations.

Professor Davey retired in 1987. She then gave up her Ithaca residence and lived in the home her grandparents had built in Ninevah, New York, where she had earlier spent her summers. For the last several years she had spent winters in Texas, and was there when she died. She is survived by her brother, Robert Davey, of Ninevah.

She loved to garden and shared flowers and vegetables with friends and neighbors. She was a quiet, private person but welcomed her circle of friends to conversation and tea in both Ithaca and Ninevah. She was open to discussion about how to reach students, current developments in family resource management and family decision making, new studies in Bible history and any new mysteries. She taught through her example of faith, gentleness and grace. She was an excellent listener and students brought concerns to her and in her open and accepting way she frequently helped students work through their own problems.

She was a friend to many and a very special friend to a few.

Francille Firebaugh, Jean Robinson, Rose Steidl

Hollis Rexford Davis

October 18, 1915 — January 13, 1995

Hollis Rexford Davis, Associate Professor of Agricultural Engineering, retired on February 28, 1978, after over thirty-three and a half years of service to the Department of Agricultural Engineering at the New York State College of Agriculture and Life Sciences at Cornell University. In March of 1978, he was awarded the title of Professor Emeritus of Agricultural Engineering.

He graduated from South Otselic High School where he played baseball and basketball and participated in band and orchestra. He was active in 4-H and played in the Chenango County 4-H Band which made a trip to the Chicago World's Fair in 1933. At Cornell, he was a pitcher on the Freshman Baseball Team and played in the Cornell Marching Band. He received both his degrees from Cornell University, the B.S. in Agriculture in 1937, and the M.S. in Agricultural Engineering in 1948.

Hollis taught vocational agriculture at DeRuyter High School. In January 1942, he was appointed District Agricultural Engineer to work with the New York State Emergency Farm Machinery Repair Program, directed by the Department of Agricultural Engineering at Cornell University. Hollis served in the U.S. Marine Corps from October 1943 to March 1946 and returned to Cornell University as an Extension Agricultural Engineer in April 1946.

Hollis distinguished himself as an outstanding teacher in educating farmers, dealers, and equipment service personnel in proper selection, operation, and adjustment of agricultural machines and equipment. As the program emphasis changed, Hollis was called upon to broaden his Extension commitment to include structures and electrification, dairy and poultry building ventilation, and materials handling systems. His Cornell Extension Bulletin 849, "Adequate Farm Wiring Systems," became a widely used publication throughout the United States.

Mr. Davis was promoted to Assistant Professor, Department of Agricultural Engineering, College of Agriculture and Life Sciences, Cornell University, in 1956, and in 1962 was promoted to Associate Professor. He was an authority on poultry laying and pullet housing systems. Builders, equipment manufacturers, and poultry producers throughout the United States continually sought his advice. He worked with government agencies in developing plans and regulations in the design of egg grading and breaking facilities, processing plants, and slaughter plants for poultry operations.

Davis was also involved in the problems associated with the disposal of waste from the above facilities as well as for home sewage disposal systems. In the 1970s, he worked with growers and builders to design common refrigerated and controlled atmosphere storage facilities and ventilation systems for crop storage. He helped develop drying systems for potatoes and onions that made it possible for growers to salvage their crops during wet harvest seasons. He collaborated on the most practical and authoritative cabbage and onion storage bulletins that are available in the United States today.

He consulted in England, Italy, Greece, Iran, India, and with the World Bank. He was widely respected by growers, equipment manufacturers, contractors, government agencies, professional peers, and his friends for his expertise, friendliness, and desire to help people with problems. He served the agricultural industry of New York State in a dedicated, conscientious manner, always emphasizing practical solutions.

Early on, Hollis was an active sportsman indulging in hunting and fishing. Later he became an ardent golfer and continued to be one for the rest of his life.

Hollis was an active member of the American Legion and past Commander of the Owen Woodford Post 894, DeRuyter; past Master of Masonic Lodge 692, DeRuyter; member of the American Society of Agricultural Engineers; and member of the Ithaca Lions Club.

Hollis and his first wife, Harriet, had a happy life with their four sons. Harriet died in 1982.

Later Hollis married Margaret Sullivan Paetow. Hollis and "Peg," both ardent golfers, enjoyed life at their summer residence in Ithaca and their winter townhouse at Suntree in Melbourne, Florida.

Hollis is survived by his wife Margaret; his four sons: Richard of Merrit Island, Florida; Robert of Atlanta, Georgia; Allen of Philadelphia, Pennsylvania; and Steven of Reading, Pennsylvania; and his two stepdaughters: Elizabeth Cowger of Rochester, New York, and Anne Barnett of Jasper, Indiana.

Everett D. Markwardt, Richard W. Guest, E. Stanley Shepardson

William Tucker Dean

August 31, 1915 — December 3, 1999

William Tucker Dean graced the faculty of the Cornell Law School from the time of his appointment as Associate Professor in 1953 until his retirement as Professor Emeritus in 1988. His academic pedigree included a Bachelor's degree from Harvard, a law degree from the University of Chicago and a M.B.A. degree from Harvard's Business School. Between his law and business degrees, he served in the Army for three years. Following a brief assignment as a private, he became an officer in the Army Transportation Corps, with overseas service in the Pacific Theater as a Lieutenant and Captain, principally with the 96th Infantry Division in the Philippines. Before coming to Cornell, he had taught at the law schools of the University of Kansas and Texas for a summer term.

At Cornell, Tucker's basic teaching interests revolved around trusts and estates, a field that encompassed estate and gift taxation, fiduciary administration and family law. He authored a number of law review articles in this field, together with many devoted to legal history. Meanwhile he served on a vast panorama of committees within the Law School as well as the broader university. During his tenure, the New York State Law Revision Commission was based at the Law School and he not only put in a stint as its Associate Director for Research, but also drafted various statutes calculated to rationalize work-a-day New York law.

Many a senior member of today's university faculty, not to mention innumerable alumni, will recall also that Tucker, between 1962 and 1990, served the outside community as the Village Justice in Cayuga Heights. Professor Dean as Judge Dean was dedicated to the proposition that a posted 30 miles-per-hour speed limit meant precisely that, a maximum speed of 30 miles-per-hour. Thus on the bench, he presented a formidable formal presence, and this mien carried over into his appearances behind the classroom lectern. And all the while, Tucker chose to walk at a brisk pace between his home and the Village and the Law School, the Village Hall, downtown, or wherever it was he was headed about the town, always carrying himself in a very erect military manner.

To have accepted these appearances as the last word was to miss the delight of knowing the very humanely decent, witty and fun-loving person that lay behind the veneer. His wit was quick and cut to the nub of the matter, as when he manhandled a cigarette machine into the office of a sober colleague who had just forsworn nicotine. And there are those who recall fondly the time that, during the interminable student protests about the Vietnam War, his Myron Taylor Hall teaching was disturbed by the loudspeaker noise from across the street. Tucker's was an old

soldier's answer to the problem: he applied a pair of wire cutters to the electric cord powering the apparatus. But again, one has to recall, these were pre-political correctness days, happy days as it were.

This same informal *joie-de-vie* characterized the hospitality ever present at the home occupied by Tucker and his wife Ann, and their four children. As fate would have it, Ann died in the year of Tucker's retirement. Then it was that he married Rosamond Arthur and moved to Long Island where, until illness overcame him, he was able to continue to enjoy domestic life while contemplating the world around him with wry acumen more often encountered in a poet than a lawyer.

Let it be recalled, finally, that whenever there arose a last minute need to find a teacher for some Law School course or other, it was William Tucker Dean who would step in and undertake the thankless job of spending hour upon hour to bone up on a subject he might never again teach. These must have been particularly onerous chores given his wide-ranging interests in the literature of contemporary law and politics. Duty to the larger community was an idea deeply rooted in his mind-set and he never failed to perform that duty as he perceived it.

W. David Curtiss, Gray Thoron, E.F. Roberts

Eugene A. Delwiche

November 26, 1917 — January 14, 1994

Eugene A. Delwiche, Professor Emeritus of the Section of Microbiology, died January 14, 1994 at Tompkins Community Hospital, Ithaca, New York.

Gene Delwiche was born in Green Bay, Wisconsin in 1917. His father was a Professor of Agronomy and Director of the Branch Experiment Stations at the University of Wisconsin, Madison. In 1941, Gene received his Bachelor of Science degree with honors from Wisconsin majoring in bacteriology. Soon after graduation, he entered active duty with the United States Infantry as a Second Lieutenant. He was placed in command of a Howitzer Company and remained in active service through the Second World War. At the end of WWII hostilities, his infantry company was stationed in Germany.

After receiving an honorable discharge from active duty in

1946 at the rank of Captain, Gene decided to go to graduate school. Dean LL. Baldwin at the University of Wisconsin, was a friend of James Sherman, the Head of the Department of Dairy and Food Science at Cornell University, and Baldwin recommended Cornell. As a result, Gene entered graduate school at Cornell with Sherman as his thesis advisor. He lived for a time in a room in the basement of Stocking Hall, a room that was used for many years to house graduate students.

Gene obtained his Ph.D. degree in 1948 and became an Assistant Professor in the “Laboratory of Bacteriology,” in the Department of Dairy and Food Science. However, in

1947 and 1948, he had supported himself by working as a Teaching Assistant in the class in introductory microbiology and there he had met a nutrition major named Constance Nott. He and Connie Nott were married in 1949. They remained a true Cornell family and their two sons and two daughters all became recipients of Cornell degrees.

Gene’s Ph.D. thesis research had focused on the propionic acid fermentations of the bacterial genus *Propionibacterium*, and he continued that research area throughout his career, teaching courses in bacterial physiology and chemistry. He was awarded many grants to fund the research in his laboratory, and that research resulted in numerous publications. In later years, he also studied aspects of the physiology of the anaerobic genus *Veillonella*. In addition

to directing research and teaching courses in microbiology, each year he advised about two dozen undergraduate students.

Gene was promoted to Associate Professor of Bacteriology in 1951 and full Professor in 1955. From 1951 to 1958, he was a consultant to the Biological Division of the Oak Ridge National Laboratory. In 1963, he was awarded a John Simon Guggenheim Fellowship and spent a sabbatical leave at the Karolinska Institute in Stockholm, where he worked in the laboratory of Tord Holme, studying biosynthesis by bacteria of the genus *Bacillus* grown in continuous culture.

In 1965, his title was changed from Professor of Bacteriology to Professor of Microbiology and when the Department of Microbiology was formed in 1977, he became a faculty member in that new Department. Gene served on the Editorial Board of the *Journal of Bacteriology*; he contributed descriptions of the genus *Propionibacterium* to the 7th and 8th editions of *Bergey's Manual of Determinative Bacteriology*; he served as president, vice president and secretary of the Physiology Division of the American Society for Microbiology, and served as program reviewer and in the Postdoctoral Fellowship Program of the National Science Foundation.

Gene served on numerous departmental, college and university committees, including the Area Committee, the Fellowship Board for Biological Sciences of the Graduate School, the Honors Committee, Curriculum Committee of the Division of Biological Sciences, and the Academic Achievement and the Petition Committees of the College of Agriculture and Life Sciences.

He continued his research in the areas of microbial physiology and energy metabolism and served as the major advisor for many Ph.D. and M.S. students. He had membership in the American Society for Microbiology, the American Society of Biological Chemists, the Canadian Society for Microbiology and the Society for Industrial Microbiology. He was also elected a fellow and a charter member of the American Academy of Microbiology.

Gene Delwiche had stayed in the Army Reserve, as a member of the Chemical Corps, long after he had finished his active tour of duty. During the summer months, he would spend his required two weeks of active duty at the Army research laboratories at Fort Detrick, Maryland. He remained in the Army Reserve until his retirement at the rank of Lieutenant Colonel in 1984. Also, in 1984, after thirty-six years on the faculty of Cornell University, Gene Delwiche retired that position and was granted the rank of Professor Emeritus.

For many years, Gene was a licensed “ham” operator of a radio transmitter and generously helped others who were interested in learning the hobby. In recent years, his interest turned to computers and he worked actively through

Cornell's Computer Internet Connection. Among Gene's other interests were hunting, swimming and vegetable gardening. As a member of the Ithaca Yacht Club, he participated in many waterfront activities, especially sailing. He was also a member of the City Club, a charter member of the Statler Club and was once an active golfer.

Besides his wife Constance, Gene Delwiche is survived by his four children and twelve grandchildren.

Norman C. Dondero, Harry W. Seeley, Jr., Robert P. Mortlock

Bernard E. Dethier

June 5, 1926 — February 22, 1995

Bernie Dethier was for many years the leader of the meteorology group in the Department of Agronomy. Through his leadership, meteorology at Cornell grew from a one-person operation to a vital, nationally recognized program. In 1983, he established the Northeast Regional Climate Center at Cornell and served as its Director until his retirement in 1988. The Center serves as a unique resource of climate data and applied climate information for Cornell researchers as well as for businesses, government agencies, and citizens throughout twelve northeastern states.

Born in Boston, Bernie earned his bachelor's and master's degrees in meteorology from the California Institute of Technology and a Ph.D. degree in geography from the Johns Hopkins University. Bernie joined the Cornell faculty as an Assistant Professor of Agricultural Climatology in 1958. He was promoted to the rank of Associate Professor in 1962 and to Professor in 1969. Prior to his employment by Cornell, Bernie held faculty positions at Nazareth College in Michigan and at Morgan State College in Maryland. He was also employed as Director of Climatology with a private weather service in California and served as an aerology officer in the United States Navy from 1952-54.

When he arrived in 1958, Bernie *was* the meteorology program at Cornell, serving the entire university with instruction, research and public service in all aspects of atmospheric science. The meteorology program grew in size and importance under Bernie's leadership. His entrepreneurial spirit and outgoing personality well suited him for developing a more substantial academic program. By the mid-1960s, Bernie was successful in obtaining an additional faculty position in meteorology to meet growing student interest and enrollment in meteorology courses. In the early 1970s, he greatly expanded the meteorology curriculum to give undergraduates the training necessary to meet requirements for professional employment in the field. This resulted in a surge in enrollment and led to the addition of a third faculty member to the meteorology program. By the time of Bernie's retirement, the program consisted of four faculty members, a half-dozen support staff, and over forty undergraduate majors. He is remembered for his encouragement and support of younger colleagues and for promoting a harmonious and cooperative work environment for everyone involved with the meteorology program.

Bernie taught the introductory course in meteorology for many years as well as courses in climatology, tropical meteorology, and air pollution. The introductory course was very popular with a typical enrollment of 75 to 100

students. Several thousand Cornell undergraduates received their introduction to meteorological phenomena and processes in this course and it inspired many to take up meteorology as a major and career.

Cornell's atmospheric science program was lifted to regional and national prominence through Bernie's efforts in establishing the Northeast Regional Climate Center. The Center's data resources, service, outreach, and research activities complement and enhance the teaching and research programs of the department. Bernie was appointed State Climatologist for New York in 1979 and, upon his retirement to Blue Hill, Maine, he assumed the position of State Climatologist for Maine—a position he held until his death. He was an active member and past president of the American Association of State Climatologists, a Fellow and professional member of the American Meteorological Society as well as a member of Sigma Xi.

Bernie's research focused primarily on the use of climate data and information to address problems in the field of agriculture. Much of his work was done in cooperation with colleagues in the department and at many other institutions in the Northeast and throughout the nation. These studies most often involved organizing, analyzing and summarizing large quantities of weather observations. In the early 1970s, he organized and led a large, multi-disciplinary group of scientists in a pioneering research project to explore the potential of satellite observations in monitoring the phenological development of crops, rangeland, and forests on a continental scale. Many of the publications resulting from his work are widely used to this day.

You may have wondered why only the top floor of Bradfield Hall has windows. Credit is due to Bernie Dethier. Bernie was fond of relating a tale of his meeting with the architect during the building's planning stages and his insisting that meteorologists had to have a clear, unobstructed view of the sky in order to observe and forecast the weather. His arguments were obviously persuasive, and the faculty and staff of the atmospheric science group as well as thousands of campus visitors each year enjoy the splendid views of the campus and Cayuga Lake afforded by Bernie's windows.

Robert F. Lucey, Madison J. Wright, Warren W. Knapp

John W. DeWire

June 12, 1916 — September 17, 1990

John W. DeWire has left an indelible imprint on Cornell. Arriving in 1947, he became one of the most influential and respected members of the Physics Department. He was one of the earliest members of the Laboratory of Nuclear Studies and was instrumental in its development into international leadership in high energy physics. In 1983 he was appointed University Ombudsman, a position he filled with great distinction until 1988, two years after his retirement, when ill health forced his resignation.

John was born in Milton, Pennsylvania in 1916, received a B.S. degree from Ursinus College in 1938 and a Ph.D. degree from Ohio State University in 1942. In 1979 he was awarded an honorary D.Sc. degree from Ursinus College. After receiving his doctoral degree, John worked on scientific projects connected with the war effort. He joined Robert R. Wilson at Princeton University on a uranium isotope separation project. In March 1943 he accompanied Wilson to Los Alamos where he measured various nuclear properties required for the design of nuclear weapons. One of the most important of these was the measurement of the neutron multiplication constant for neutron induced fission in uranium. He also participated in measuring the neutron growth rate in the first nuclear explosion at the Trinity test site in New Mexico.

In 1946 John joined the newly established Laboratory of Nuclear Studies at Cornell as a research associate. In 1947 he was appointed to the Physics Department faculty. He was an active player in the life of the department. John enthusiastically taught courses at all levels, from freshman autotutorials to graduate-level courses on high energy physics. He took on many departmental responsibilities from graduate field representative and admissions committee to writing and directing skits for the Christmas party. His sense of fair play guided the physics faculty through many difficult decisions. In the laboratory, he was a key member of the faculty group which designed, built, and used the five electron accelerators that kept Cornell in the forefront of elementary particle physics. For seventeen years he was the associate director of the laboratory. The successful and harmonious operation of the laboratory was due, in large measure, to John's devotion to its work and to his concern for the welfare of its employees.

Over a period of forty years John carried out an active research program on each of the laboratory accelerators and he did important work in many fields of elementary particle physics. We can only touch on some of the highlights. He made the first accurate measurements of the interaction of electromagnetic radiation with matter

at high energy. In a beautiful series of experiments he demonstrated that this interaction was correctly described by the then young theory of quantum electrodynamics. He worked for many years on the production of mesons by electromagnetic radiation during which he made essential contributions to our understanding of the form of the strong or nuclear interaction. In collaboration with others at Cornell he discovered an excited state of the proton. For the last ten years he was a senior member of a collaboration working at the Cornell Electron Storage Ring studying the properties of heavy quarks. This group produced many of the most important elementary particle physics results of the last decade. Much of what we know about the properties of heavy quarks, including the discovery of more than six different particles containing one or more such quarks, comes from that work. Events with electrons are an important signature for the decay of particles containing heavy quarks; John was particularly effective in applying his years of experience in detecting electrons to the study of events of this type. Each of these subjects was at the forefront of elementary particle research when John was working on them. Together they span a large fraction of the history of elementary particle physics. John's contributions assure him an honored place in that history.

John was a prominent figure in the national and international high energy physics community. In 1960 he was a senior postdoctoral fellow at the Italian National Laboratory at Frascati, Italy. He spent the 1968 and 1974 academic years as a visiting professor at the University of Bonn in West Germany, first as a Fulbright Fellow and then as a Humboldt Senior Scientist Awardee. He developed very close professional relations and lifelong friendships at both places. He was also invited by the Soviet Academy of Sciences to lecture at a number of laboratories in the Soviet Union. In addition, he was a Fellow of the American Physical Society.

For fifteen years John was a member of the Board of Trustees of Associated Universities, the organization responsible for the management of Brookhaven Laboratory and the National Radio Astronomy Laboratory. He enjoyed his work on the board and was highly valued for his knowledge of elementary particle physics as well as accelerator design and civil construction. His characteristic outspokenness and his critical judgement were particularly useful to the board.

John was an early member of the Federation of Atomic Scientists and worked effectively in the successful effort to keep the development of atomic weapons under civilian control. He was a member of the American Association for the Advancement of Science and he served on the editorial board of the *Review of Scientific Instruments*.

Among John's many enthusiasms, railroading was a special interest; he knew routes, systems, equipment, and schedules. One of his most cherished memories was the trip arranged by his Bonn friends for a ride in the engine

of a crack train traveling along the Rhine, a trip that earned him a photograph in a Bonn newspaper which he showed with great pride. He also enjoyed travel, music, art, and gardening, being particularly proud of his grapes. However, above all other interests, John's true love was physics. His passion for physics survived, undiminished, an eight-year struggle against leukemia. The first six years he continued working normally. The last graduate student to profit directly from John's knowledge and experience is just now finishing his thesis. During the last two years he became progressively weaker. Nonetheless, he continued to maintain a strong interest in the work of the laboratory. Even when he was very weak he went to the laboratory to work for an hour or so on a research project he was particularly interested in. When finally he was unable to leave his home, his first request from visitors was for information about the activities at the laboratory and in the rest of the world of physics. This devotion to physics was but one of the reasons he was so much admired by his colleagues.

All of John's personal qualities, his integrity, compassion, sense of humor, experience as a professor, and knowledge of the entire Cornell Community, enabled him to be a particularly effective University Ombudsman. He was equally at home mediating a dispute between the campus police and an unruly hockey fan, assisting a victim of sexual harassment and her family, and fighting for students' rights when he felt that a department had abused its authority. Even though the Ombudsman's responsibilities demanded a large commitment of time and energy, he found the role immensely satisfying.

John had a happy and productive life. He loved physics and Cornell and particularly the combination. He had a loving and devoted family and a large circle of grateful friends who basked in his warmth and generosity. He was loved and honored by his many colleagues.

John DeWire is survived by his wife, Ruth*; a daughter, Susan Hosek, of Los Angeles, California; son, William, of Lewistown, Pennsylvania; five grandchildren; a brother; and two sisters.

Boyce McDaniel, Albert Silverman, David G. Cassel

*Ruth DeWire died January 2, 1992.

Robert S. Dickey

January 18, 1921 — July 1, 1991

Robert S. Dickey, Professor Emeritus of Plant Pathology, Cornell University, died at his home in Prescott, Arizona on July 1, 1991.

Professor Dickey was born on January 18, 1921 in Riverside, California. He received his early education in public schools in Riverside, California after which he attended Riverside Junior College where he earned an A.A. degree in 1941. In 1948 he was awarded the B.S. degree in Plant Science and in 1954 a Ph.D. degree in Plant Pathology at the University of California, Berkeley. His doctoral thesis research dealt with several aspects of the crown gall disease caused by *Agrobacterium tumefaciens*.

From September 1942 to January 1946 Professor Dickey was in military service. He served as Regimental Intelligence Officer and Company Commander in the 39th Infantry Regiment, 9th Infantry Division in Europe where he participated in four military campaigns. Four decorations were awarded to him for heroic action and two of these were awarded by the Belgium Government. His discharge from the United States Army was with the rank of Captain.

Bob Dickey joined the Department of Plant Pathology at Cornell as an Assistant Professor in 1952. From 1952 to 1954 he served as Extension Specialist in charge of cereal, potato, and forage crop diseases. He was Plant Pathology Extension Project Leader from 1954 to 1958 with additional responsibilities for preparing plant disease survey reports, for being in charge of the Plant Pathology Extension Office, and planning Extension conferences. With the retirement of W.H. Burkholder, Professor Dickey moved to a research/teaching position dealing with plant diseases caused by bacteria. From 1959 until his retirement in 1987, he carried out research and taught courses in bacterial plant diseases and phytopathogenic bacteria. Research on bacterial diseases of plants included the diagnosis, pathogen identification, epidemiology, and control of bacterial diseases as well as the host-pathogen interaction during pathogenesis. His investigations of phytopathogenic bacteria were concerned primarily with the taxonomy and physiology of various genera, species, and strains. A limited collection of selected bacterial cultures also was maintained as an integral part of the program.

One of Professor Dickey's first research projects on bacterial diseases of plants at Cornell was on the wilt disease of carnation caused by *Pseudomonas caryophylli*. The results of this research were published with his co-workers and graduate students in a series of papers in *Phytopathology* covering all aspects of this disease. An important

finding from this research by Professor Dickey and his graduate student, C.W.D. Brathwaite, was the discovery of the synergism between *Pseudomonas caryophylli* and *Corynebacterium* species in causing maceration of carnation stem tissue. Another of Professor Dickey's major research interests was the genus *Erwinia* particularly *E. carotovora* subsp. *carotovora* and subsp. *chrysanthemi*. A series of papers were published dealing with the affects of these organisms on chrysanthemum, *Musa paradisiaca*, *Zea mays* and other host plants as well as work on the taxonomy of this genus.

Professor Dickey was an active participant in International meetings and programs dealing with bacterial diseases of plants. In 1971 he was awarded a New York State College of Agriculture Travelling Fellowship to attend the Third International Conference of Plant Pathogenic Bacteria in The Netherlands and to visit research laboratories in Denmark and The Netherlands. He was Discussion Session Organizer and Chairman for the Ecology of Bacterial Plant Pathogens at the 2nd International Congress of Plant Pathology and on the organizing committees for Bacteriology for the 3rd and 4th International Congress of Plant Pathology held in 1978 and 1983. He also served on the Executive Committee for the International Group on Plant Pathogenic Bacteria, the Committee on Taxonomy of Plant Pathogenic Bacteria and the *Erwinia* (Soft Rot) Working Group.

Professor Dickey served his University and the American Phytopathological Society in a number of ways. He served on numerous University, College, and Department committees at Cornell. He served his professional society as Councilor of the Northeast Division, as Associate Editor of *Plant Disease*, as a member and as secretary-treasurer of the Committee on Phytopathological Classics, and on numerous committees dealing with Plant Pathogenic Bacteria and Bacterial Diseases of plants.

He was an excellent teacher and his courses on Bacterial Plant Pathogens and Bacterial Plant Diseases were well organized and thorough in subject matter covered. Although he was a firm taskmaster, students came away from his courses with a thorough grounding and understanding of Plant Pathogenic Bacteria and Bacterial Diseases of plants. His devotion to teaching was further demonstrated by the fact that a portion of each of the three sabbatic leaves he took was devoted to course revision and improvement.

In 1946 he married Muriel F. Duffy who survives along with three sons: Paul of Meadville, Pennsylvania; Mark of Buffalo, New York; and David of San Francisco, California; one sister; and a grandson.

Bob Dickey was known for his integrity, and the thoroughness and accuracy of his research. His advice and assistance were sought regularly was generous with his time in offering assistance. Many of us regret the loss of a

scientific colleague but more important is the loss of a good friend who was willing to discuss a variety of topics and listen patiently to the concerns of his friends. Bob will be sorely missed by his many colleagues and friends in Plant Pathology.

P.E. Nelson, R.K. Horst

David Dropkin

September 13, 1908 — October 12, 1990

David Dropkin savored over 50 years of academic life at Cornell, first as an undergraduate, then as a graduate student, next as a research associate, eventually as a faculty member, and finally as a professor emeritus teaching part-time. This is certainly more than most of us experience and he was still showing some reluctance for final detachment when he moved to Florida to ameliorate the poor health of his first wife, Sophie.

He was born in Vitebsk, Russia and became naturalized as a U.S. citizen soon after his parents moved to the U.S.A. He attended elementary and high schools in Nyack, New York and matriculated at Cornell in 1929, graduating in mechanical engineering with the M.E. degree current at that time. He continued his studies on the graduate level, earning an M.M.E. degree in 1935 and a Ph.D. degree in 1938. During the period from 1933 to 1942, he held appointments as research assistant and research associate, with instructor being added to the latter in 1942, entitling him to become a faculty member of the Sibley School. He was appointed an assistant professor in 1943, associate professor in 1946, and professor in 1957. In 1970 he was named the John Edson Sweet Professor of Engineering and retired in 1974 as professor emeritus.

Dave was that *rara avis*, a first-class experimentalist and a first-class teacher—he had many publications to his credit and was accorded the Excellence in Teaching Award of the College of Engineering in 1968-69. His experimental work was meticulous, as shown in his published papers and his laboratory teaching, both of undergraduates and graduates. His field of interest was in heat transfer in general, and a hallmark of his work was the accurate measurement of temperature: good enough was not enough, it had to be as precise as technique and tenacity allowed. A major quality of character possessed by Dave was his innate kindness to students and it was this attribute, together with a certain ingenuousness of approach and of unaffectedness in presentation, which endeared him to them, because they perceived, either consciously or not, that he was personally concerned about their learning. This affection and respect carried through the years, and alumni returning to Sibley School after several years of absence from the campus immediately made inquiries at the school office of his whereabouts and were grieved to learn that he was retired and, later on, far away in the South.

During Dave's long attachment to Cornell from matriculation to emeritus, a number of curriculum patterns were advanced, the major one providing a significant change over the decade of World War II and following years. This innovation was engendered by the establishment of the five-year undergraduate engineering program which

emphasized a new concept, the teaching of “Engineering Sciences” in depth, before the introduction of design and applications. In Sibley, this meant separate courses of study, such as thermodynamics, fluid mechanics and heat transfer, which had been previously subsumed in ‘Heat Power Engineering’ as a single two-semester course covering both basic and application material. While a few of his colleagues might have grumbled that whatever it was called, their lecture notes would remain the same, Dave welcomed the change wholeheartedly and immediately took advantage of it. It meant that heat transfer became a required study complete with built-in laboratory, with temperature measurement and advanced heat transfer for graduate courses and for graduate research.

His publications became well-known in the late fifties, again largely for his prowess in temperature measurement and he established consultancies with a number of institutions and companies. To quote a former chairman, “Dr. Dropkin has done more good work with graduate students than any other teacher in the Sibley School. This is, I believe, one true mark of a scholar”. He was a member of the American Society of Mechanical Engineers, the American Society of Engineering Education, the American Association of University Professors and the New York Academy of Sciences.

Throughout his career at Cornell, Dave gave generously of his time to the many necessary tasks within the school beyond those of the classroom, such as advising of both undergraduates and graduates, and acting as graduate field representative of the Sibley School. Even in his retirement, he took up the office of secretary-treasurer of the Cornell Alpha Chapter of Sigma Xi, the Scientific Research Society, and brought it to a long-needed order.

Dave was a conscientious person of the highest order and could not abide intolerance, injustice, deception and hypocrisy. He could speak out forcibly whenever an event occurred that violated his high standards of behavior. At such time his friends knew that Dave could always be expected to start his objections with the characteristic phrase “I am furious”. On one memorable occasion, during the student anti-Vietnam War demonstrations, Dave arrived at Upson Hall to find that a number of protestors were carrying the Upson Hall furniture to the outside patio. Dave became “furious” and peremptorily ordered the students to return everything to its proper place. Hearing the voice of authority, possibly for the first time in many years, the perpetrators, all of whom were relatively large fellows, attended to the diminutive professor who was suddenly nine feet tall, meekly restored the furniture to the lounge, and sheepishly departed from the scene.

On September 15, 1940, Dave married Sophie Katz of Nyack, New York. Most of their 43 years of life together were spent in Ithaca, except for sabbaticals and some foreign travel. When Sophie became ill, they moved to Coconut

Creek, Florida, where she died on February 4, 1983. On March 5, 1985, Dave married Idie Kertesz in Coconut Creek, Florida, and, except for occasional visits to Ithaca and some travel abroad, remained there until his death.

He is survived by his wife, Idie, of Coconut Creek, Florida; his son, Dr. Lloyd Richard Dropkin, of New York City; his daughter, Marilyn Hoffman, of Ithaca, New York; and his brother, Harry, of Florida.

David Dropkin will be long remembered as a dedicated and caring teacher, an honored and esteemed colleague, and a true and devoted friend.

Bart J. Conta, Sidney Leibovich, Dennis G. Shepherd

Matthew Drosdoff

December 15, 1908 — April 24, 1998

Matthew Drosdoff culminated a distinguished career as Cornell's first professor of tropical soils following a long period of service as a scientist and administrator for the United States Department of Agriculture and the United States Agency for International Development.

In 1935, after receiving the B.S. degree from the University of Illinois, and M.S. and Ph.D. degrees in Soil Chemistry from the University of Wisconsin, Matt began his 31-year career in government as a research scientist and administrator. Much of his early efforts were devoted to tung oil research at the University of Florida, considered vital to the war effort. His international career began in 1950 when he first went to Central America as a member of a mission to identify soils and mineral nutrition problems of Manila hemp. In 1955, he joined the forerunner of USAID and spent five years in Peru as a soil science advisor to their Ministry of Agriculture. Matt then served four years in Vietnam and from 1961-64 was the chief of the U.S. agricultural mission in that country. He was then named Administrator of the International Agricultural Development Service of the U.S. Department of Agriculture, a position he held until he joined the faculty at Cornell in 1966.

Upon joining the Cornell faculty, Matt Drosdoff rapidly became one of its most active and distinguished members. Matt had a remarkable capacity to interact with people and involve them in the many activities that he undertook as a Cornell professor. Under his guidance, multi-disciplinary research programs on effective utilization of soil and water resources of the tropics were organized and carried out. Using discussion and persuasion, he was able to coordinate effective research among members of the faculty from Cornell and other universities and at in-country institutions. The result was a world-perspective of soil science. Even though he became emeritus in 1976, there still remains a core of soil professors in his former department active in research on soils of the tropics.

Matt's course in Properties and Management of Tropical Soils attracted many foreign students as well as students from the United States and remains a subject desired by many students interested in international development. He was heavily involved in the development and execution of an interdisciplinary course in Tropical Agriculture that included a field trip to tropical areas. This course likewise remains one that attracts many students annually. The graduate program developed by Professor Drosdoff and colleagues resulted in more than 20 M.S. and Ph.D. theses produced by students in the program. A feature of the program was the training of scientists in their own country at in-country research institutions. Building on this base, the subsequent graduate program in tropical

soils has remained very active. As a consequence, both U.S. and foreign students trained under these programs are in positions of leadership throughout the world.

At the same time, Matt interacted with faculty and students throughout the university and was highly influential in university affairs. He was a member of the Steering Committee of the Program for Science, Technology, and Society; the executive committee for Programs and Policies for Science and Technology in Developing Nations; and the executive committee for the Latin American Studies Program of the Center for International Studies. He served as a member of the Constituent Assembly and chaired the Faculty Committee on International Student Affairs. Matt was an inveterate tennis player and was a consistently formidable contender well into his eighties.

Professor Drosdoff chaired the Tropical Soils Committee of the National Academy of Sciences. He served as a consultant to the Ford Foundation and to the Food and Agriculture Organization of the United Nations among others. He was elected a Fellow by the American Society of Agronomy in 1969 and received its International Agronomy award in 1974. He also was a Fellow of the American Association for the Advancement of Science.

Matt was born and raised in Chicago and died in Ithaca. He is survived by his widow, Mildred Binder Drosdoff, of Ithaca; a sister, Naomi Weinstein, of Chicago; a daughter, Ruth Tucker, of Cincinnati; a son, Daniel, of Fairfax, Virginia; a stepson, Jonathan Prigot, of Boston; a stepdaughter, Andrea Hovaness, of Westchester County; three grandchildren; and three step-grandchildren. His first wife, Sarah Max Drosdoff, died in 1978.

It is noteworthy that a life-long public servant, however distinguished his record, could become at the end of his career, a truly outstanding and energetic example of that unique species, the Cornell University professor. Matt Drosdoff, however, contributed a decade of extraordinary achievement to Cornell University and to soil science for which he will be long remembered.

David R. Bouldin, Armand VanWambeke, Douglas Lathwell

Lola Tingley Dudgeon

September 25, 1898 — October 2, 1992

Lola Dudgeon, emeritus professor of foods and nutrition, died on October 2, 1992, in Pocatello, Idaho after an extended illness. She was born in Rockford, Ohio and attended public schools there. After attending Bowling Green State Normal School she taught in rural schools in Ohio for several years. In 1934, she obtained a B.S. degree in home economics at Purdue University and in the same year entered Cornell obtaining an M.S. degree in foods and nutrition in 1938. During this period she worked as a research assistant to Professor Marion Pfund. Lola was then appointed as a country home demonstration agent at Michigan State College and in 1941 as extension nutrition specialist at the University of Arizona.

In 1943, Lola returned to Cornell as an assistant professor and extension specialist in the Department of Foods and Nutrition in the New York State College of Home Economics and became associate professor in 1948.

As an extension specialist she worked consistently and in different ways to increase public understanding of current research as it related to diet and health. She frequently consulted with research faculty in her department and experimented on her own to translate laboratory to home conditions. She was adept at motivating people to change through “how-to-do-it” demonstrations which incorporated not only the principles of food preparation and good food buying but also current research information.

She had a special interest in the bacteriological aspects of food as they related to short term food storage and the preservation of perishable foods in the home. She prepared individually and with others many extension bulletins in a variety of areas, always urging the importance of “plenty of meat” in the content. Some of these contained such useful information they are still in current use. She worked closely with the staff in food marketing particularly in the activities of the Potato Commodity Committee of the College of Agriculture. Another activity was to prepare materials on home reserves of food for the State Civil Defense Commission.

Lola was seen as a stimulating mentor to young extension staff as well as a creative co-worker in the many cooperative projects she undertook. Keenly aware of public concerns, conceptions and misconceptions and of consumer practices, her suggestions for enriching programs for consumers were sound and timely. One example from her work on the Potato Committee was her suggestion of instituting a potato peeling contest at the annual Potato Field Day. Each contestant came with a favorite knife, well sharpened, to compete in producing a batch of potatoes in the least time with the lowest weight of peelings and the fewest blemishes left on the potato. This

proved a popular activity as did her ideas for cartoon style leaflets and exhibits used at state and county fairs and other consumer events. Her understanding of consumers and their needs made her a popular figure at training meetings where her lessons were keyed to practical home conditions yet contained sound information and were a source of enjoyment as well.

Following her retirement in 1960, Lola taught courses in nutrition and food preparation to Peace Corps volunteers training for service overseas. With her experience in teaching many different kinds of people, many of whom had very limited knowledge in this area, she was invaluable in helping the volunteers to think through the essentials for them to try to teach and the importance of simple illustration to accompany new information.

Lola's Ithaca home, planned by herself to suit her needs, and her garden were a constant source of pleasure to her and to the many others who visited there. She delighted in hospitable gatherings of colleagues, students and other friends and was famous for her Thanksgiving and Christmas dinners. She remained active for many years working with Foreign Student Aid, Girls Youth Ranch and Handicapables among several other organizations. She was also a deaconess of the Presbyterian Church for many years both in Ithaca and Sun City. She was a member of several professional honor societies including Omicron Nu, Phi Kappa Phi, and Sigma Delta Epsilon; she was also a member of the American Home Economics Association, and the American Dietetic Association.

When she moved to Sun City, Arizona after retirement, she lived close to former Cornell colleagues and this congenial ground was a welcome focus for visiting friends. While in Arizona she gradually lost her vision; Cornell neighbors, especially Leola Cooper, became her "eyes" making it possible for her to continue living independently. After the onset of Alzheimer's disease she moved to a nursing home facility with special provision for Alzheimer's patients in the community in Idaho where her daughter lives.

Survived by her daughter, grandchildren and great-grandchildren, her relationship with her family was one of Lola's greatest joys as she grew older. She will be remembered by Cornell friends and colleagues not only as a kind and loyal friend but as an able teacher with a keen perception of people's needs and interests.

Nell Mondy, Hazel Reed, Kathleen Rhodes

W. Robert Eadie

May 5, 1909 — March 17, 1991

Born in New Hampshire, W. Robert Eadie received the B.S. and M.S. degrees from the University of New Hampshire, where he began teaching in 1933. After completion of the Ph.D. degree at Cornell University, he became a faculty member of the New York State College of Agriculture in 1942. His special knowledge of vertebrate zoology, particularly the biology of small mammals, led him into a productive research and extension career in animal damage management.

With the buildup of the New York deer herd during the war years, problems of the fruit growers increased. Now, along with the ever present rodent problems the deer population began impacting the fruit industry. The challenge of the problems of control of orchard damage along with his teaching of undergraduate and graduate students in the area of mammalogy brought cooperation with co-worker William Hamilton and the development of an extension program for orchardists. As the plantings of Christmas trees in the state grew, transfer of the orchard mouse baiting programs was a logical extension of Bob's work and orchardists and plantation growers alike quickly accepted the findings which were likewise approved by the U.S. Fish and Wildlife Service. This pioneering work on deer repellents and mouse baiting in orchards and Christmas tree plantings was done at the Cornell Orchards and the Arnot Forest.

Professor Eadie led in the development and application of zinc phosphide rodenticide including aerial baiting methods that were readily adopted by orchardists. During his career he also conducted benchmark studies of the reproduction and ecology of the mammalian family Talpidae (moles). Further, he combined research efforts with his friend and colleague, William J. Hamilton Jr., to produce a number of other important scientific articles on the mammalian fauna of New York State. From the outset, both Dr. Eadie and Dr. Hamilton were leaders in advocating safety in the use of rodenticides, and in devising methods to target them to particular species. This concern long predated the development of our current general concern about the welfare of non-target species.

In August of 1944, Dr. Eadie, like many others of that period, left the employ of the University to serve in World War II, where he specialized in rodent control while serving as a U.S. Navy Lieutenant in the South Pacific.

Professor Eadie's broad interest in mammals carried him in his travels throughout the United States, Europe, the South Pacific, and the Orient, as well as East Africa, on study tours where he collected and exchanged numerous museum specimens. He served as summer visiting professor of zoology at the University of Oregon in 1949 and

at Montana State University at Flathead Lake in 1964. His widely known reputation in rodent control led to an invitation by the then United Fruit Company and its banana plantations in Guatemala to help solve continuing problems there in 1958. Throughout his career, his special interest and expertise was the biology of mammals and methods of control of species injurious to crops and homesteads while keeping environmental impact to a minimum.

At Cornell, Dr. Eadie taught courses in wildlife damage management (titled Economic Zoology) and in mammalogy. He conducted research and extension programs in wildlife damage and was advisor for many graduate students who worked on mammal damage problems, including early research on repellents for deer and rabbits. He published in professional journals, technical and extension publications, and in popular periodicals. His book, *Animal Control in Field, Farm and Forest* (Macmillan, 1954), was an early practical handbook for homeowners, nursery operators, and foresters; it is still noteworthy for an early emphasis on natural means of controlling wild animal populations to prevent damage. Professor Eadie clearly was an early conservationist in the field of economic zoology.

Throughout his career he provided leadership and guidance to several professional organizations. He was a three-term director of the American Society of Mammalogists; Editor of the *Journal of Mammalogy* (1952-57); an elected Fellow of the American Association for the Advancement of Science; a member of Sigma Xi; Phi Beta Phi; the Wildlife Society; the Audubon Society; the American Institute of Biological Sciences; and the Ecological Society of America. He was named Professor of Zoology Emeritus upon retirement from Cornell in 1969.

In spite of, or perhaps because of, his numerous activities in his field Bob was a very private person seeking much of his recreation and quiet time fishing the local waters and his favorite activity, bow hunting, yearly at the Connecticut Hill Game Management Area or the University's Arnot Forest. After his retirement to Chatham, Massachusetts in 1969, he continued to renew his acquaintance with his old hunting areas.

During his retirement years Bob was active in the Chatham Conservation Foundation and its concern for the endangered shoreline, the wildlife, and the increasing pressures from the influx of a huge mobile population on Cape Cod. His activities also involved volunteer work with the Eldredge Public Library of Chatham.

The field of mammalogy and wildlife management has lost one of its prominent pioneers with the passing of Robert Eadie. Indeed, for those who knew him well, and benefitted from his broad knowledge, practical wisdom, and unlimited kindness, we have lost a giant in our own field.

Bob is survived by his wife, Laura; two sons; a stepdaughter; stepson; and four grandsons.

Wendell G. Earle

June 16, 1923 — April 3, 1990

The faculty in the Department of Agricultural Economics, the College of Agriculture and Life Sciences and the University, lost one of its strong contributors and supporters in the passing of Wendell Earle. He was an innovator in his teaching, a developer of new University programs, an effective fund raiser, and an active leader and worker in the University community. We have all learned from his timely counsel, his quick wit and his selfless commitment to higher education for students of all ages.

Wendell G. Earle was born June 16, 1923 in Hardwick, Vermont, son of Blanche Earle of East Hardwick and the late Sidney Earle. He received his B.S. degree from the University of Vermont in 1946, after having his college work interrupted by a tour of duty in the U.S. Air Force. He came immediately to Cornell, completing his masters degree in 1948 and his Ph.D. degree in 1950.

Professor Earle began his professional career in the Department of Agricultural Economics in 1950 when he was appointed assistant professor of marketing. At that time, he was given responsibility for developing an extension program in poultry marketing. In this capacity, he demonstrated his leadership ability in program development and his skill as a teacher. He published nearly 150 articles in the six years that he conducted the program. He was promoted to associate professor in 1953, and to professor in 1959.

Professor Earle spent the 1957-58 year on sabbatic leave directing a research project for the National Agricultural Extension Center at the University of Wisconsin. He studied problems of organizing and operating marketing programs with business firms.

When Professor Earle returned to Cornell, he began the phase of his professional career for which he is most recognized. At that time he assumed responsibility for developing a new program in food industry management within the department of agricultural economics. Because of his vision, leadership, and tireless efforts, this pioneer program has gained international recognition. The program developed by Earle was designed to train persons with food industry experience for management positions; to interest undergraduate students and prepare them for food industry careers; and to upgrade the skills of food industry employees. He recognized the benefits that would result from exposing promising young food industry personnel to an academic environment as well as the exposure of undergraduate students to experienced food industry leaders. Under Earle's tutelage, a Home Study Program was developed which offered more than 20 different courses reaching nearly 100,000 people.

More recently, he was instrumental in developing the Personal Enterprise and Small Business Management Program (PEP) at Cornell. Although many people from the business and university communities have made major contributions to the program, PEP would not exist today had it not been for the vision, wisdom, enthusiasm, patience, and tireless efforts of Wendell G. Earle. He played an important role in recruiting and counseling four visiting faculty who were key to the development of the program from 1987 to 1989. As one visiting faculty put it, “Wendell was always there to offer me steady support, never interfering, but always willing to answer my questions with insightful, patient answers.” He was instrumental in raising funds that led to the endowment of the Personal Enterprise Program with the Bruce F. Failing Sr. Chair in Personal Enterprise as its major component.

He served as an academic advisor and taught more than 3,000 students during his 33 years at Cornell. He was a member of the Faculty Committee on Physical Education and a member of the Cornell University Athletic Board. He also served as faculty advisor to the men’s hockey team from 1976 to 1988, and he and Fran housed hockey players for over 15 years. In 1975, more than 300 of his former students, together with representatives of the food industry, honored him at a testimonial dinner in New York City and endowed a scholarship in his name. In 1977, he was named Professor of Merit by students in the College of Agriculture and Life Sciences. In 1989 he received the Distinguished Alumni Award from both the University of Vermont and Cornell University. He was a member of the University of Vermont Fund Executive Committee and an alumni representative to the University of Vermont Board of Trustees. In January 1990, he received the National Grocers Association Industry Service Award for his lifetime of commitment to raising the academic and professional standards of the food industry.

He has served on the board of directors of P&C Food Markets, Syracuse, NY; Actmedia, Inc., West Hampton Beach, NY; Pet, Inc., St. Louis, MO; Fisher Foods, Inc., Cleveland, OH; Pneumo Inc., Boston, MA; Harrington’s, Inc., Richmond, VT; and Hartstrings, Wayne, PA; and he was chairman of the Site Selection Committee for Wakefern Foods Corp. in Elizabeth, NJ.

His community service contributions include the presidency of the Tompkins County United Way and more than 36 years of service to scouting. He received the coveted Silver Beaver Award, and was president of the Louis Agassiz and Baden-Powell Boy Scout Councils.

He is survived by his wife of 47 years, Francelia Connor Earle; three sons: Brian and wife Jody of Freeville, NY; Bruce and wife Peggy of Devon, PA; Terry and wife Jean of Bernardsville, NJ; two daughters: Wendy and husband

Adam Brayshaw of Lake Clear, NY; Shelley and husband Michael Mitchell of Sapulpa, OK; two brothers: Ronald of East Hardwick, VT and Walton of St. Johnsbury, VT, and seven grandchildren.

Robert Smith, Bernard Stanton, Gene A. German

George C. Eickwort

June 8, 1940 — July 11, 1994

George Eickwort, Professor and Chairman of Entomology, died July 11, 1994 as the result of an automobile accident on the Caribbean island of Jamaica. George will be remembered by many people for diverse reasons. To his children, Alex (Mary), Robert and Jeffrey, George was a devoted father who participated fully in their lives; he especially enjoyed his free time visiting them at their colleges. To his brother, George will be remembered as a person of exceptional talent who displayed enthusiasm and determination for the lifelong interests he pursued. To his students, both the undergraduates who knew him as a teacher and the graduate students who worked closely with him, he represented a kind mentor and an insightful advisor who achieved the highest pedagogical skills. And to his many friends and colleagues at Cornell and throughout the World, he was a forthright, scrupulous, dedicated, and imaginative person with a multitude of talents.

George grew up in Brooklyn and studied insects as long as his younger brother Jerry can remember. He took this interest to Michigan State University, where he obtained a B.S. degree with high honors in 1962 and an M.S. degree in 1963. He went on to the University of Kansas, where he studied with CD. Michener, and obtained a Ph.D. degree in 1967. Thereupon he joined the Department of Entomology at Cornell as an Assistant Professor. During his career at Cornell, George regularly taught the Introductory Insect Biology, Insect Morphology, and Insect Behavior Seminar courses. Upon student request, he also offered Acarology and advanced seminars and courses on bee biology and systematics. His reputation as a skillful teacher ranged widely; it was not unusual for graduate students at other universities to visit Cornell in order to take one or more of his classes. National recognition of his teaching skills came through the 1986 Distinguished Achievement Award in Teaching from the Entomological Society of America.

George was equally active in graduate student advising: he guided twenty-four Ph.D. and six M.S. recipients during his 27 years on the faculty. His influence in teaching extended beyond the classroom through his contributions to textbooks, reviews, monographs, and as series editor for the Cornell University Press Arthropod Biology Series.

George's long-term research interest focused on the biology of the sweat bee family Halictidae—so-called because some species are attracted to human perspiration—and the evolution of sociality in these diversely social bees. The Halictidae embraces a wide spectrum of species with habits ranging from the solitary—in which a mother provides for her offspring by herself—to rather highly social, with several to many adults of the same or consecutive

generations cooperating to raise a brood. This range provides the opportunity to throw light on the evolution of social behavior, not just in these little bees, but as it turns out, in animals in general, humans included. George was fascinated, as is his whole generation of sociobiological investigators, by such questions as: What is the role of genetic relatedness in the evolution of the social state? What behavioral traits predispose the bees to sociality? What is the relationship of particular social structures to the environment? These interests led to extensive field work throughout the Americas and interaction with researchers in the fields of behavior, systematics, chemical ecology, and genetics. Because of his broadly based curiosity and his many talents, George became a pivotal person who brought together other colleagues and students in those disciplines and guided the way toward novel syntheses of ideas. His acumen in research received recognition through extensive invited service to the National Science Foundation, participation on numerous external reviews at other institutions, and the presidencies of the International Society of Hymenopterists and the Acarological Society of America.

George's unique service to Cornell University hinged on his ability to blend the interests and activities of sometimes disparate groups of individuals. At the time of his death, he had served only one year of his term as Chairman of Entomology. But, during that single year, he had forged close ties among diverse groups of insect biologists working on campus and at the Geneva Experiment Station; he placed high priority on fostering the research and training activities of the many people at Cornell whose work focuses on insects. Aside from teaching and guiding students in Entomology, he served as a joint appointee in the Section of Neurobiology and Behavior and participated very actively in that group.

George's success as a teacher and researcher was based on his incredible enthusiasm. Whether the subject was tennis, ornithology, or bee biology, he would convey his enthusiasm without artifice, thereby initiating people into the subject. George's teaching activities never ceased. He taught not only at Cornell, but also on sabbatic leaves at the University of California at Davis and the University of Arizona; during summers he taught at the Rocky Mountain Biological Laboratory. He actively participated in the Programa Cooperativo Sobre le Apifauna Mexicana, a program that combined teaching Mexican students about bees with a comprehensive survey of the biodiversity of the Middle American wild bee fauna.

George took students on numerous field trips and showed them firsthand the excitement of observing living organisms in their own environment. He also played the role of a classic entomologist, with net and jars in his luggage wherever and whenever he travelled to a location suitable for collecting sweat bees; given these bees' catholic habitat preferences, that meant everywhere.

Many former students trace their achievements as entomologists, insect behaviorists, or acarologists to George's guidance and example. He added to all of our lives through his gentle nature, thoughtfulness, accessibility, expertise, and enthusiasm. But in all ways he did much better than simply add to people's lives. He expanded their thinking and brought together people and ideas in a synergistic manner. As a result, his influence will extend well into the future. So strongly do his students identify with George's principles that they consider themselves "Eickwortians," a legacy that will be carried forward by many well-trained, highly talented scientists.

His explosive laugh which often rang down the hall or across crowded rooms, rose above the rest. It is hard to accept that we will not hear it again. However, George continues to live in the hearts and minds of his friends and colleagues.

William L. Brown, Jr., John G. Franclemont, Maurice J. Tauber, James K. Liebherr

Mario Einaudi

September 8, 1904 — May 15, 1994

Mario Einaudi, Goldwin Smith Professor Emeritus and founder of Cornell's Center for International Studies, died on May 15th, 1994 in Piedmont, Italy, in the house in which he was born almost 90 years ago. The eldest son of Luigi Einaudi, economist and Italy's first President (1948-55), his wisdom, dignity and love of freedom inspired generations of students at Cornell and at the Foundation he later created in his father's memory.

Einaudi received his degree from the University of Turin, where he specialized in European political philosophy. His first scholarly works were on the French thought of the eighteenth century and his first published volume in English was *The Physiocratic Doctrine of Judicial Control* (1937). He would return to the eighteenth century repeatedly as the fount of modern political thought and practice, especially in his *The Early Rousseau* (1967). He found amusing the current academic fashion to denounce the Enlightenment.

Einaudi first came to this country as a Rockefeller Fellow in the 1920s, returning to Harvard in 1933 as a political exile when he refused to swear allegiance to Mussolini's fascist state. Raising his three sons in America with his wife, Manon Michels Einaudi (1904-90), he taught first at Harvard, then at Fordham, and finally at Cornell from the end of World War II until his retirement.

As a teacher of Government, Einaudi opposed the growing specialization in American academia and continued to teach and write in both political theory and comparative politics until the end of his career. He served twice as the Department's chair, presiding over its heroic period, when teachers like Rossiter, Berns and Hacker—and Einaudi— had the largest enrollments of any department in the College of Arts and Sciences. The many letters that have arrived from former students since his death testify to his lasting influence as a teacher.

Proud at having become an American citizen, Einaudi yet never lost his European roots. He saw part of his vocation to try to explain Europe to Americans (especially in his three collaborative books on European communism, Christian Democracy and nationalization), and America to Europeans. In the latter respect, his most significant work was his magisterial, *The Roosevelt Revolution*. This book was an attempt to make the New Deal part of the remembered experience of the Western World, "a bold and important message for the 1950s/' notes his Government Department colleague, Theodore Lowi. The book was written out of fear that, as Europeans fell out of love with the Soviet model, they would drift towards fascism, rather than towards the liberalism of the New Deal. Italy's move to

the extreme right during the last weeks of Einaudi's life left him distressed and fearing for the future of his native country and the West.

Even as he approached retirement, the 1960s were a watershed for Einaudi. His intellectual breadth and humane universalism had their most concrete expression in founding the Center for International Studies. The Center embodied Einaudi's belief in the land-grant university, a notion quite at odds with the experience of the European universities he had grown up with. His main effort as the Center's first director was to build bridges across boundaries, linking it to the College of Agriculture and Life Sciences at a time when the work of that College was highly technical. He was, as Davydd Greenwood notes, "twenty-five years ahead of his contemporaries in creating a multi-disciplinary center which combined the best in international relations, foreign language and area studies and international development and technical assistance/' As Milton Esman, his successor as Center Director, remembers, "He introduced programs that he hoped would reach across areas and disciplines and focus the attention of Cornell's students on the emerging problems of an interdependent world/' In honor of his vision, C.I.S was renamed the Mario Einaudi Center for International Studies in 1991.

The 1960s were also troubling years for Einaudi. Though no radical, he resisted the instinctive conservatism of some of his colleagues faced by the tumultuous events of 1969 at Cornell. His refusal to take a negative attitude to student activism was part of his lifelong preoccupation with the expansion of freedom: from his dissertation on the eighteenth century French philosophers to his condemnation of postwar European communism to his *The Early Rousseau*, Einaudi believed in activism, despite the contradiction between its frequent excesses and his own sense of measure and austerity.

As he approached emeritus status, Einaudi began what amounted to a second career, founding and presiding over the Italian foundation that bears his father's name and is based on the elder Einaudi's remarkable library. For most of his last 30 years, he and Manon divided their time between the Turin, where the Foundation was located, Ithaca, and their family retreat in the Val d'Aosta. At the Foundation, at the cost of constant worry and effort, he shaped an institution where young scholars could carry out their research removed from the tumult of the Italian University system. And by bringing scholars from all over Europe to spend periods of study in Turin, he also assured the Foundation's universal mission.

In all this time, Einaudi's commitment to Cornell never wavered. When he and Manon returned twice a year, he would quickly and incisively inform himself about affairs both in international studies and in the Arts College. A

penetrating interviewer, he would interrogate junior colleagues who crossed the quad about the latest happenings in the college and in the university. Those who braved inquisitorial spirit would be rewarded by his quiet approbation. At the Center, he was instrumental in the founding and expansion of the Western Societies Program, and in establishing a rotating chair for distinguished European intellectuals. With reluctance, he allowed himself to be convinced that it be called the Luigi Einaudi Chair in European and International Studies after his distinguished father. When the Berlin wall fell and Western Societies and the Center's new Slavic and East European Studies Program began to move together, he felt great satisfaction that—at Cornell too—the Cold War had been symbolically ended.

Survivors include his sons, Luigi of Bethesda, Maryland; Robert of Rome, Italy; Marc of Stanford, California; his three daughters-in-law; nine grandchildren; and two brothers, Roberto and Giulio. At the Einaudi Center and the Government Department, he leaves us bereft of a distinguished colleague, a shrewd counsellor and a dear friend.

Arch Dotson, Davydd Greenwood, Sidney Tarrow

Scott Elledge

January 9, 1914 — December 23, 1997

Scott Elledge, a distinguished scholar, a graceful stylist, and a kindly presence died at the Cayuga Medical Center in Ithaca Tuesday afternoon, December 23 at the age of 83. He was Goldwin Smith Professor of English Literature at Cornell, a university with which he had a long association. Following his undergraduate education at Oberlin College, he came to Cornell for graduate studies, receiving his M.A. degree in 1936 and his Ph.D. degree in 1941. After serving as Instructor in English at Harvard, he was appointed in 1947 as an Associate Professor of English at Carleton College, becoming a full Professor and Chair of the Department in 1951, positions he held until his return to Cornell in 1962. He retired from Cornell in 1984.

To the general public, he is best known for two books published in his later years. One of them is a biography of another Cornell alumnus—the essayist and *New Yorker* staff member, E. B. White—whose writing had long attracted him. *E.B. White: A Biography*, was published in 1984, the year Elledge became an Emeritus Professor. In the foreword to that book, Elledge remarks that in writing his biography he was following the advice— “to please and satisfy” himself—that White gives to all prospective writers in his *The Elements of Style*; Elledge achieved the clarity and unassuming grace that marks the style of his subject. The other book, *Wider than the Sky* (1990), is a collection of poetry for children that he edited, an anthology praised for the editor’s ability to choose poems that, while appealing to the young, were rewarding to readers of any age.

Elledge’s earlier writing was largely devoted to seventeenth and eighteenth century literature. In addition to many articles, he wrote two books on Milton, the first on *Lycidas* (1965) and the second on *Paradise Lost* (1975). He was co-editor of *The Continental Model: Selected French Critical Essays of the Seventeenth Century* (1960) and editor of the two-volume *Eighteenth-Century Critical Essays* (1961). He also edited the highly regarded Norton Critical Edition of Thomas Hardy’s, *Tess of the D’Urbervilles* (1965), as well as the revised editions that have kept its scholarship current.

Interested throughout his professional career in matters pertaining to education, he was associated in many capacities from 1941-68 with the College Entrance Examination Board, and served from 1964-67 as a member of the commission on the English curriculum for the National Council of Teachers of English. From 1964-66, he was a member of the supervising committee of the English Institute, becoming its chair in 1966. On a grant from the Rockefeller Foundation, he was Visiting Professor in 1969-70 at Thannasat University in Bangkok, Thailand,

and returned to Carleton College in 1976 as Benedict Distinguished Visiting Professor. In the year following his retirement, he was appointed Visiting Professor at Williams College.

Elledge's relationship with the Salzburg Seminar in Austria began early in his career as educator and provides a remarkably fitting closure to it. Following the end of World War II, Elledge, then a young instructor at Harvard, and two Harvard students—augmented by the fortuitous circumstance that gave them the use of a war-ravaged Salzburg castle—gathered enough financial support to institute a “center in which young Europeans from all countries, and of all political convictions” could come together to foster the spiritual and intellectual healing that Elledge and his companions felt to be at least as important as the rebuilding of the physical structures damaged by the war. From the beginning, the Salzburg Seminar flourished, attracting as lecturers eminent cultural and intellectual figures from Europe and America; Elledge himself was brought back as lecturer in 1953. As part of the celebration of its fiftieth anniversary, the Salzburg Seminar invited Elledge to return once more. It was here that Elledge gave his final public address. As part of its anniversary celebration, the institution published a book, *The Salzburg Seminar: The First Fifty Years*, dedicating it to Elledge and the other two founders.

The generous impulses that led Elledge and his two companions to undertake that successful enterprise in open dialogue among individuals of diverse national groups can be found within all aspects of his life. *E.B. White: A Biography*, his last major work, is dedicated to his wife, Liane; they were married in 1950. The epigraph from Henry David Thoreau that Elledge chose for the biography can be applied to him as well as the subject of his book: “All that a man has to say or do that can possibly concern mankind, is in some shape or other to tell the story of his love--to sing; and, if he is fortunate and keeps alive, he will be forever in love.”

In addition to Liane, Scott Elledge is survived by two brothers: Daniel Elledge, of Naples, Florida, and Richard Reese Elledge, of Chicago; and two sisters: Mrs. Bonnie Baxter, of Gainesville, Florida, and Mrs. Eva Kathryn Shepard, of Saxton River, Vermont.

M.H. Abrams, Stephen Parrish, James McConkey

William Harry Erickson

April 4, 1916 — October 21, 1998

William Harry Erickson was born in McKeesport, Pennsylvania on April 4, 1916. After graduating with a B.S. degree in Electrical Engineering from the University of Pittsburgh in June 1938, Bill joined the Duquesne Light Company in Pittsburgh, Pennsylvania, where he became an electric-power transmission and distribution engineer specializing in the design of transmission facilities. During this period, he was also a graduate student at Carnegie Institute of Technology. In 1942, he came to Cornell as a civilian instructor in steam engineering in the U.S. Navy V-12 officer-training program as a specialist in motors and generators. He joined the School of Electrical Engineering as an Assistant Professor in 1945, received the M.S. degree in Electrical Engineering from Carnegie Tech in September 1946, became an Associate Professor in 1947, and attained full professorial rank in 1953. When Charles R. Burrows resigned as Director of the EE School in 1957, Professor Erickson served as Acting Director for two years and as Assistant Director from 1959-65. From 1965-71, he was an Associate Dean of the College of Engineering. Bill returned to teaching duties in 1972 and also served two separate three-year terms (1972-75 and 1979-82) as a member of the administrative board of the Division of Unclassified Students, a college department that supervised undergraduates who were in academic difficulty. He retired as Professor Emeritus in July 1982. The major portion of Bill's 40-year academic career at Cornell was devoted to undergraduate education in the EE School and in the college, with emphasis on the application of engineering methods. He was also an ardent advocate of good technical writing and humanities studies in an engineering curriculum.

In 1946 and for years afterward, the large number of students who were enrolled in the Schools of Chemical, Civil, and Mechanical Engineering were required to take special courses in electrical engineering. Professor Erickson was given the task of organizing and teaching these "service courses," and served as a mentor to a group of graduate students who were appointed as his teaching assistants. Several of these young instructors later became members of the EE School faculty. Since a suitable textbook was not available, Bill wrote and distributed a series of class notes on basic electrical engineering and dc and ac machinery that he dubbed "Electrical Engineering for Non-Electrical Engineers." In collaboration with the late, Professor Nelson H. Bryant, who wrote the electronics component, the notes were expanded into a textbook entitled *Electrical Engineering, Theory and Practice*. The first edition of this popular text was published in 1952, a second edition came out in 1959, followed by a paperback edition in 1975.

Professor Erickson's background and expertise in electric-power systems and machinery were invaluable in the Naval training program, in the development of his text, and throughout his academic career. His familiarity with engineering practice allowed him to construct challenging thought-provoking problems that were incorporated into his text. Unlike the usual rote exercises found in many textbooks, every problem in the text required a firm understanding of the principles involved in order for the student to achieve a correct solution. Bill often received requests for a solution manual from users of his text at other colleges but his typical response was, "I've given you the correct answers. You'll learn something if you figure out the solutions by yourself."

In the early 1950s, Bill helped initiate and taught many sessions of a required senior EE engineering-reports course that featured preparation of technical articles and oral presentations. When the Division of Basic Studies was established in the College of Engineering in 1961, Bill initiated Eng. 101 and Eng. 102, Engineering Problems and Methods, as introductory engineering courses at the freshman level. The courses featured consideration of major examples of modern engineering, emphasized the interrelationship of the several professional fields, and described the role of the engineer in society. Bill taught these courses for 10 years in addition to his duties as Assistant Director of the EE School and as Associate Dean of Engineering. During those years he also continued his service-course management and teaching responsibilities, and served as class advisor at all class levels. Upon his return to active teaching without administrative responsibilities, and until his retirement, Bill applied his machinery and power-system expertise to introductory electrical engineering courses at the sophomore level, and particularly to the junior laboratory courses that came to be known over the years as "Super Lab." He was a junior and senior advisor throughout those years and served as advisor for several Master of Engineering projects, including design of a Mars Rover, and a windmill power generator.

Many of Bill's major contributions to the College of Engineering occurred while he was Associate Dean of Engineering. In his initial task of restructuring the Engineering curriculum from a five-year to a four-year program, he achieved a smooth and relatively trouble-free transfer to the new curriculum due in large part to his direct approach and clearheaded solutions to the problems that arose during the transition process. His strong belief in the need for engineers to have a thorough grounding in the humanities led to the establishment of a college requirement in the new program of at least 30 hours in the College of Arts and Sciences. During his tenure as Associate Dean, Bill was responsible for over-all undergraduate affairs in the college, and was particularly effective in his work with the Academic Standards Committee where his stern but eminently fair judgments administered to students in academic difficulties ultimately caused many of those students to improve their records and graduate

successfully. In later years, these same students often expressed their gratitude to Bill for his positive impact on their successful careers.

In addition to his classroom responsibilities, Bill was an active participant throughout the years in the work of many committees, including among others, Long Range Planning, Financial Aids, Nominating, and Physical Education and Athletics, at the university level; the Core Curriculum, Professional Programs, Policy, and Academic Standards, in the College of Engineering; and as a multi-term member of the governing Faculty Committee in the EE School. In off-campus activities, he was registered as a professional engineer in New York State, served as Chairman of the Ithaca Section of the American Institute of Electrical Engineers (AIEE), and was the Chairman of the AIEE Summer General Meeting held in Ithaca in 1961. Bill was named a Fellow of the AIEE in 1962 “for contributions to engineering education.” When that organization became the Institute of Electrical and Electronic Engineers (IEEE), he continued his membership and became a Life Fellow of IEEE in 1981. He was elected to the engineering honor societies Tau Beta Pi, Eta Kappa Nu, and Sigma Tau, and was a member of the American Society for Engineering Education.

Bill was an avid golfer, had a keen interest in baseball, and organized the EE School Franklin Hall Bowling League. However, his particular long-time interest was in the “Sport of Kings.” His overall gaming success with the horses is not known but he always maintained that his principal concern was with statistics. On several occasions, he was a speaker at student-award banquets where he delivered a “lecture” that he called “Horse-Racing for Non-Horses”, a corollary of “EE for non-EE’s.” On these occasions, he would display his secret formula for track success: a long roll of paper covered with complex mathematical symbols.

In 1955, Bill was elected President of the Exchange Club, an Ithaca branch of a national service club. Soon after assuming office, Bill discovered to his dismay that the constitution of the club contained a clause that banned non-white persons from membership. Under Bill’s leadership, the local club voted to withdraw from the national organization and form a new group, the Ithaca City Club, that is still in existence. On April 23, 1956, the *Ithaca Journal* reported that on the previous Saturday Bill was presented with a plaque that reads: “B’nai Brith of Ithaca, New York honors William H. Erickson for outstanding achievement towards equality of man.”

Bill and Mary Margaret Mannion were married on December 27, 1941 in Chicago, Illinois. Their 40 years of life together, principally in Ithaca, ended when Mary Margaret died on August 19, 1981. Bill is survived by his son, James Paul and his wife Suzanne, of Fairport, New York; his daughter, Mary Ann and her husband, Thomas McMahan, of Stamford, Connecticut; a sister, Ada Dickey, of Monroeville, Pennsylvania; a sister, Dorothy

Erickson, of Fond du Lac, Wisconsin; his sister-in-law, Barbara Mannion, of Chicago, Illinois; and his brother-in-law, Robert Mannion, of Cleveland, Ohio. He was predeceased by his brother, G.F. Erickson.

Bill Erickson will be long remembered as a dedicated teacher and advisor; a man of exemplary honesty and integrity who set high academic and professional standards for himself, his associates, and his students; and a highly respected colleague, and a true friend.

Paul D. Ankrum, Norman M. Vrana, Simpson Linke

Watson Harry Everhart

June 5, 1918 — October 1, 1994

Professor Emeritus Watson Harry Everhart had a long and distinguished career in the science and management of fisheries and in higher education. Born June 5, 1918, in Connellsville, Pennsylvania, Harry began his training as a biologist at Westminster College (Pennsylvania) where he received a Bachelor of Science degree in 1940. Two years later, Harry completed requirements for a Master of Science degree from the University of Pittsburgh and entered the Air Force, rising to the rank of Squadron Commander.

In 1945, Harry resumed his academic training by entering a doctoral program at Cornell University in fishery science, with minors in vertebrate zoology and insect ecology. Completing requirements for the Doctor of Philosophy in 1948, he joined the faculty at the University of Maine as an Assistant Professor. In 1950, Harry was appointed Chief of Fisheries, Maine Department of Inland Fisheries and Game; and in 1955, he was appointed Chief of Research, Maine Atlantic Salmon Commission, two posts he held simultaneously while remaining an active faculty member at the University of Maine. He was promoted to Associate Professor in 1952 and to Professor in 1956. During this time, he co-authored a text in fishery science which served as the basic treatment of this subject for virtually all universities offering such a curriculum. It was rewritten with Cornell colleagues; this text is now in its third edition.

In 1967, Harry became Chairman of the Fishery Major at Colorado State University, returning five years later to Cornell as Chairman, Department of Natural Resources, a position he held until retirement in 1982. He was named Professor Emeritus the following year.

As Chairman, Harry effectively represented his department at college, university, state, and national levels; remained active in the classroom; and guided the department through a period of rapid evolution. His students perhaps best remember him as a mentor for their professional writing skills, a task Harry was especially suited for from his experience as Editor-in-Chief (1960-61) of the *Transactions of the American Fisheries Society*, one of the world's top two journals in fishery science and management.

Over the course of his career, Harry's research focused principally on fish habitat management in the broadest sense of this term. Publications of Harry and his graduate students ranged from studies of heavy metal toxicity to the effects of land use on fish habitats. In addition, he published basic works on the fishes of Maine and Colorado and on the restoration of Atlantic salmon.

While at Cornell, Harry began a long association as a consultant to the Great Northern Paper Company (Maine). He continued important work in this capacity until stricken with Alzheimer's disease. His death, at the age of 76, was due to complications from this disease.

Watson Harry Everhart was a leader in his profession during a time when fishery resources were coming under rapidly increasing stress. Through his writings, teaching, and administrative leadership, he played an important role in the development of a science to deal with these problems. The discipline of fishery science was in its infancy when Harry began his career and he played a significant role in guiding it wisely through the formative early years.

Richard Baer, William Youngs, Ray Oglesby

Howard Newton Fairchild

November 16, 1906 — September 1, 1990

Howard Fairchild, Professor Emeritus in the Sibley School of Mechanical and Aerospace Engineering, died unexpectedly on September 1, 1990 at the age of 83.

Born in Liverpool, New York, he lived most of his life in New York State. He married Helen Brodhead in 1944 and their son, Howard Newton Fairchild, Jr., was born in 1945. Helen Fairchild died in 1989. Howard Fairchild, Jr. graduated from the Sibley School in 1967 and went on to do graduate work and pursue a career in engineering. He now lives in Fairborn, Ohio.

Howard was graduated from the Sibley School of Mechanical Engineering with the M.E. degree in 1929. He went on to fulfill the requirements for the E.E. degree in 1930. The breadth of interest and versatility suggested by these dual degrees have characterized his entire career as an engineer and as a teacher. He began his teaching career in 1930 as an instructor in Cornell's College of Engineering and continued teaching at Cornell until his retirement, except for two years as an instructor in the Mechanical Engineering Department at Pennsylvania State University. At Cornell he advanced from instructor to assistant professor, to associate professor, to professor, and to professor emeritus in 1972.

Professor Fairchild had a wealth of experience in engineering and technology. Even before entering college he had worked as a pipe fitter during a summer vacation. He was a licensed professional engineer in New York State and was generally recognized as an outstanding member of the department in the area of engineering practice. He used his sabbatical leaves and summer vacations to achieve and strengthen this diversity of engineering experience. During one sabbatical leave he served as a visiting professor of mechanical engineering in the Department of Reactor Science and Engineering of the Brookhaven National Laboratory. Following this assignment he was granted a leave of absence for a semester to serve as a mechanical engineer in the same department. He later was called upon on two different occasions to serve as a consultant for the same department of the Brookhaven National Laboratory. He was also appointed as a visiting professor of mechanical engineering in the Experimental Reactor Division of Oak Ridge National Laboratory. During his teaching career at Cornell he also served as an engineering consultant to a number of corporations including the Frankfort Arsenal in Philadelphia, the Babcock and Wilcox Company and the Westinghouse Electric Corporation.

Professor Fairchild's importance as a member of the Sibley School's faculty was never so keenly felt as during World War II. Cornell was asked to operate a Naval Midshipmen Training School and a major part was to be a Diesel School for training engineering officers. Although the Sibley School of Mechanical Engineering had professors with competence and interest in the sciences and engineering which are the basis of design and analysis of performance of engines, the scope and emphasis of this school was to be quite different. The Sibley staff would be expected to teach engine operation, engine overhaul, troubleshooting and other pragmatic aspects of propulsion engines. A laboratory of operating diesel engines would also have to be established and staffed. Howard Fairchild was the obvious choice to be in charge of this new school; he was not only an excellent teacher and a competent engineer, he was also a skilled mechanic. The Diesel School which resulted and was operated until the end of the war was generally recognized as the best in the country.

Professor Fairchild was a competent researcher and experimental investigator, and was the author or coauthor of several technical papers. However, his first love was always teaching. He taught a wide diversity of subjects including thermodynamics, heat transfer, internal combustion engines, steam power generation, and refrigeration and air conditioning. He was as much at home in the laboratory as in the classroom.

As a teacher he was patient, soft-spoken, and unassuming. In spite of this mild manner, he set high professional standards for his students as well as for himself. He was highly respected by both his students and his teaching colleagues. He always accepted teaching assignments cheerfully—even unpopular ones.

Howard Fairchild will long be remembered by his colleagues and former students. His contributions to Cornell and to his profession were many. He was a gentleman in every sense of the word and a valued and deeply respected colleague.

Richard M. Phelan, Dennis G. Shepherd, Bart Conta

Reeshon Feuer

January 11, 1917 — March 29, 1997

Reeshon Feuer, soil scientist, left his mark on the mantle of the Earth: in selecting a site for the capital city of Brazil; in guiding rice farming in the Philippines; and in directing an enlightened use of the land from end to end of New York State. His boundless enthusiasm for learning and for sharing his knowledge continued to the very end of his life.

A native of New Hampshire, he began his career as scientist by graduating in Agricultural Chemistry from UNH, and he joined the USDA Soil Survey Division that was engaged in mapping the soil boundaries in that state. After an appointment as a faculty member at UNH, he came to Cornell to study for a Doctorate. Upon receiving it, he was appointed an Assistant Professor with principal duties in extension teaching. He was promoted to Professor, served as Departmental Extension Leader in Agronomy, and for four years was Visiting Professor of Soils and Agronomy at the University of the Philippines, as Cornell faculty members assisted in the creation of graduate-level educational programs at Los Banos.

The foregoing chronicle only hints at the qualities that made Reeshon Feuer famous wherever he lived and worked. “I have not known another person with such a thirst for knowledge about all things in the natural environment as Reesh had,” wrote his former department chairman. With enormous vitality he read, observed, recorded and organized information, not only in relation to his professional endeavors but also far beyond. An example was his dissertation study of the district in which the new inland capital city of Brazil was to be established *de novo*. A newcomer to the tropics, he not only as expected characterized the previously unstudied soils as to their ability to support the capital agriculturally, but also described the landscape, geomorphic relationships, and native vegetation.

His duties at Cornell were mainly those of helping both professionals and lay people across the state understand the properties of the soils on which they lived and worked. It was a period of intense, county-by-county mapping by teams of state, federal and local soil scientists; each map they produced was accompanied by a text that indicated the merits and deficiencies of each soil series for crop production, road construction, building sites, forestry and recreation. The introduction of each new county survey report touched off a major educational effort directed to bankers, highway engineers, real estate appraisers, and local officials as well as agriculturists. In this effort, Reeshon Feuer was the state leader. It was a task for which he was ideally suited, for he combined a truly

encyclopedic knowledge of our natural resources with a warm and enthusiastic personality, and a dedication to giving the public a maximum return on its investment in the soil surveys. Concurrently he was contributing to the annual college handbook, *Cornell Recommends for Field Crop Production*, and evolving a “par yield” rating system for scores of soil types, an innovation that became part of the environmentalist’s toolbox as well as the assessor’s.

Reeshon was the sort of person about whom a host of stories (some perhaps apocryphal) grew up, and to whom remarkable powers were attributed. It was said that if he were blindfolded and transported to any part of the state, then given a spade and a few minutes to dig, he could identify his location. The maps he carried were continually annotated, to the point where all margins were filled and notations were continued on the back. Some of the maps he derived from the county surveys by lumping kindred units into “associations” employed not only the usual color coding, but also a variety of shaded and polka-dotted patterns that may never before have been known to cartography. His personal compilation of best and thriftiest places to stay and eat in New York State was so highly regarded that it was finally mimeographed for distribution. He knew where the trout lurked, and how to cook them.

In the Philippines, he succeeded in enlisting several previously uncooperative agencies in the publication of a national rice-growing guidebook, a feat many veteran observers had assured him was impossible. Colleague Shaw Reid was not surprised, knowing from long association that “Reesh did 90% of the work and gave others 100% of the credit.” Several Philippine organizations honored him for his service.

Close to home, neighbors relied on him for advice about gardening, hoping to approach his marvels of vegetable production, and when the Feuers moved to the Kendal retirement community, he was immediately selected to guide the establishment of a community garden there. Less akin to his other talents, but again remarkable, was his skill as an investor. His was a guiding voice in an investment club for many years, one so sage that the members have planted a memorial tree to honor him.

Reeshon Feuer’s legacy is in the recollections of his family, coworkers and a host of friends, and in the hands of those who examine his maps and publications. It was a zestful life of service.

Marlin G. Cline, Robert F. Lucey, Madison J. Wright

Charles Clayton Fischer

February 11, 1928 — May 21, 1993

Charles (Clayton) Fischer was born February 11, 1928 in South Bend, Indiana, the son of Wilbert and Frances Stover Fischer. He attended elementary and high school in South Bend. Chuck, as he preferred to be called, served in the United States Army Corps of Engineers with stations in the United States and in Japan. He attained the rank of Sergeant. After his discharge, he worked for several years before entering Michigan State University where he obtained his Bachelor of Science degree in ornamental horticulture in 1955 and his Master of Science degree in 1956.

In 1954 Chuck married Barbara Tomlinson while he was a student at Michigan State University.

After receiving his M.S. degree, he served as assistant county agricultural agent in ornamental horticulture with the Colorado Agricultural Extension Service in Denver, Colorado from July 1956 until October 1957. He returned to Michigan to become Genesee County 4-H Agent in urban ornamental horticulture and served November 1957 through July 1959. In September 1959, he was appointed assistant professor in the Department of Floriculture and Ornamental Horticulture in the College of Agriculture and Life Sciences at Cornell University with responsibilities as state extension specialist in ornamental horticulture. He was promoted to associate professor in 1965.

Chuck rapidly attained a fine reputation throughout the State as an expert in interior plant decoration. He gave lectures and demonstrations at county and regional meetings and at statewide meetings of county extension staff and leaders held at Cornell. He was a frequent participant on radio and television programs, and his appearances at the Horticulture Building at the New York State Fair in Syracuse were very popular. He also chaired the Cornell-Rutgers educational exhibit at the New York International Flower Shows of 1963 and 1964.

Professor Fischer wrote many articles on the effects of light on the growth of ornamental plants in interior situations, and the decorative use of lighting in home gardens. He also published on landscaping mobile homes, and the use of planters in landscaping outdoor patios and living areas. He wrote many newsletters on the culture of various interior plant species and his Cornell Bulletins, *Growing African Violets* and *The Selection, Care and Use of Plants in the Home* by Professors Fischer and Raymond T. Fox have been distributed widely both within New York State and nationwide. He also produced several slide sets used for Cooperative Extension Education in and beyond New York State.

In 1970 when a colleague was on sabbatical leave, Professor Fischer took over the teaching of the basic course in floral design in the Department of Floriculture and Ornamental Horticulture. A very popular course since the inception of the Department in 1913, it draws students from across the University. Because of its popularity, it had been limited to upperclass students outside the department and to department majors, and had always had a waiting list. Professor Fischer's approach to the course was one of freedom and informality, which allowed the students to relax and enjoy themselves while learning a new design skill and coming to appreciate the beauty of natural materials.

Professors Fischer and Fox also taught a course, Judging Ornamental Plants and Flowers.

In the last several years, Chuck was forced to reduce his teaching effort because of his increasingly frail health. He involved student laboratory assistants to lessen the amount of "standing" time. In the way in which he handled it, his approach gave advanced students the opportunity to teach under his direction, thereby giving them valuable teaching experience which already has proved useful to many of them in their future careers.

Chuck spent the last few years in increasingly difficult health circumstances. He was hospitalized several times for long periods and was finally forced to discontinue his teaching. His last hospitalization ended in his death on May 21, 1993.

He is survived by his wife, Barbara Tomlinson Fischer and his son, Gregory and daughter-in-law, Susan Fischer; his parents, Mr. and Mrs. Wilbert Fischer; and his brother and sister-in-law William and Helen Fischer; and several nieces, nephews and cousins.

During all of his tribulations, Chuck was never one to complain. He related well to his colleagues and he never let his afflictions be reflected in his attitude toward his students. His students both at Cornell and in extension across the State will remember him for his caring, kind, effective and concerned manner of teaching.

Raymond T. Fox, Arthur S. Lieberman, Ernest F. Schaufler, Carl F. Gortzig

Gordon P. Fisher

July 26, 1922 — January 22, 1993

Dr. Gordon P. Fisher, professor emeritus of civil and environmental engineering, of Warren Road, Ithaca, New York, died unexpectedly at Tompkins Community Hospital on Friday, January 22, 1993 after a sudden collapse that morning. He was 70 years old.

Dr. Fisher was born July 26, 1922 in Baltimore, Maryland, the son of the late Frank and Harriet Fisher. He graduated from The Johns Hopkins University with a Bachelor of Engineering degree in 1942. He then worked for the predecessor of NASA a short while before enlisting in the U.S. Army Corps of Engineers. As a 1st Lieutenant he served his country in the Pacific Theatre during WWII. Beginning in New Guinea, he fought from Leyte, Luzon, and Manila through Corregidor, Mindoro, and finally Mindinao, where he was wounded and awarded the Purple Heart.

After recuperating he returned to The Johns Hopkins University where he earned his Dr. of Engineering degree in structural engineering in 1948. He then joined the faculty of Cornell University where he taught for 42 years. He retired in 1990 as professor emeritus.

Initially he taught structural theory and design, optimization of structural systems, foundations, and steel and concrete design. In 1965, he shifted his professional interest and activities to transportation systems planning and design. He pursued those interests into his retirement.

During his long and distinguished service to the University he held a number of significant administrative positions.

From 1962-64 he served as the first director of the Cornell Water Resources Center, coordinating all water-resource-related activities on campus. He was associate dean of Engineering between 1960 and 1966. Appointed head of the Department of Environmental Systems Engineering in 1966, he was principally responsible for the conception, formation and development of the Department. In 1973 he became director of the Cornell Program in Urban and Regional Studies, holding that position until 1978.

Dr. Fisher distinguished himself early in his career when he received the Outstanding Civil Engineering Student Award from The Johns Hopkins University in 1942. He was the recipient of the prestigious Norman Medal of the American Society of Civil Engineers in 1962. He was past president (1971-72) of the Sigma Xi (honorary research

society), a member of Tau Beta Pi (honorary Civil Engineering society), and an honor member of Chip Epsilon (honorary Civil Engineering society). He was a registered Professional Engineer in the states of New York and Maryland.

He was a member of the American Society of Civil Engineers, the American Concrete Institute, the Transportation Research Board, the Operations Research Society of America, the Comite European du Beton, the Structural Stability Research Council and the Paleontological Research Institution.

Most noteworthy among his international activities were his visiting professorships at Chalmers University of Technology in Gothenburg, Sweden (1962); UN AM in Mexico City, Mexico (1975); and twice at Kyoto University in Kyoto, Japan (1983 and 1989).

He was a leader in the Engineering Foundation in New York City until his untimely death. He was Vice President of its Board of Trustees and held many offices over the years in his work with its Conferences Committee. He was considered an outstanding organizer of leading edge, interdisciplinary, international engineering conferences.

Dr. Fisher played football in college at Hopkins and later sang lead tenor with the Ithaca Opera. He was a scout leader and volunteered with the Special Children's Center for many years. He was an avid scuba diver, a gourmet chef, and an intrepid world traveler.

Gordon is survived by his wife of almost twenty years, Mimi Ann, at home; daughters Linda Fisher of Ithaca and Jennifer Morrison of San Jose, California; sons Jeffrey Fisher of Naples, Florida, and Christopher Fisher of Orlando, Florida; and grandson, Marshall Fisher of Orlando.

He is also survived by his step-sons, John Uzmann of Millbury, Ohio, and Steven Uzmann of Spencer, New York, step-grandchildren, Michael and Erika Uzmann of Millbury and Thomas Alexander Uzmann of Spencer.

William McGuire, Jerry R. Stedinger, Arnim H. Meyburg

Ephim Fogel

November 15, 1920 — June 13, 1992

Ephim Fogel's colleagues in the English Department remember and honor him for the energy, skill, and wisdom with which he chaired the department during four crucial years, 1966-1970. Ep not only steered it through the political crises of those years, but at the same time he successfully negotiated with an expanding College and University for the means necessary to bring to his department much of the strength, flexibility, breadth, and distinction that it enjoys today. His students during his forty years' service at Cornell are grateful to him for the searching and sensitive rigor with which he trained them. His fellow philologists acknowledge his many published contributions to the methodology of resolving cruxes of interpretation and documentation. He collaborated in editing two Cornell University Press books, *Evidence for Authorship* (with David V. Erdman, 1966), and *A Concordance to the Poems of Ben Jonson* (with Mario A. DiCesare, 1978), and at the time of his death he was revising his book-length study of Sir Philip Sidney's poetry. The audience of Ep's work as poet, both his original verse and his translations from Russian and German, admires it for its rich precision. His family and his friends throughout the University and beyond will profoundly miss his good counsel and the warm humanity of his presence.

Born in Odessa, Russia, Ep Fogel emigrated with his parents to the United States at the age of three. He was educated in the New York City schools, and was elected to Phi Beta Kappa in course at the City College of New York and was graduated *magna cum laude* in 1941. That June, he and Charlotte Finkelstein were married. Ep immediately started graduate study in English at New York University, but in July of the following year he enlisted in the Army of the United States. Indeed, both his love for pedagogy and, in particular, his devotion to Russian literature began while he was assigned to ASTP duty. During much of his service until his discharge in early 1946 as sergeant, Ep put to use his talent for teaching, first as an instructor in the Signal Corps and then as instructor-in-charge of educational therapy in the Army hospital at Camp Shelby, Mississippi. His experience at the hospital inspired one of his earliest and finest poems, "Convalescents." He completed residency requirements for his M.A. (NYU, 1947) by fall term 1946, when he entered the doctoral program in English at Ohio State University. Completing his course work there, in 1949 Ep accepted appointment as Instructor in English at Cornell, attracted to the institution at which his younger brother Robert had completed undergraduate study only the year before.

Ep's appointment was one of a notable series that renewed a department left greatly weakened during the war. Ep was promoted to Assistant Professor in 1955, received his Ph.D. in 1958, and was promoted to Associate Professor with tenure in 1961 and to Professor in 1966. Immediately before taking the chair that year, Ep had served for three years as Director of Graduate Studies; in 1970 recurring health problems obliged him to withdraw from what would have been his eighth year of uninterrupted administrative duty. For 1974-75 he was appointed Faculty Fellow in the Society for the Humanities. He retired as Professor Emeritus in 1990.

Certain qualities of mind and sensibility characterized Ep Fogel's scholarly writing from the outset of his career: toughness in assessing a hypothesis, scrupulous clarity and control in articulating it, trenchant curiosity, a resolutely independent critical imagination, exhaustively thorough learning, style, humor, depth. In conversation the Ep we remember also exhibited a prodigious memory—the envy of us all, and to every task he brought an absorbing interest and belief in what he did. He read and published numerous papers on the life and work of Sir Philip Sidney, on William Shakespeare, on the Elizabethan and the European renaissance more generally, on computer-assisted analysis of literary texts, and on modern poetry. He published his own poetry and his translations in such periodicals as *Atlantic Monthly*, *Granite*, *Poetry*, *Prairie Schooner*, *Voices*, and *Slavonic and East European Review*, and in *Cross Section*. His poem "Shipment to Maidanek," one of the earliest literary responses to the Holocaust, appears in several anthologies. The work that perhaps best displays the rich variety of Ep's talents as scholar-poet, and the work to which he increasingly turned in his later years, is his exemplary verse-translation from Russian of some hundred poems by Osip Mandelstam, with annotation and a critical introduction—a volume that in many ways constitutes Ep's *chef-d'oeuvre*.

The accomplishments of Ep Fogel's years of departmental administration were many and notable. Both undergraduate and graduate curricula were wholly revised. The Cornell Creative Writing Program, now generally recognized as one of the finest in the country, benefited greatly from Ep's sponsorship and strong support. Ep obtained a reduction of the far too heavy teaching-load in English. With the close collaboration of his dear friend, the late David Novarr, he oversaw the appointment of twenty-five tenured or tenure-track colleagues, fully half the membership of the department at the time he retired from the chair, and Ep involved that membership much more widely than before in the management of departmental affairs. The administrative achievements of which Ep remained proudest were the initiatives he undertook by which the first woman and the first African-American became full professors of English at Cornell. His leadership of the department he thus built was marked by a

patient fairness to which even dissenters within it paid tribute. Ep Fogel was painstaking, and at a time when it was most required, he devoted himself to virtually unintermitted labor at his desk.

Although Ep often felt that he was at his best working late at night to deadline, he ultimately found that his health could no longer sustain all the demands of his administrative regimen. When he returned to full-time teaching and his own writing, a new generation of students was able to enjoy the deeply engaged and sympathetic mind Ep brought to classroom and conference. Ep was, first to last, an extraordinarily fine teacher, one who exercised his every skill—and innumerable kindnesses—to encourage his students, graduate and undergraduate, in the life of learning.

Ephim Fogel leaves his wife Charlotte; their four children, in whom he took immense pride, Daniel, David, Rebecca, and Jessica, two of whom followed him into the professoriate; four grandchildren; his brother Robert; and us, his colleagues, students, and friends.

Dan McCall, Edgar Rosenberg, Charles S. Levy

Felician F. Foltman

July 31, 1918 — September 7, 1993

In certain respects, Felician Foltman was different from most Cornell professors. Those differences helped him contribute importantly to his colleagues and to the School and University he loved and served. For example, he was a first generation American from a working class background. Born sixth in a family of eleven children, his Polish immigrant father was a skilled worker in the Amsterdam, New York carpet industry. From his family, Fel (pronounced Phil) learned to get along with others, to work hard and to respect work done well.

Academically outstanding in high school, he was encouraged to attend college. He enrolled at Oswego State Teachers College in 1936, majoring in Industrial Education. Like most first-generation in-college youngsters, he worked his way through. He spent two summers as a production worker in carpet mills. His last summer, he managed a service station/garage, an unusual responsibility for one so young. After graduating, Foltman taught Industrial Arts for one year at Mineville (New York) High School. Part of his job assignment was to supervise a “work experience” program for disadvantaged youth at the National Youth Administration’s Resident Work Center at Mineville.

Fel joined the Army in July of 1941 as a private in the Ordnance Corps. After basic training, he went to Non-commissioned Officer’s School, and later to O.C.S., served in the U.S., North Africa, and Europe as company officer, company commander and Battalion Training Officer. He was discharged in February 1946 with the rank of major, a truly extraordinary achievement in four and a half years. Another difference! Energized by that record, he raised his career goals from high school to college teacher.

To sum up, Fel Foltman approached graduate school with: a spectacularly successful military record; a wide knowledge of occupations and how to analyze, perform and teach about them; great respect for competence; and the conviction that he could achieve excellence in anything he attempted.

As luck would have it, he was admitted to the Industrial Education program at Cornell, where the subject had just moved from its “natural habitat” in the Education Department to the newly established School of Industrial and Labor Relations. In this new setting, the I.E. program was less concerned with training high school shop teachers, and more with how work organizations should train working adults to perform the job demands of plants, mills and offices. Although not what he had expected, it fit his aptitudes and interests very well.

Adaptation to Fel's novel situation was helped by two faculty mentors, Lynn Emerson and Kenneth Beach. While taking a "cram course" in labor economics, statistics, theory, collective bargaining, and trade union history, he got insights about job training from two experts in that familiar area. In return, Foltman had much to offer the School. As a grad assistant in Industrial Education courses he helped undergraduates. Even more, as an experienced teacher (another salient difference), he helped fellow assistants get a handle on *their* new tasks.

Each mentor left a lasting impact on Fel's career. Expertise in applying Emerson's training methods to a variety of work settings and technologies helped him as a management consultant and later as adviser to work-readiness programs of the War on Poverty. Skills in small group-discussion teaching, learned from Beach, affected his own development as a teacher. (Beach called Foltman, "the best student I ever had.") Throughout a long teaching career, Fel's students of all ages, in the university and in adult programs, agree that he excelled as teacher, and, where appropriate, as mentor.

Upon receiving his Ph.D. degree in 1949, he was appointed to the ILR faculty. Along with teaching duties he was made undergraduate Placement Counselor. He developed a co-op work program, placing students in summer training jobs with unions, businesses, and government agencies around the state. This project succeeded so well that for many years, ILR required students, as a condition of graduation, to have one summer's experience each, in a trade union, a business, *and* a government agency. He taught students about job search behaviors to good effect.

While teaching and counseling in Ithaca, the fledgling Professor Foltman was used extensively by the ILR's Extension Division to teach classes of practitioners around the state. Capable and congenial, he made a great hit with adult audiences. He enjoyed working with practitioners, "where I can teach and learn at the same time". For more than thirty years, he was *the* major contributor from the resident teaching faculty to ILR's Extension program.

Early in his career, Foltman inherited Ken Beach's course, "Industrial Occupations and Processes", which introduced freshmen to the work world by busing them weekly to work sites close to Ithaca, where they observed workers at their jobs, learning which tools and machines they used, and what the end products looked like. His background was ideal for transmitting this kind of instruction to the uninitiated! And to the graduate assistants watching Foltman teach this course, he gave master classes in how to excel at the job.

Early in his teaching years, Fel entered on the other serious preoccupation of his life, his family. Early in 1951 he married Christina Steinman, a fellow worker at Cornell. By that summer, he began building their house. As his

own contractor, he did all the skilled work (carpentry, wiring, plumbing, painting etc.), but cajoled kin and friends into contributing occasional help. First, a daughter, Laurie, and then two sons, Philip and Michael, joined the household. Fel was admired by his colleagues for being both family-oriented, and a father figure who could pass on useful domestic skills.

Most of his hobbies had a domestic aura. He became a finished cabinetmaker. He raised grapes and learned to make wine. As befits one who grew up near the Adirondacks, he became a deer hunter, but with a special twist—using bow and arrow rather than gun. In these pursuits, he symbolized the “good provider/” combining practical with mythical/romantic aspects of paternity. More down to earth was his passion for golf. He was founder and “guru” of ILR’s golf team which competed for many years in the University league. After retiring, he traveled the U.S. enthusiastically sampling of the nation’s links.

An important theme in Foltman’s personal history was upward mobility, e.g. moving from his skilled worker origins, through high school teaching to university teacher. Another mobility “dimension” is *lateral* crossing over from one branch of activity to another one.

His mastery of American research about highly skilled manual workers made him a pre-eminent scholar in this field. Emblematic of this is a major review monograph: *Apprenticeship Research: Emerging Findings and Future Trend*, (co-edited with Cornell colleague Vernon Briggs, Cornell/ILR Press, 1980). This was a first and lasting interest of his. But his academic career contains successive “crossovers” into other areas, each one denoting growth.

An early crossover was into *management* Education. He became a key figure in ILR’s ambitious management development program for American Airlines’ senior managers in 1953. In 1955, he took a one-year leave to work for Shell Oil’s management training program. Returning from Shell, he played a major role in a joint Business School/ILR “Executive Training Short Course”. In a few short years, Foltman was a nationally recognized leader in executive training. *Effective Supervisor of People* (Dun and Bradstreet, 1971) testifies to this. Even more significantly, two ‘leading edge’ monographs: *Collecting and Managing Employee Information*; and *Skills Inventories and Manpower Planning* were pioneer treatments of computing applied to human resource management.

Moving from workplace problems to concern with public policy issues is another major “crossover”. Community concerns are treated in his *White and Blue Collars in a Mill Shutdown* (Cornell Press, 1968). At the *state* level, his *New York State’s Economic Crises: Jobs, Incomes and Economic Growth* (Cornell ILR Press, 1977) addresses problems still plaguing his birthplace. At the *national* level, one would put all the special reports, conference minutes, and published testimony submitted to various Congressional Committees, growing out of his membership on

presidential committees and task forces, and assignments to AID (the Agency for International Development), Federal and State Labor department committees and the ILO (International Labor Office).

Some of the latter dealt with apprenticeship and other programs at the high end of the skill ladder. Increasingly, however, they dealt with serious national problems of underprepared, virtually unemployable, youth facing a labor force no longer hospitable to unskilled job candidates. An expert on training manual workers, Foltman was asked by state and Federal agencies to advise them how to think intelligently about these complex issues.

Back home, he was busy persuading academic colleagues to study these issues. Rather than publish extensively in this area, he became a “teacher of teachers”. Due to his efforts, the Department name of Human Resource Studies continues this emphasis on social policy.

A further comment on Foltman “crossovers” deals with his moving beyond departmental boundaries. He joined Professor Donald Cullen from the Collective Bargaining department to co-teach “Manpower and Collective Bargaining in the Construction Industry” several times. He also taught a course in “Plant Shutdowns and Job Loss” with Professor Robert Aronson of the Labor Economics department. When he co-taught courses, it was usually in addition to his normal teaching load. He was always experimenting with teaching. Well into his career he started courses based on “field studies”, a new modality for him. And as late as three years before his retirement, he developed a new course, based completely on case studies, once more a new approach for him.

Finally, a personal/professional crossover that still astounds his colleagues. At first, Fel’s consulting related to his departmental specialty: training; management development, and personnel practices. Mediation and arbitration “belonged” to other ILR departments. In the 1960s, Foltman took a course offered by the School to train professionals to implement the Taylor Act (which regulated labor relations in public sector employment in New York State). After completing the course, he established himself as a “third party” who could work with union and management representatives of school districts, prisons, fire departments, etc., around the state. He then “crossed over” into *private* sector union management dispute settlement, including the most competitive and lucrative activity, *arbitration*. Emblematic of his approach to life and work, he not only entered a new challenging field but took on its most demanding aspects.

We can say finally that Fel was first and foremost a teacher. He showed love and respect for his craft by excelling at it. True to his roots, he followed the credo of a skilled worker: “Be a journeyman in everything you do, in the *important* things, be a master.”

Loved and respected by his family, liked and respected by his colleagues, admired and respected by his students, he left a mark on all of us. He will be remembered.

Vernon Briggs, Lee Dyer, Frank Miller

Edward Whiting Fox

June 28, 1911 — May 19, 1996

Edward Fox was a gentleman and scholar. Born in Spokane, Washington and afflicted from his early teens by arthritis, he began study at Harvard University as an undergraduate in 1931. There he met Professor William L. Langer as well as his wife to be, Elizabeth Simon, who was Langer's research assistant and whom he married in 1935. Langer's fascination with European diplomacy interested Fox, but he decided it offered too narrow an intellectual compass. In contrast to Langer's German focus, Fox concentrated upon French history but did not thereby neglect classical and oceanic history or the link between domestic and international affairs. His study of world geography with Derwent Whittlesey also began at this time. Fox proceeded directly from his A.B. degree in 1935 to his Ph.D. degree six years later. He served as Assistant Dean at Harvard during World War II. Because of his international skills, he was appointed to the State Department by President Franklin Delano Roosevelt and continued to work in the Truman Administration as Assistant Secretary of State for Policy Analysis (1945-46). He had direct contact with Secretary James F. Byrnes and developed an astute and abiding grasp of postwar diplomacy. From 1946 until his retirement in 1978, he was a member of the History Department at Cornell University. From 1950-52, he was a Fellow of the Institute for Advanced Study at Princeton when Arnold J. Toynbee was in residence.

Fox's contribution to historical thought was not fully appreciated during his lifetime. He offered new and general theories about French political development at a time when the "Annates" school concentrated upon the microcosm of everyday life. He combined an interest in geography with a deep passion for history in a period when academic specialization had reached an all-time high. His research on France held enormous implications for other countries, especially 17th century England and colonial America. That "trading states" might behave differently from political-military and administrative monarchies was a paramount insight. These new historical syntheses were initially more to the taste of social science colleagues than to historians.

Briefly and synoptically, Fox held that geography— particularly the ease of oceanic or riverine communication— ultimately determined the political type of a society. Societies like England's in which few places are more than ten miles from a waterway which leads to the sea, are bound to engage in commerce as their major vocation. In contrast, France, more landlocked and with few easily navigable rivers, was predestined to develop an administrative culture and tradition depending upon resources from the political center. Only around Bordeaux and a few other trading cities like Nantes, would one find a rugged independence of administrative edicts from Paris. In principle, this

doctrine applied to other countries as well, illuminating liberal movements located in riverine constituencies, and administrative centralization in countries not interpenetrated with waterways.

Fox's view of historical development influenced his attitudes toward policy. Russia, that vast landlocked continent in which rivers ran the wrong way for trading purposes, was the logical embodiment of administrative centralization. The United States, penetrated with internal waterways and canals and increasingly dependent upon long distance and oceanic trade with Europe and other continents, was likely to be the exemplar of liberal and market forces, eschewing centralization. The Atlantic alliance of trading nations was in one sense a modern representation of the league of Hansa towns. Moscow could hardly join such a grouping. Could Russia become democratic? That depended upon developments in communications and transport technology that are only now emerging.

If Russia was likely to be centralized and authoritarian, Fox devoted much of his non-professional life to the promotion of understanding of Israel, a nation founded upon trade. Through his presidency of American Professors for Peace in the Middle East, he brought many American academics to Israel to learn about its problems and successes. He also was a founding member of the Society for French Historical Studies in the United States.

In between periodic bouts of arthritis, he was an avid squash player, with a well-nigh unreturnable serve. A keen oenophile, he found and savored underappreciated wines of the Rhone region, a testimony to his breadth of taste. Academically, he was equally at home with the ideas of Marxist social history as with religious studies, perspectives represented in the work of his children as well as of his sons-in-law. He was a charter member of the Willcox Group, a Thursday luncheon colloquium that fostered and embraced new intellectual currents from some of Cornell's best known professors. When his *Festschrift* was published in 1989, it was a veritable mosaic of historiography, written by individuals influenced by Foxian theory. These essays ranged from Greek philology through the anthropology of high altitude Andean societies, to commodity production in Malawi, to a geographic analysis of post-capitalist transportation in all modern states.

He was a brilliant teacher of Western Civilization and students learned much more than history from his classes. His extensive syllabus discussed required texts, reference works, how to take notes, and how to write an essay. His grading standards were exacting. He believed that an "A" paper could be read by a student to perfect strangers as an exemplary piece of writing and research. A "C" paper, on the other hand, would be read with some embarrassment in the privacy of one's dorm room to a roommate. Fox's influence is due to seminal publications like (in 1971) *History in Geographic Perspective: the Other France* and most recently, *The Emergence of the Modern European World* (1991). He edited the *Oxford Atlas of European History* (1957) and the *Oxford Atlas of American*

History (1962). He also was General Editor for the series, *The Development of Western Civilization* (Narrative Essays in the History of Our Tradition from its Origins in Ancient Israel and Greece to the Present) published by Cornell University Press. In 1989, Basil Blackwell issued a volume of essays in his honor under the title *Geographic Perspectives in History* edited by Eugene Genovese and Leonard Hochberg.

Walter LaFeber, L. Pearce Williams, Richard Rosecrance

Harrop A. Freeman

November 7, 1907 — October 28, 1993

Harrop A. Freeman, Emeritus Professor of Law since 1974, died shortly before his 86th birthday at his retirement home in Port St. Lucie, Florida. Freeman was an active member of the University Faculty for 29 years (1945-74). His writing on social issues, especially those relating to peace and civil rights, led to national and international recognition. He was a peace activist, a life-long crusader for good causes and a familiar presence at Cornell.

Freeman was born in Elyria, Ohio, on November 7, 1907. His early years were spent at Kalispell, Montana in the foothills of the Rockies. In 1916, his family moved to Cortland, New York, where he received his elementary and secondary education. In 1925, he was valedictorian of his class at Cortland Central High School.

Freeman earned three degrees from Cornell University: an A.B. degree from the Arts College in 1929 (Phi Beta Kappa); an LL.B. from the Law School in 1930; and a J.S.D. (doctor of juridical science) degree in 1945.

He was admitted to the New York bar in 1930 and practiced law in Niagara Falls and Buffalo until the early 1940s. A dedicated conscientious objector, he then moved to Philadelphia to work for the Pacifist Research Bureau of the Society of Friends (Quakers). Here he directed and conducted extensive research on peace and post-war problems, and served as the Bureau's Executive Director, a position he continued to hold on a part-time basis until 1948.

Freeman began his academic career in 1943 with an appointment as Acting Professor of Law at the Marshall-Wythe School of Law of the College of William and Mary in Williamsburg, Virginia. In Williamsburg, the Freemans lived in quarters occupied at an earlier time by Thomas Jefferson.

In 1945, Freeman joined the Cornell faculty as an Associate Professor of Law, winning rapid promotion to Professor of Law in 1948. In addition to teaching and research, he served for a period as Secretary of the Law School, a position which included responsibility for admissions and other administrative assignments from the dean. An able and productive legal scholar, Freeman was a tireless worker with an inquiring mind.

Freeman taught and wrote in a number of legal fields: Administrative Law, Constitutional Law, International Law, Federal Taxation, Jurisprudence, and Interviewing and Counseling. He was an innovative teacher. In 1945, he designed an Administrative Law course for first-year students, a development subsequently copied in a number of other law schools. Toward the end of his career he was a forerunner in the teaching of lawyer skills in law school. His publications and teaching materials on *Interviewing and Counseling*, especially a book written with Henry Weihofen, had a national influence.

Dean Erwin N. Griswold of the Harvard Law School wrote a foreword to Freeman's initial book of teaching materials on *Interviewing and Counseling* (1964). Griswold said in part:

Preparing this book has been a novel task. It required great imagination, great energy, and much capacity to persuade the persons involved to make their material available. In a very real sense, this is almost as much a pioneering book as was Dean Langdell's Cases on Contracts...Many people will have occasion to be grateful to Professor Freeman, for the concept which is embodied in this book, and for the skill and imagination with which it has been carried out.

Freeman's writing on First Amendment issues stressed the theme that a free society depends upon citizens exercising the responsibilities of stating dissenting opinions. Only by the expression of dissent would public authority be checked and citizen control ensured. In a series of books and articles on peace issues, he advanced concerns relating to the third world that have become a commonplace of subsequent writing: The real issues of foreign policy in the future, Freeman argued, would be between the Northern and Southern hemispheres, the haves and have nots of the world. Freeman argued that it was wrong and dangerous to conceive of foreign policy solely in terms of East versus West (U.S. v. U.S.S.R.).

Freeman was an activist committed to international peace, civil liberties and other causes. As a peace activist, he helped found the Emergency Peace Campaign, the Pacifist Research Bureau, the Central Committee for Conscientious Objectors and the War Resisters League. Throughout his life he was active in the Society of Friends (Quakers) both in Ithaca and nationally.

Freeman represented students at Cornell and other colleges protesting university policies such as those dealing with military research, investments in South African businesses, closed meetings of the Board of Trustees, and similar issues. Outside the Cornell community, he represented Japanese-American evacuees from the West Coast, a professor who refused to name names before the McCarthy Committee, certain tribes of American Indians, and a number of well-known peace figures. During later years he was attorney for the People of Micronesia in their effort to gain independence.

In 1962, Freeman ran unsuccessfully for Congress from the district including Ithaca (then New York's 33rd Congressional district) as the Liberal Party candidate. Freeman was a Senior Fellow and Consultant at the Center for the Study of Democratic Institutions, then headed by Robert Hutchins, in Santa Barbara, California from 1964-71.

On Freeman's retirement in 1974, former President Deane W. Malott expressed the following in a letter to Freeman:

You and I have often been poles apart in our thinking but I have always respected your forthright sense of justice and certainly you have contributed a point of view of importance in a free university.

President Dale R. Corson wrote on the same occasion:

I am writing just to express my personal appreciation for your service to Cornell. The University has benefitted especially, I think, from your efforts to provide legal counsel for those for whom it has not traditionally been readily available. Your work on behalf of those about whom society has cared very little has enhanced Cornell's reputation as an institution where the human side of learning is also important.

Freeman remained active in university and national affairs for many years after becoming an Emeritus Professor. He and his family established the Freeman Award for Civil Human Rights, an annual prize of \$500 given to the law student "who has made the greatest contribution during his or her law school career to civil-human rights."

Freeman's life-time companion was Ruth St. John Freeman, whom he married in 1930. Both were active members of the Religious Society of Friends (Quakers). They were a distinctive Cornell family. Ruth Freeman held two Cornell degrees and was the first woman instructor in the Cornell Arts College (Geology); Harrop held three Cornell degrees; and their son, Norman, two.

Harrop and Ruth Freeman travelled widely, attended many international conferences, and taught and lectured throughout the world. They visited a great many countries in the world in one capacity or another. They continued this activity after Freeman became Emeritus Professor in 1974.

Freeman was predeceased by his wife, Ruth St. John Freeman. Survivors include a son, Norman D. Freeman of Stuart, Florida; a brother, La Verne Freeman of Elmira, New York; two grandchildren, Cheryl Baker of Ithaca, New York and N. Douglas Freeman of Ft. Lauderdale, Florida; and three great-grandchildren, William J. Rich, Samantha Baker and Caitlen Baker, all of Ithaca.

W. David Curtiss, Gray Thoron, Roger C. Cramton

Orval C French

January 3, 1908 — March 30, 1999

Orval C French was born in Geneseo, Kansas, raised on his father's farm, and attended a one-room school. Orval enrolled in Electrical Engineering at Kansas State University, took leave in 1927 to help on his father's farm, returned to Kansas State University in 1928, switched to Agricultural Engineering and received a B.S. degree in 1930 and an M.S. degree in 1931. Orval then joined the faculty of the Agricultural Engineering Department at the University of California, Davis. In 1932, he married his college sweetheart, Helen Pembleton, from Ness City, Kansas

At Davis, his career was directed toward teaching and research. He quickly became an authority on methods and equipment for weed and pest control, including aerial chemical application. He prepared many widely read publications on pest control, spray equipment and chemical application.

From 1942-45, Orval was "borrowed" as a research engineer on the Manhattan Project at the University of California's Radiation Laboratory in Berkeley. While at the University of California, he was promoted to Assistant Professor in 1943 and to Associate Professor in 1947.

Shortly after that, he was invited to Cornell University to interview for the position of Professor and head of the Agricultural Engineering Department, which he accepted beginning in the fall of 1947. Orval came into a department that was teaching and extension oriented and housed in several buildings. He oversaw the design and construction of the finest Agricultural Engineering building in the country, Riley Robb Hall. Under his tutelage, the already growing department moved into these fine new quarters in February 1956, here he began to develop a strong research program while expanding and strengthening the teaching and extension areas. Building a good research faculty made it possible to develop a graduate faculty and a strong graduate program, which now draws students from all parts of the world.

He made many personal visits to farmers and agribusiness people all over New York State to learn firsthand their needs and problems. He quickly earned the respect of industry for his good judgment, sound advice, frank suggestions, progressive ideas and willingness to work on any project that helped the farmers.

Under Orval's leadership, Agricultural Engineering at Cornell blossomed. He convinced many in the university, the state, and the nation of the importance of agricultural engineering. He attracted funds and assistance for

research activities. Under his guidance, a five-year professional undergraduate degree program was initiated in 1953 and accredited in 1958.

Early phases of research efforts under Professor French included a strong pest control program in cooperation with the Entomology Department. Excellent programs were developed in mechanizing fruit and vegetable production, in agricultural waste management, and in bioengineering. Much of that pioneer research has been translated into commercially available machines and methods.

A great deal of Orval's success at Cornell came from his ability to develop each staff member to his or her full potential. His warm, friendly manner made him easy to meet. He enjoyed talking to students, staff members, farmers, businessmen and women, and government officials. Orval was a sincere, dependable, honest, forthright person with high moral standards. He would gladly counsel with anyone on problems of any sort at any time. He was the kind of man people would choose for a referee, whether for a ball game or a word battle. All knew of his fairness.

From February 1958 to February 1959, Professor French was a Visiting Professor in the Cornell-UP Contract Program at the University of Philippines, College of Agriculture at Los Banos.

Since joining the American Society of Agricultural Engineering in 1932, Orval has been Chairman of the former College Division; Chairman of the North Atlantic Region; and was ASAE national President in 1966-67. During his presidency, a new organizational structure was adopted, the Food Engineering Division was organized, and ASAE became a full member of the Engineering Committee for Professional Development. He served on many committees, programs and special assignments. French was elected an ASAE Fellow in 1964. He received numerous other recognitions and awards, including an Extension Service award in 1970 for meritorious service to 4-H and to the 4-H Tractor Program in New York State. Perhaps the most prestigious award was The Cyrus Hall McCormick Gold Medal for "Exceptional and Meritorious Engineering Achievement in Agriculture" in 1975, the highest honor in ASAE.

In addition, Orval ably represented ASAE in the American Society for Engineering Education and the Engineering Joint Council. He served on several ECPD accreditation teams. He was a longtime member and Fellow in the American Association for the Advancement of Science.

Orval served as Elder and held many other church offices in the First Presbyterian Church of Ithaca. Here too, he was most anxious that others receive credit, even if the work was entirely his own. In the quarter century that

Orval attended his church, the pastor claims he never once heard a derogatory remark about Orval. He classified Orval as “a leader who developed the finest of leaders.”

When the first fire department was organized at the University of California, Davis about 1938, Orval was Assistant Chief and later served as Chief until 1942. In 1955, when a fire department was organized in his community of Cayuga Heights, Orval was the only member qualified to serve as Chief, which he did for the first year. He continued as an active volunteer fireman until after his retirement from Cornell University.

Following retirement, Orval and Helen moved to Florida, where he continued contact with colleagues and former students. Orval will long be remembered by his many friends and colleagues.

His wife of 66 years, Helen; daughter, Nina L. French Glover; son, Byron; five grandsons; and two great grandsons survive him.

Everett D. Markwardt, William F. Millier, E. Stanley Shepardson

Wolfgang Fuchs

May 19, 1915 — February 24, 1997

Wolfgang Fuchs, Professor of Mathematics, Emeritus, died February 24, 1997, at his home in Ithaca, surrounded by his loving family. His life was celebrated at a remarkably joyful memorial service on March 8, 1997 in the chapel of Anabel Taylor Hall, with more than 200 people in attendance.

Wolfgang was born on May 19, 1915 in Munich, Germany. His parents foresightedly sent him to England in 1933. He enrolled at Cambridge University, receiving his B.A. degree from St. John's College in 1936 and his Ph.D. degree in 1941, under the supervision of A.E. Ingham. Between 1938-50, Wolfgang held academic positions in Aberdeen, Swansea, and Liverpool. He came to the Cornell Mathematics Department as a Visiting Associate Professor in 1948 and returned as a permanent member of the faculty in 1950. Except for leaves, he stayed at Cornell for the rest of his life. He received a Guggenheim fellowship in 1955, was promoted to Professor in 1958, and served as department chair from 1969-73. He was a Fulbright-Hays Research Fellow in 1973-74 and a Humboldt Senior Scientist in 1978-79. Although he officially retired in 1985, he remained active in the Mathematics Department until his death.

Wolfgang's mathematical training was in complex function theory, but he had broad mathematical interests and often applied sophisticated function theoretic techniques to questions from other areas of mathematics. For example, his 1946 paper in the *Journal of the London Mathematical Society* definitively settled a question in the theory of approximation that had been studied by several mathematicians. One of them, Ralph P. Agnew, was then chairman of Cornell's Mathematics Department. Agnew's admiration for this paper played an important role in bringing Wolfgang to Cornell in 1948.

Wolfgang's joint paper with the world-famous number theorist, Paul Erdős, published in 1956, was one of his favorites. Applying complex function theory to number theory, the authors showed that a certain property of the sequence of squared whole numbers (1, 4, 9, 16, etc.) is in fact a "law of nature" and is shared by all increasing sequences of positive whole numbers.

Wolfgang's best known mathematical research was concerned with the value distribution of meromorphic functions, whose modern theory began with Rolf Nevanlinna's work in the 1920s. In 1955, Wolfgang's friend Albert Edrei, a professor of mathematics at Syracuse University, attended a Cornell mathematics picnic and, with Fall Creek Gorge as backdrop, encouraged Wolfgang to undertake a joint research program in Nevanlinna

theory. In a collaboration lasting nearly twenty years, Edrei and Fuchs raised the theory to a new level, developing techniques that have become the standard way to handle the subject, and bringing it to another generation of students and colleagues. When Nevanlinna died, Wolfgang was the obvious choice to deliver the address devoted to Nevanlinna theory at the memorial conference in Zurich.

While the classical Cambridge tradition could be seen in most of Wolfgang's work, he was always looking for new talent and encouraging a broad view of mathematics. His three monographs, which have already been influential for decades, include significant topics that he did not often use in his own work but have been useful to many others. He made early and important contacts with complex analysts in China, Armenia, Russia and Germany. He brought many visitors to Cornell, and his mentoring led to much collaborative work. Until the last several months of his life, Wolfgang was always at the center of conversation at conferences, where in later years his talents were often used to give surveys and even to write poems (one of which is now in a second printing).

While Wolfgang was usually a gentle and genial colleague, he was not afraid to speak out when so moved. He helped to organize a large group of mathematicians to protest the 1989 situation in China, and for many years tried to provide support and publicity for oppressed mathematicians there, in Eastern Europe and elsewhere. He warmly supported Amnesty International.

In 1943, Wolfgang married Dorothee Julie Rauch von Traubenberg. She survives him, as do their children, Annie, John, and Claudia; and their grandchildren, Storn and Cody Cook and Lorenzo and Natalia Fuchs McClellan.

Wolfgang and Dorothee's home was always a special place to visit. They created a warm and enthusiastic atmosphere that reached far beyond the mathematical or academic communities. One of its key ingredients was Wolfgang's exceptionally positive attitude toward life.

Wolfgang's life was a celebration. He was interested in everything, read avidly, traveled eagerly, and concerned himself deeply with friends and family. Times spent together with him and Dorothee were always fascinating. One always learned from him. He enthusiastically shared historical information from periods ancient to contemporary, related travel adventures, told life stories of relatives and friends from his past. In discussions relating to difficult tomes, such as *Tristram Shandy*, he would politely listen without patronizing, and then proceed to quote esoteric passages that he had probably not seen for at least fifty years. When he traveled to a country whose language was unfamiliar to him, he would study it in order to be able to converse directly with colleagues and acquaintances.

Even towards the end of his life, when he was not well, he was undaunted in his zest for living. On a cruise from Amsterdam to Vienna, one stop was a beer hall where the noise level was, for some of the assembled tourists, painful. Wolfgang was the first person on the dance floor. He invited the tour director to some vigorous turns, accompanied by a raucous German band. He enjoyed the music, the clowning of the floor show performers, the beer — everything. On that same trip, lunch and dinner always seemed to include a course with whipped cream, which his prescribed diet forbade. He would initially push the cream aside, and then little by little it disappeared with whatever else was on his plate. Chocolate was also not allowed. But he loved it and even hid chocolate bars from Dorothee. The first thing he offered a friend after he returned home from heart surgery was a chocolate bar! He had an impish, happy-go-lucky attitude — along with a serious, inquiring mind that retained everything he read or heard. During his last illness, and his last stay in the hospital, he wrote from memory, and gave to Dorothee, a note containing the following passage from Book Five of Spenser's, *Faery Queen*.

What if some little pain the passage have
That makes frail flesh to fear the bitter wave
Peace after Warre, Port after stormy seas
Death after life do greatly please.

Wolfgang made his death as joyous an experience as his life. He is often quoted by his family, which came together to celebrate his life as he lay dying, "I did not know that dying could be so much fun."

David Drasin, Sonya Monosoff Pancaldo, Clifford J. Earle

Walter Galenson

December 5, 1914 — December 30, 1999

Walter Galenson, the son of Russian immigrants, was born in New York City. He graduated from Columbia University in 1935 and joined his father's accounting firm. But coming of age during the depression had given him a concern of the problems of workers and he returned to Columbia for a Doctorate in Economics, which he received in 1940. He then devoted his career to studying how workers fared in both rich and poor countries, advising governments and unions on how to improve labor conditions and teaching about the role of labor in economic development.

After working as principal economist in the War Department and Office of Strategic Services during World War II and serving as American labor attaché in Norway and Denmark during 1945-46, he returned to academia. He taught at Harvard and the University of California at Berkeley before moving to Cornell in 1966 where he was appointed the Jacob Gould Schurman Professor in the Department of Economics and the School of Industrial and Labor Relations. He spent the next 14 years on the faculty at Cornell and became a Professor Emeritus in 1980.

During his career, Professor Galenson held a number of visiting positions, including the Pitt Professor of American History and Institutions at Cambridge University. He was a Fulbright and Guggenheim Fellow, served as president of the Association for Comparative Economic Studies and was an advisor to the International Labor Organization's World Employment Program.

Former Secretary of Labor and Harvard Professor John Dunlop, a longtime friend of Professor Galenson, described him as "a prolific scholar of industrial relations, labor movements in Scandinavia, and American labor unions and their federations." His 28 published books included four volumes on American labor history, four on Scandinavian labor movements, three on labor in communist economies, six on comparative labor movements, and five on labor and economic growth in less developed countries.

His 1955 book, *Labor Productivity in Soviet and American Industry*, has been described by Professor Abram Bergson of Harvard as a "pioneering work, the first careful and systematic assessment of Soviet labor productivity." Another co-authored book of his, published in 1964 with Professor F.G. Pyatt of Cambridge University, was the first empirical study to demonstrate the importance of caloric intake, housing quality and other conditions of life for workers' productivity in developing countries.

Professor Galenson's scholarship was matched by his teaching. He was a popular and influential teacher. Labor economics underwent a transformation during his years at Cornell and in his last five years as an active faculty member at Cornell, he also played an important role in recruiting a new generation of scholars, many of whom remain on the faculty today.

Professor Galenson had a lifetime commitment to what his good friend, former President Clark Kerr of the University of California, called "social democratic" politics. He was proud to have sided with Professor Sidney Hook in the successful challenge to the Communist dominance of a teachers' union in New York City during the post World War II period. While in California, he was active in Democratic politics and the loss of a primary by a Democratic congressman to a member of what he perceived to be the "New Left" was a bitter blow to him. The disorders and the collapse of ordinary academic life that occurred at Berkeley when the New Left challenged the leadership of President Kerr in the 1960s disturbed him greatly and he welcomed the chance to come to Cornell.

Of course, Cornell was not immune to the events of the 1960s. Professor Galenson played an active role in resisting what he saw as trends destructive of academic values at Cornell. At the very end of President Perkins stay, he was a member of the committee that sought the President's ouster.

After his retirement from Cornell, Professor Galenson divided his time between Ithaca and Washington and he continued to do research. His last book, a study of Scandinavian labor markets, was published in 1998. His last article, on the Taiwan labor market, was published in 1999.

Professor Galenson loved music and was an avid opera and concert attendee. He resumed the study of the violin during his retirement years. One of the curious conjunctures between his musical and economics interests lay in exchange with one of the Soviet Union's top economists during the Cold War era. The Soviet economist could not easily obtain information on the prices of various U.S. goods. Professor Galenson regularly sent his Soviet colleague copies of the Sears catalog and in return his colleague sent him what is now a unique collection of Soviet recordings of classical music.

Professor Galenson is survived by his wife Marjorie, herself a retired Cornell Human Ecology Professor; three children, Emily Schneider, Alice Galenson, and David Galenson; and three grandchildren.

Isadore Blumen, M. Gardner Clark, Ronald G. Ehrenberg

Paul W. Gates

December 4, 1901 — January 5, 1999

Paul Wallace Gates, the John Stambaugh Professor, Emeritus, of History, was born in Nashua, New Hampshire, the son of a Baptist minister, grew up in Maine, and graduated from Colby College in 1924. He received his Master's degree at Clark University, and his Ph.D. degree at Harvard University in 1930, after a year at the University of Wisconsin.

Gates taught at Cornell for thirty-five years, coming to Ithaca from Bucknell University in 1936 as an Assistant Professor and retiring in 1971. He was Goldwin Smith Professor of American History from 1950-59, before occupying the Stambaugh chair. During his Cornell career, he also taught as a Visiting Professor at Harvard and the University of Wisconsin, among other universities. He also held a number of distinguished national fellowships, and spent a year as a visiting scholar at the Henry E. Huntington Library.

Gates focussed his research on the development of the American west, particularly the nation's land distribution policies. He wrote ten books, edited four others, and published seventy-five articles, book chapters, and other scholarly essays, attracting much attention, and then renown, as his generation's leading historian of his subject. His first book, *The Illinois Central Railroad and its Colonization Work* (1934), based on his doctoral dissertation, won the David A. Wells Prize at Harvard. This was followed by studies that are classics of their genre: *The Wisconsin Pine Lands of Cornell University: A Study in Land Policy and Absentee Ownership* (1943); *Fifty Million Acres: Conflicts Over Kansas Land Policy, 1854-1890* (1954); *The Farmer's Age: Agriculture, 1815-1860* (1960); and others, culminating in his *magnum opus*, the 828 page, *The History of Public Land Law Development* (1968), a work undertaken at the behest of the Public Land Law Review Commission, an agency of the federal government seeking to evaluate and plan the course of America's future land distribution and conservation policies. As recently as October 1998, a panel of scholars at the Annual Meeting of the Western History Association extolled the merits of this magisterial volume before an enthusiastic audience of both young and mature scholars.

Gates's publications spanned the years from 1931-96, when he contributed an autobiographical sketch to a collection of his writings. His work fundamentally reshaped our understanding of how the western United States developed within the orbit of free wheeling capitalism that had little sentimentality or commitment to what Gates believed was originally intended to be a "democratic system of land disposal." In a recent review, Professor Walter Nugent of Notre Dame wrote that "Gates's corpus is one of the greatest in American historical scholarship in this century."

Gates was a single minded professional whose work habits were extraordinary. He frequently was the first person in Olin Library in the morning and often among the last to leave at night, Saturday, and usually, Sunday, included. He appeared there each day well into his nineties, working away in his fifth floor study. His productivity and increasing recognition brought him many professional honors including the Presidency of the Mississippi Valley Historical Association, the national professional society of American historians, in 1961-62. He was also the President of the Agricultural History Society, and held high office in a number of other professional organizations.

In the classroom, Gates taught well attended undergraduate courses on the American West with a booming voice that at first frightened everyone within earshot, but he particularly excelled as a graduate teacher and mentor. His seminars were famous for their intensity, rigor, and the superb work produced in them. He encouraged his students to take interdisciplinary graduate fields ranging from agricultural economics and rural sociology, to government, and city-regional planning. He directed 23 doctoral dissertations at Cornell and many of his students went on to distinguished careers of their own; several, like their mentor, attained the highest reaches of the profession.

Professor Gates chaired the History Department for ten years, from 1946-56, (and served again, as acting chair in the Spring of 1963). He took an active role then, and subsequently, in the buildup of the department from a quite small group pursuing a limited range of subjects to its eventual much larger size and command of a much broader field of historical knowledge. He also played a vigorous role in expanding the Cornell library's collections in American history and led the efforts to establish the regional history research collection in Olin.

Although he preferred the classroom and the library to any other venue, for years Professor Gates participated in an interdisciplinary lunch with colleagues from across the campus, seated daily in a large alcove at one end of the old Faculty Club. They always found, he later remembered, a great deal to disagree about. He served a term as Secretary of the University Faculty (1957-60), and was asked to be a candidate for the Dean of the Faculty, an honor that he declined in order to return to his teaching and research.

Always interested in public affairs, Gates was a life long political activist, civil rights advocate, and ardent civil libertarian. He served in the Agricultural Adjustment Administration during the New Deal, testified as an expert witness in Indian land claim cases, helped lead the New York State branch of the Progressive Party in 1948, and spoke out in the cause of conservation. He took the lead in the founding of a consumer cooperative in Ithaca and served for many years as Secretary of the Varna volunteer fire department.

Gates was married for more than sixty years to Lillian Cowdell Gates whom he met in graduate school and who pursued a scholarly career of her own, publishing several books and articles, alone and in conjunction with

her husband. They had four children and seventeen grandchildren. Lillian Gates died in 1990. Professor Gates subsequently married, in 1991, Olive Lee, a retired college librarian, who survives him. He died in Oakland, California where he lived in brief retirement.

Joel H. Silbey, Walter F. LaFeber

Jack Charles Geary

September 29, 1920 — February 18, 1992

Jack C. Geary, Professor Emeritus in the College of Veterinary Medicine, died at home in Ithaca on February 18, 1992 at the age of 71.

Born in Hornell, New York, he lived most of his life in New York State. Jack married Dorothy Gibson in 1943 and they have two sons, David of Ithaca and Richard who lives in St. Thomas, Virgin Islands with his wife Denise and their two daughters.

During World War II Jack served as an instructor pilot in the U. S. Army Air Corps and was honorably discharged a Captain in 1945.

Professor Geary received his veterinary training at Ohio State University, graduating in 1951. While a student he worked as an assistant and following graduation as an associate of Dr. J. H. Knapp, one of Ohio's outstanding veterinarians. Following this he came to Cornell University where he served as Director of the New York State Veterinary Diagnostic Laboratory. Dr. Geary had a deep and enthusiastic interest in radiation medicine; and following graduate studies in radiology at Cornell, he was appointed to the faculty as Assistant Professor of Radiology in the Department of Large Animal Medicine, Obstetrics and Surgery. He left Cornell in 1960 to serve as Associate Professor of Radiology at Kansas State University and, subsequently, a similar position at Auburn University, Auburn, Alabama.

He returned to Cornell in 1966 as Associate Professor of Radiology and became a Full Professor on July 1, 1969. He retired in 1976, but returned to serve half-time as a faculty member from 1981-1983. Until one month before his death Dr. Geary served as an active consultant to individual practitioners and to the Orthopedic Foundation for Animals and the American Animal Hospital Association. His work was a major factor in reducing the incidence of hip dysplasia in dogs. He authored over 25 scientific papers on subjects related to radiology. Subsequent papers reflected his interest in linear tomography and imaging of spinal diseases, particularly traumatic injuries. Professor Geary was a meticulous worker who accumulated an extensive collection of radiographic slides that cover all subjects of veterinary radiology. These remain as a priceless teaching library for today's students.

Jack Geary was a keen, personable, experienced radiologist. He was an excellent teacher who liked students and was deeply interested in their welfare. He was a well-liked, cooperative team member with a ready wit, a broad smile and a willingness to be helpful to all.

Jack was a skilled craftsman who was admired by colleagues as a master technician-engineer in addition to his attributes as a professional radiologist. When the Section of Radiology was in its infancy, Jack as its head went beyond ordinary expectations of a faculty member by building, repairing and improvising until funds were available to select the state-of-the-art equipment he needed.

He was a talented artist, photographer, radio ham (WA2SYW), cabinet maker and inventor.

Professor Geary was elected to membership in Sigma Xi, Phi Kappa Phi and Phi Zeta honor societies. He was a diplomate of the American Board of Veterinary Radiology and served as its president in 1971. He was also a member, and president of the American Veterinary Radiology Society and the Educators in Veterinary Radiologic Science. Reflecting wider interests, he was also an active member of the Southern Tier Veterinary Medical Society, the New York State Veterinary Medical Society and the American Veterinary Medical Association.

Jack Geary was a pioneering radiologist who will be missed by his many friends and colleagues.

Nathan L. Dykes, Francis H. Fox, Robert W. Kirk

John C. Gebhard

May 18, 1898 — August 11, 1992

Jack Gebhard, professor of civil engineering, emeritus, died on August 11, 1992 at McLean, Virginia. He had enjoyed good health and mental vigor until a few days before his death. His wife, Jean Hall Gebhard, Cornell '19, died in 1986.

Jack's father immigrated to the United States from Germany, his mother from Hungary. They settled in New York City where his father became a stationary engineer. Jack was born in Manhattan, attended Stuyvesant High School, and received a four-year scholarship to Cornell in 1915. In 1919 he graduated with the degree of Civil Engineer, finishing first in his class and winning the Civil Engineering School's coveted Fuertes medal.

Jack had two careers. He spent the first two-thirds of his professional life as an officer in the United States Navy and the last third as a member of Cornell's Civil Engineering Faculty.

In 1921, after an engineering apprenticeship in the Bethlehem Steel Corporation, he competed for, and received, a commission as Lieutenant (jg) in the Civil Engineer Corps of the Navy. There followed tours of duty in Naval installations throughout the United States, the Virgin Islands, and the Philippines. His work was in planning, design, construction, and operation of the Navy's shore establishment. During World War II, as a senior Captain in the Corps, he supervised the construction of the vast Sampson Naval Training Center, airfields, docks, and submarine base in Puerto Rico, and a network of airfields for the Pensacola Naval Air Training Base. After the War he had a tour as design manager in the Navy's Bureau of Yards and Docks.

Jack retired from the Navy in 1949 and in the same year returned to Ithaca to join the faculty and teach construction engineering and administration. He retired as professor emeritus in 1965.

The post World War II years in the Engineering College were a time of change. The five-year undergraduate program was being developed in all its schools. In Civil Engineering the character of the faculty was changing as older men retired and were replaced by young ones of a different breed, and the School was moving to revitalize graduate and research programs that had languished in the war years. Jack was the oldest of the new men, and both old and new were fortunate to have him for he soon proved to be a voice of reason and maturity in the clash of academic generations and cultures. His professional credentials were impeccable. And he had the qualities that the best military officers seem to have: knowledge and respect for order and rules, and the wisdom to know when to overlook the rules.

He was a true teacher, both for his students and younger colleagues. He spent long hours in personal talks with each. But he instructed and helped without forcing his will, ideas or methods. His calm and assured approach to problems inspired them to try to set their own goals for personal progress.

Jack always stressed the need for both “specialists” and “generalists” in the practice of civil engineering. The group in Construction Engineering and Administration that he headed was charged with helping students understand elements of the general business of civil engineering that are essential to the success of any specialized technical project. When he came, the group was behind the times. Much of his Cornell career was devoted to trying to find ways to make it responsive to evolving professional needs and, at the same time, to maintain a respected place for it in a faculty of increasing specialization. Time ran out on him however. After he retired the effort ceased, victim of changing educational objectives. His group was disbanded at about the same time, but twenty years later the void left by its absence was apparent and the case was again taken up by the establishment of an Engineering Management program in Civil Engineering. As in many cases, the vision and the contributions of an individual become clear only in retrospect.

Jack was a successful man. The features which accounted for his success were his orderly mind, scholarly bent, devotion to duty and gentility in his relations with people. But he was also a keen, energetic individual who moved decisively. His accomplishments in the differing roles of naval officer and university professor are a tribute to his adaptability and reasonableness. He was capable of great institutional loyalty. The National Anthem and the Cornell Alma Mater held great meaning for him.

Jack had strong convictions about community responsibility. He was at heart an environmentalist before the movement gained public support. His service as chairman of the Cayuga Heights Zoning Board of Appeals drew accolades from Mayor Marcham. His neighbors knew him as an individual of great warmth once his natural reserve was laid aside. He had a green thumb and his lawn was second to none. The squirrels and blue jays at his bird feeder offended his sense of fair play. He was for the little guys, the chickadees and nuthatches that frequented the rhododendrons in his back yard. Hence the electric grid he devised to study the conditioned reflex of animals in response to electric shock. This was the sum of Jack’s inconsiderateness.

Even simple neighborhood matters were deserving of careful deliberation. Jack concluded that in a friendly neighborhood not everyone need own a wheelbarrow, extension ladder, and the like. His were available, always in good order, and neatly stored. Upon moving to Virginia in 1970, he left the barrow and appointed a neighbor

its custodian, to continue it in neighborhood service. Over the years this came to represent and symbolize Jack's spirit of sharing and of being a good neighbor, always with modest reserve and gentility.

Throughout both careers, Jack had the steadfast support of his wife Jean, a wise, charming, considerate person. Their devotion to each other found expression in many ways including poems and love notes that continued until her death.

Jack was not a church goer, but he left one with the feeling that here is a spiritual man. At his request, the only service for him was a family one at the Arlington National Cemetery. But two years before his death he wrote the rector of New York's Saint Georges Church to express appreciation for the help the church school had given him to "get started in this world" seventy five years earlier.

Jack is survived by his son John, Cornell '51, three grandchildren and seven great-grandchildren. He rendered over four decades of distinguished service to the Navy and to Cornell. The tradition of both institutions has been enriched by Jack's influence as have a host of friends. He will be remembered for his accomplishments and his integrity, inquiring mind and warmth of personality.

Jack Rogers, Edward Smith, William McGuire

Peter Gergely

February 12, 1936 — August 25, 1995

Peter Gergely, Professor of Structural Engineering in the School of Civil and Environmental Engineering, died at his residence on August 25, 1995, after a long and courageous battle against cancer. Peter was born in Budapest, Hungary, on February 12, 1936, a son of the late Maria and Istvan Gergely. He grew up there and entered the Technical University of Budapest in 1954. He was a freedom fighter during the Hungarian Revolution of 1956, and left Hungary on New Year's eve, 1956, to come to North America. He soon became a student at McGill University, where he completed an undergraduate degree in civil engineering (Applied Mechanics Honors) in 1960. He then entered graduate study in structural engineering at the University of Illinois. Immediately after receiving his Ph.D. degree in 1963, Dr. Gergely began his distinguished 32-year career at Cornell University. He held two prominent leadership positions at Cornell—Chairman of the Department of Structural Engineering (1983-88) and Director of the School of Civil and Environmental Engineering (1985-88).

Peter Gergely had an exceptional zest for life and a strong interest in science and the arts. He often spoke about his early school years in Budapest and how lucky he was to have had wonderful, inspirational teachers, especially in mathematics and literature. In his personal writings he stated:

These giants taught us the joys of learning and infused into us a thirst for knowledge. They were noble, conscientious, and tireless teachers and educators. They implanted into us the germs of talent, which we otherwise were not blessed with, and also self-confidence.

Surely these early experiences with great teachers had much to do with his own superb ability to teach and to inspire students to reach for the stars and to achieve their very best, not only while at Cornell but also after they launched their engineering or business careers. He set a very high example for his students; those who came to know him soon understood the nature and depth of his personal qualities—rigor, innovation, integrity, professionalism, and a continual quest for excellence.

He was instrumental in the training and development of thousands of young engineers through his inspired teaching and advising of undergraduates and graduate students. He consistently ranked in the top group of Cornell Engineering faculty, and in 1995, he received a Dean's Prize for Excellence in Teaching. He will be remembered by his many students for his constant examples of technical and professional excellence and for his strong support of student activities. His legacy is captured in the following quote from a letter sent to Peter by 17 engineers (16 with

Cornell CEE degrees) from the firm of Leslie E. Robertson Consulting Engineers in New York City: “There is no way that we can sufficiently thank you for that which you have so freely given to us. Our only form of payment to you is to do our very best, intrepidly, to use the skills and wisdom that you have bestowed upon us in creating beautiful buildings and structures and to otherwise contribute to the world around us.”

Peter co-authored a three-volume undergraduate textbook series published by John Wiley in the 1970s, and his notes for a book on structural dynamics and earthquake engineering have become widely recognized and used all over the world. Peter Gergely made major contributions to a wide variety of structural engineering problems, ranging from design procedures that have been adopted by national building codes to complex seismic analyses and consulting work on numerous nuclear reactor facilities and other structures.

His research led to many important advances in understanding the mechanics of reinforced and prestressed concrete, with strong emphasis on using research results to improve building codes. He also made pioneering contributions in structural dynamics, earthquake engineering, and earthquake hazard mitigation, particularly for structures and facilities built in regions of moderate seismicity. He was one of the founders and leaders of the National Center for Earthquake Engineering Research. He played key roles in developing new seismic provisions for eastern states and in working with national agencies in developing new and improved seismic design philosophies and codes. He reported his research in more than 100 technical papers.

Peter Gergely was exceptionally generous in volunteering his time and talents to professional societies and groups, including the American Concrete Institute, the American Society of Civil Engineers, the International Association for Bridge and Structural Engineering, the International Committee on Tall Buildings, the National Research Council, the Transportation Research Board, the Applied Technology Council, the Building Seismic Safety Commission, and the National Committee on Property Insurance. He was an enthusiastic and valued participant in each of these important professional groups and his many contributions and ability to make meetings enjoyable will be sorely missed by his engineering colleagues around the world.

Peter also participated fully in the life of Cornell University. He was a valued member of numerous committees at the school, college, and university levels. He was one of those rare faculty members who “always showed up” at all school and college events, be they faculty gatherings, student activities, or alumni events.

In recognition of his outstanding contributions to the advancement of the understanding of concrete structures under severe static and dynamic loadings, and for applying these advancements to design and to design codes,

Peter Gergely was honored with numerous national and international awards, including co-recipient of the State of the Art of Civil Engineering Prize (ASCE, 1974) and the Raymond C. Reese Research Prize (ASCE, 1976); election to Fellow of ACI (1974); Delmar Bloem Distinguished Service Award (ACI, 1981); and co-recipient of Wason Award for Most Meritorious Paper (ACI, 1993) and Structural Research Award (ACI, 1994). Of all his honors, the one that meant the most to him was the Honorary Doctorate he received in 1992 from his beloved alma mater, the Technical University of Budapest, given “for his outstanding international activities in advancing the development of his profession of mechanics and reinforced concrete.” Cornell University honored Peter with the Gergely Symposium in August 1995, which was attended by colleagues and friends from around the world.

Peter had a life-long dedication to his beloved native Hungary, and returned there for visits on many occasions. His automobile license plate was H-56, selected to serve as a constant reminder of the Soviet suppression of the Hungarian revolution in 1956. He delighted in telling stories about Hungarians and was particularly fond of the definition of a Hungarian as someone who can go into a revolving door behind you and come out in front. And, as he said in his honorary doctorate acceptance speech in 1992:

The 1956 Revolution obliged and inspired us. We were representatives in foreign lands. We had to succeed and could not fail and could not abandon the ideals of the nation. We have had to keep up the momentum.

This same love for Hungary extended to his feelings about the United States. He was a strong champion for free enterprise and for the American way of life.

Peter was a great lover of classical music and the arts, and an avid chess player who often spent his lunch hours at Cornell playing chess with other faculty and students. He had a wonderfully dry sense of humor and was particularly fond of telling lawyer jokes, sometimes almost too fond considering that many of his students had lawyers in their families.

Peter’s family meant so very much to him—he was a dedicated and proud husband, father, and grandfather. He married Kinga Mecs in 1964 and they had two children: a son, Zoltan; and a daughter, Ilia. Ilia and her husband, David Burbank of Ithaca, have one son, Istvan, who was Peter’s pride and joy. Kinga was Peter’s constant source of strength and inspiration, particularly during the final year of his life, when he struggled so valiantly against overwhelming odds. Peter and Kinga never wavered, even in the face of great difficulties, and their ability to face life with exceptional levels of grace, courage and dignity provided a lesson to all who knew them.

Peter Gergely always gave his best, he lived life to the fullest, he made a difference, and we have been blessed to share in the life of this remarkable individual.

John F. Abel, William McGuire, Richard N. White

George Gibian

January 29, 1924 — October 24, 1999

On October 24, 1999, George Gibian, the Goldwin Smith Professor of Russian and Comparative Literature, died suddenly in the home that he shared with his longtime and beloved partner, Karen Brazell. His life was unusually rich. George was born in Prague in 1924. With the Munich Agreement and its guarantee of a German takeover of Czechoslovakia, he was sent to England, for safety and for his studies. In 1940, after a harrowing journey across the Atlantic, the Gibian family settled in the United States. A Europe at war, however, beckoned George to return. He did so as a member of the 94th Infantry Division, which landed in Normandy in 1944. He participated in the Battle of the Bulge, and at the end of the war he was assigned to occupy the southern part of Czechoslovakia. George was decorated with the Bronze Star with the V device for Valor.

After the war, George received his Ph.D. degree in English from Harvard University. He taught at Smith, Amherst, and the University of California at Berkeley before joining the faculty at Cornell in 1961. In the process, he shifted his specialization from English to Comparative Literature and Russian Literature. His contributions to Russian literature were foundational. Indeed, George, who was appointed to the position at Cornell that had been held by Vladimir Nabokov, founded the current Russian Literature Department. Students and faculty alike will remember him for his Norton “Critical Editions” of the classics of Russian Literature. He made a major and permanent contribution to the history of Russian literature with the publication in 1971, by Cornell University Press, of his translations of the absurdist Oberiu writers, whose works had been suppressed and nearly forgotten for fifty years in Soviet Russia. He wrote and edited twenty-four books and published ninety-five articles on, among other things, Russian and Soviet literature; Czech literature; comparative literature; intersections of literature with history and politics; Russian nationalism. He kept an active interest in Czech cultural life, returning regularly to Prague and maintaining contacts with Czech writers and artists there and here. Among his last publications was a 1998 volume of verse and prose by Jaroslav Seifert, with introduction and prose translations by George.

While an undeniable part of his story, however, these facts do not capture adequately the George Gibian we knew and valued. Here, what stand out are four characteristics. One was his sheer level of activity, intellectual and physical. Just as he was always ready to develop new courses that explored aspects of Russian and East-Central European culture, so he was until his death an ardent traveler, hiker, and tennis-player. This was a man who was most comfortable when his body or his mind—or both—were on the move. Another characteristic: George always

managed to make things around him more interesting. His engagement with people and ideas was infectious. Another, perhaps most rare, was his humility. He was too fair-minded and too full of curiosity to pull rank. He was a good listener and a ready student. He enjoyed his life and those lucky enough to know him. He was as interested as he was interesting. Finally, George was a devoted family man, with some or all of his five children and two step-children and multiples of his grandchildren almost always around—especially in summer, when the entire clan would gather at the cottage on the lake, to George’s perpetual delight and even, occasionally, exhaustion. George was an inspiring and beloved teacher and an irreplaceable colleague. We will miss him.

Valerie Bunce, William Kennedy, Natalie Melas, Nancy Pollak

Robert M. Gilmer

December 10, 1920 — July 17, 1999

Robert M. Gilmer, 78, Professor Emeritus of Plant Pathology and former chair of the Department of Plant Pathology at Cornell University's New York State Agricultural Experiment Station, Geneva, New York, died unexpectedly on Saturday, July 17, 1999, at his home in Brooksville, Florida.

Professor Gilmer was born on December 10, 1920 in Lawrence, Kansas. He attended Emory University, Atlanta, Georgia, for two years before going into the service during World War II. Following the war, he received his B.S., M.S., and Ph.D. degrees in 1947, 1948, and 1950 respectively from the University of Wisconsin. He joined Cornell as an Assistant Professor in the Department of Plant Pathology at Geneva in 1950. He was promoted to Associate Professor in 1954, and to Professor in 1959.

Bob was an outstanding plant pathologist. He established a worldwide reputation for his knowledge of virus diseases of deciduous fruit crops. But, for those who worked closely with him and became his friends, he will be remembered foremost for his intelligence, his great breadth of knowledge of plant diseases, and being a free-thinker who challenged our conventional views. Bob was also known for his broad experiences in different areas, for being a voracious reader, for his photographic memory, and for helping younger members of the Geneva faculty develop their careers. He was an engaging raconteur and conversationalist. Several of his colleagues also appreciated him as an astute bridge and poker player.

In addition to an outstanding career as a researcher, Bob served as acting chair and then chair of the Department of Plant Pathology from 1967 to 1972. He retired from Cornell on December 31, 1975.

Most of his research efforts were concentrated on virus diseases of deciduous fruit trees and grapevine. He found that several leafhopper species were efficient vectors of X-disease of stone fruits. The agent that caused this disease, which was first believed to be a virus, was later demonstrated, using electron microscopy, to be a mycoplasma. This led to the use of chemotherapy to treat the disease.

Bob also investigated the sour cherry yellows disease. This disease was widespread in sour and sweet cherry orchards throughout New York State. The virus involved in the disease complex brought about severe reduction in fruit production. At the time, sour cherry yellows disease was the most important virus disease in cherry. Bob conducted an extensive search for a source of resistance to the disease, but was unable to find any. However, during this research, he was able to identify and separate two commonly occurring cherry viruses — prune dwarf and

necrotic ringspot — and implicate them in the disease. He also demonstrated that healthy cherry trees can become infected by pollen that are carrying these viruses. This discovery helped to explain the rapid spread and common occurrence of sour cherry yellows disease in commercial orchards.

Bob's pioneering research on grapevine virus diseases in eastern North America resulted in significant contributions. A disease caused by the tobacco ringspot virus was initially found in 1967. It had not been previously reported to infect grapes. However, as a result of this research, surveys in vineyards in New York State and Canada revealed widespread occurrence of this disease. In 1974, a program was initiated to identify resistant scion and rootstock varieties and evaluate methods to control the nematode vector. Largely because of Bob's persistence, official rules and regulations were developed in 1973 for a grapevine virus disease certification program. This program provided growers protection against purchasing virus-infected grape plants as well as trueness to variety type. Eventually, the Nursery Inspection Unit of the New York State Department of Agriculture and Markets took over the program as part of its regulatory and detection duties.

In his 26 years at the Geneva Station, Bob published 90 scientific articles and numerous abstracts of talks presented at scientific meetings. He was a member of the Association of Applied Biologists and the American Phytopathological Society. In the latter, he was Secretary-Treasurer of the Northeastern Division in 1965, Vice President in 1966, and President in 1967. He was conferred the Distinguished Achievement Award of the Northeastern Division in 1976.

In 1957, he spent a six-month sabbatical leave as a Visiting Plant Pathologist at the East Malling Research Station, near Maidstone, Kent, England. In 1972-74, he was a Visiting Professor at the Department of Agricultural Biology, University of Ibadan, Nigeria, under the auspices of the Rockefeller Foundation. Bob was a member of the Alpha Epsilon Upsilon, Alpha Zeta, and Sigma Xi honorary societies.

In retirement, Bob and his wife, Eleanor, lived in Brooksville, Florida. However they returned annually to Geneva, usually coinciding with the annual dinner of the bridge group, when reminiscences were in full flow. It was only days after the bridge dinner in 1999 that Bob succumbed to a heart attack while cutting wood in his yard. We have acutely missed their presence at the last two dinners.

Bob established a special trust fund that will eventually provide funding for support of Cornell graduate students in Plant Pathology at Geneva.

Bob is survived by his wife, Eleanor, and sister, Joanne (Robert) Hammond, both of Fort Walton Beach, Florida.

George S. Abawi, James E. Hunter, Herb S. Aldwinckle

Frank F. Gilmore

June 6, 1911 — January 1, 1992

Frank Gilmore taught in Cornell's Graduate School of Business and Public Administration (now the S.C. Johnson Graduate School of Management) from 1955 to 1974. Previous to 1955 he taught at Washington University and the Harvard Graduate School of Business. In his early years he taught production, but his interests evolved into business policy and strategy.

Coincident with his arrival at Cornell University he became the Director of the School's highly successful Executive Development Program and was one of the most appreciated teachers in that program. After becoming Emeritus he continued to teach in the program for many years after his retirement. Much of Cornell's success in executive education can be attributed to Frank's dedicated efforts.

Frank was one of a group of senior professors who believed in treating junior professors as equals and students as being the School's most important concern. He worked hard to teach effectively and was successful in his efforts.

But all was not smooth as the above implied. To illustrate production operations, Frank had the School buy a large machine tool which was placed in an upper floor classroom in McGraw Hall (the initial home of B&PA). The floor began to tilt, the building and grounds department insisted that the machine be moved to the basement, and Frank shifted his teaching interests to business policy.

Then there was the afternoon party thrown for Bill Carmichael, newly appointed dean, by Frank and his wife, Mary Lee. The day was very hot and everyone drank heartily of the "fish-house punch". Unfortunately, it became apparent later in the afternoon that this was not a fruit punch as the innocents had assumed. It was an impressive welcoming for our new dean.

And then there was the time Frank went to Trinidad to help the University of the West Indies initiate a management development program. The Pro-Vice Chancellor (Dudley Huggins) took Frank for a picnic and a swim in the Caribbean. Frank swam out past the diving raft, and Dudley waved frantically from the beach. Frank's companion swam in to determine Dudley's concern. It seems that where Frank was swimming was the home of unfriendly sharks and, in addition, in a few minutes the tides would sweep him to sea, if he survived the sharks. His exhausted companion (a poor swimmer) swam out to Frank who then started to argue that the swim was perfectly safe. Out

of compassion for his companion (now about to drown), he reluctantly abandoned his exercise and returned to safer waters. Yes, the executive programs conducted in Trinidad were big successes.

Frank was a loyal, generous friend and an outstanding teacher of business policy. He devoted a large percentage of his career advancing the well-being of B&PA (the Johnson School) and he is remembered by his former colleagues with affection and admiration.

Alan McAdams, Seymour Smidt, L. Joseph Thomas, Hal Merman

Frank H. Golay

July 2, 1915 — August 31, 1990

Frank Hindman Golay, former president of the Association for Asian Studies and foremost economic historian of the Philippines, died in the Veterans Hospital, Oxford, New York, on August 31, 1990, after a long illness. Born in Windsor, Missouri, on July 2, 1915, he served as a submarine officer in the U.S. Navy in World War II and received his Ph.D. degree in economics from the University of Chicago in 1951. After working in the international division of the Federal Reserve Board, he came to Cornell in 1953 as an assistant professor of economics and Asian studies. He became a full professor in 1962 and remained at Cornell until his retirement in 1981. He was chair of Cornell's Department of Economics from 1963 to 1967 and director of the Southeast Asia Program from 1970 to 1976.

During the 28 years of his service, Frank Golay was a rock of dependability within the Department of Economics. The chairman could count upon him invariably for staunch support; and as chairman, he demanded the same kind of responsible service as he himself was always prepared to give. In addition to his own specialties, in particular the fields of economic development and the economics of Southeast Asia, he regularly taught basic departmental courses—elementary economics, money and banking, international trade and finance. His work on the Philippines exhibited the same kind of soundness, thoroughness, and excellence of judgment as he could always be depended upon to provide in his service to the University.

As director of the Southeast Asia Program's Philippine Project (1967-73) and London-Cornell Project (1968-70), Frank contributed much to strengthening Southeast Asian studies at Cornell. He was appointed to visiting professorships at London University's School of Oriental and African Studies (Fulbright-Hays) in 1965-66 and at the University of the Philippines (Rockefeller Foundation) in 1973-74. For his scholarship on the Philippines, Frank was awarded an honorary L.L.D. degree by the Ateneo de Manila in 1966. He was awarded research fellowships by the Guggenheim and the Luce Foundations, the Social Science Research Council, the National Endowment for the Humanities, and the United States Educational Foundation (Fulbright). He served as chairman of the Philippines Council of the Asia Society of New York (1964-67) and as a member of the Southeast Asia regional committee of the Association for Asian Studies (1963-65).

His major publications include *The Philippines: Public Policy and National Economic Development* (Cornell University Press, 1961) and four coauthored books: *The United States and the Philippines* (Prentice-Hall, 1966), *Land and Man in 1990: Philippine Rice Needs in 1990, Output and Input Requirements* (Agency for International

Development, 1967), *Underdevelopment and Economic Nationalism in Southeast Asia* (Cornell University Press, 1969), and *Diversity and Development in Southeast Asia* (McGraw-Hill/Council on Foreign Relations, 1977). Shortly before his illness he was close to completing a comprehensive study of United States-Philippine economic and political relations before Philippine independence.

It was not only through his many publications that Frank contributed to the development of a formal program of Southeast Asian studies at Cornell; he accepted leadership roles that significantly defined the scope and character of Cornell's teaching and research on that area. It was during his service as the third director of the Southeast Asia Program, from 1970 to 1976, that Frank Golay made his crucial contribution. The war in Vietnam was winding down, area and language programs were fading, and the government and foundations began to question the costs and the value of such programs. To such questions Frank Golay, with his financial and management sagacity and skills, added to his impressive scholarship, could provide persuasive answers, and he did. An official of one of the foundations called him his "best client." The U.S. Department of Education and several foundations began or continued their aid to Cornell's funding of the program.

A climax of Frank Golay's preeminent career in the field of Asian scholarship came with his 1984 election to the presidency of the Association for Asian Studies. In his presidential address, he noted that over time he found that "the outside world considered my role to be that of a Filipinist." It was certainly that and very much more.

So Frank Golay lived—serving extraordinarily well his university, his profession, and the peoples, students and others, common and uncommon, of both his country and of Southeast Asia. What Thucydides said of his friend can well be said of him: "The whole earth is the tomb of heroic men and their story is not graven only in stone over their clay, but abides everywhere, without visible symbol, woven into the stuff of other men's lives."

George McT. Kahin, Alfred E. Kahn, Lauriston Sharp, Tom E. Davis

Dana C. Goodrich, Jr.

January 1, 1928 — December 10, 1994

The faculty of the Department of Agricultural, Resource, and Managerial Economics lost a distinguished emeritus professor when Dana C. Goodrich, Jr. died on December 10, 1994, at Shands Teaching Hospital in Gainesville, Florida. Dana had received a heart transplant on April 19, 1994. By November it appeared as if there was a chance for complete recovery, but while in Gainesville for tests at the University of Florida Medical Center, an unexpected rare form of rejection caused his death.

Dana was born in Ilion, New York, son of the late Dana C. Goodrich, Sr. and Olive Dillenbeck. He is survived by his wife, Elizabeth (Betty) Luttgens Goodrich, of Melbourne, Florida; two daughters: Susan of Bedminster, New Jersey, and Karen and husband Thomas Lerario of Reston, Virginia; two sons: Dana C. III and wife Sue of Arnold, Maryland, and Kendall of Boca Raton, Florida; one sister, Jeanette Burnett of Hyde Park, New York; and four grandchildren. Although Dana grew up in the suburban areas of Northern New Jersey and Albany, New York, his chosen profession of agricultural economics was a natural result of his summer visits to an uncle's farm and hatchery in Webster, New York. He received a B.S. degree in Poultry Husbandry in 1954 from Rutgers University; and he received M.S. (1956) and Ph.D. (1958) degrees from Cornell University.

Dana's professional career began at Cornell in 1958 as an Assistant Professor of Marketing and Extension Economist. Promoted to Associate Professor in 1964 and to Professor in 1970, his research focused on marketing of poultry and egg products, horticultural marketing, and marketing of fish products. He taught courses in Accounting, Managerial Accounting, Prices, and Marketing; and he developed and taught an upper level course in Marketing Management.

During his career he taught over 7,000 students and was faculty adviser to over 500 undergraduates. To give his students an opportunity to participate in commodities trading, he developed one of the first Futures Market Games to be used as part of his marketing class. For several years, he was Chair of the Department's Undergraduate Program Committee. He was known as a compassionate faculty member who always had his students' interests at heart. Dana had strong feelings about the importance of undergraduate teaching when that was not a popular career path. His outstanding teaching was recognized by the very positive comments of his students and through many teaching awards—most important are the 1983 Professor of Merit Award, presented by Ho-Nun-De-Kah,

the agricultural honorary society, and the 1986 prestigious Edgerton Career Teaching Award, given by the College of Agriculture and Life Sciences for an outstanding career in teaching.

Professor Goodrich spent sabbatic leaves at the University of Florida (1965-66) and at The Technical University of Hannover, West Germany (1975). During his career, Dana became a recognized national and international expert on the economics and marketing of ornamental horticultural products. This resulted in a book, *Floral Marketing*, published by Lebhar Friedman Books. He was appointed Professor Emeritus December 31, 1986.

His greatest work satisfaction came from teaching and counseling students. Dana really listened and cared, and he gave quiet advice and counsel in a non-judgmental way. He was well respected and was known for his high ethical standards and values. He touched the lives of hundreds of students by his lectures and as an advisor. During his several years of illness, students continued to maintain contact. He was most pleased that in recent years the University has recognized the need for excellence in teaching at the undergraduate level.

He was a member of Alpha Zeta, Delta Sigma Phi, and Phi Kappa Phi. His professional affiliations included the American Agricultural Economics Association, American Marketing Association, American Society for Horticultural Science (chair of the Marketing and Economics Committee), and International Society of Horticultural Sciences. He served as a consultant to the U.S. Department of Agriculture on the development and execution of research relating to the economics of marketing horticultural crops.

Dana's activities in the Ithaca community included serving on the Board of Directors for the Cornell Federal Credit Union and as its President. He was also a past chair of the Cornell Division United Way Campaign, and past member of the Board of Directors for the Student Management (Purchasing) Corporation. After moving to Florida in 1987, although limited by health problems, Dana served on several church committees and sang in the church choir. He also served on the Board of Directors, Literacy Council of South Brevard and published their monthly newsletter.

His other interests included fishing, reading—especially books about the Civil War and WWII—listening to classical music, studying Florida wildlife, and watching football and hockey. While at Cornell, Dana was an avid hockey fan, and in the heyday of Cornell's Big Red hockey team, you could hear his whistle throughout the rink.

Joseph F. Metz, Jr., Shirley L. Soule-Redmond, Olan D. Forker

Richard William Guest

July 7, 1932 — February 24, 1997

Richard William Guest was born in Oklahoma City, Oklahoma on July 7, 1932. He grew up on a grain and beef cattle farm near Menoken, North Dakota. Dick attended North Dakota State University, where he received both his B.S. (1954) and M.S. (1958) degrees, and was a Second Lieutenant in the US Air Force (1955-56). He met Myrth J. Weiser while in college, and married her in 1959.

Dick was appointed Assistant Professor in the Department of Agricultural and Biological Engineering (ABEN) of the College of Agriculture and Life Sciences on September 1, 1958; promoted to Associate Professor with tenure on July 1, 1964; and to Professor on April 1, 1983. He retired September 1, 1991 and was appointed Professor Emeritus. Following retirement, he continued part-time to develop a comprehensive publication on dairy manure management for the Northeast Regional Agricultural Engineering Service. During his thirty-three years with the Department of Agricultural and Biological Engineering, Dick participated in the department's teaching, research and extension functions, but by far his first love was extension and the continuing challenge of applying engineering to the solution of problems associated with the dynamic world of production agriculture. Here, he developed principle specializations and expertise in the areas of Farmstead Engineering and Mechanization, and Animal Waste Management, during a time when rapid change was taking place in farming and solutions to attendant problems was in short supply. Dick loved a challenge and he met them head-on with his eternal optimism and wry smile.

His professional work covered a wide range of topics, the major areas being animal manure management, land application of wastes, milking systems, feeding systems, housing for livestock, energy conservation in livestock production systems, and mechanical fruit harvesting. He was one of the early leaders in developing solutions for the proper handling, utilization and disposal of wastes from dairy and other animal production systems. He attracted a wide national following for this work, well beyond the borders of New York State, and received requests from both national and international agencies for assistance as well.

Dick served as Interim Department Extension Leader and Consultant to the World Health Organization on farm sanitation practices. He was the recipient of several Blue Ribbon Awards from the American Society of Agricultural Engineers for exemplary publications, as well as designs for agricultural systems, and received an early award (1963) for the college's "Project M" milking systems over-the-road educational demonstration unit that traveled

throughout New York State to educate the dairy industry on proper milking system operation, practices and their influence on animal health. He helped design, build and test a successful mechanical cherry harvester, and was co-leader in the design and development of a mechanical harvester for processing apples. He taught Household Mechanics to hundreds of women in the fields of Human Ecology and Agriculture. His consulting activities, both overseas and domestic, have had a marked influence on practices that relate to the maintenance of environmental quality for agricultural production systems, as well as reduce labor tedium and increase production efficiency.

Always concerned with practical innovations and new challenges, in his role as Extension Agricultural Engineer, he advised several thousand farmers about free-stall dairy systems, milking parlors, swine housing, grain drying, ventilation systems, materials handling equipment and related facilities. He also helped many colleagues with the development of research facilities, especially at the Cornell Animal Science Teaching and Research Center, the Swine Barns, and at the Miner Institute in Chazy, New York. For two decades, he taught certified milk inspectors, and was a participant in Empire Farm Days for a decade. Dedicated to improving engineering in agriculture, his efforts and skills cannot be replaced. Dick spent his sabbatical leaves as a research and development engineer with Sperry-New Holland, in New Holland, Pennsylvania; as a consultant engineer with Alfa-Laval in Tumba, Sweden; as well as the Martin Manufacturing Company in Myerstown, Pennsylvania; and the Institute für Landtechnik in Weihenstephan, West Germany. He especially favored the hands-on practice of engineering and getting solutions into the mainstream of application utilization as soon as possible.

Dick was always a faithful supporter of the ABEN family, both professionally and socially. He also gave of himself generously in community activities beyond the university's doors, and most notably as a dedicated member of the Trinity Lutheran Church in Ithaca, New York. In 1995, the Dryden Sertoma Club honored him with its Sertoman of the Year Award. Sertoma stands for Service to Mankind, and for thirty-five years, in both the professional and non-professional worlds, Dick was truly Mr. Sertoma. He was a member of the American Society of Agricultural Engineers, the New York State Association of Milk Sanitarians, the Northeast Dairy Practices Council, Tau Beta Pi, Sigma Xi, both the Ithaca and Dryden Sertoma Clubs, a 4-H Leader, and a member of the 4-H Acres Development Committee. Beyond this, over the years Dick also found some time occasionally to fish, hunt, fly a plane, bowl, play some golf, put on a benefit pig roast, and grow a rose or two in his home greenhouse. He truly enjoyed it all and remembered to "smell the roses" as well as share them with his friends.

Dick and his wife, Myrth, had three daughters: Katrina, Sheryl, and Linda; and four grandchildren, Adam, Nathen, Kyle, and Keirsten. He was understandably proud of them all, and will be long remembered and sorely missed by his family, friends, and colleagues. We can speak for them all by simply saying, “Mr. Sertoma, we salute you”.

Joseph K. Campbell, Wilmot W. Irish, Everett D. Markwardt, William F. Millier, Ronald B. Furry

Robert Anderson Hall, Jr.

April 4, 1911 — December 2, 1997

Robert A. Hall, Jr., world-renowned specialist in Romance linguistics, one of the early representatives of American structuralism and descriptive linguistics, and one of the founders of the Division of Modern Languages at Cornell, died on December 2, 1997, at the age of 86. He is survived by his wife, Alice M. Colby-Hall; his three children, Philip A. Hall, Diana K. Goodall, and Caroline Erickson; six grandchildren; and six great-grandchildren.

Although he was born in Raleigh, North Carolina (April 4, 1911), he spent most of his childhood in the north, first in Minnesota, then in New England. He received his higher education at Princeton University, the University of Chicago, and the University of Rome. At Princeton (B.A. 1931) he majored in French and German literature. He became acquainted with the budding discipline of linguistics when he began his graduate studies at Chicago that year, taking courses with Harry Hoiyer and later with Leonard Bloomfield. He continued his studies in literature and expanded his studies in the classical Indo-European languages (Greek, Latin, Sanskrit, Avestan, Old Persian) with Carl Darling Buck and George Bobrinskoy.

He interrupted his graduate work at Chicago by going to Italy, where he studied Italian literature and historical linguistics, the latter in a European version whose distortion of neo-grammarians theory he was critical of throughout his scholarly career. He received the Dottore in Lettere from the University of Rome in 1934. He finished up the few remaining requirements for the M.A. degree upon his return to Chicago in 1935 and did further course work, but, having received what he considered to be the equivalent of the Ph.D. degree from Rome, chose not to pursue that degree at Chicago.

In 1936, he married Frances L. Adkins, with whom he later collaborated on the preparation of materials for the teaching of reading and writing to English-speaking children and on an Italian-English and English-Italian dictionary of idioms. In that same year, he got his first academic job teaching at the University of Puerto Rico. While there, he worked on the rewriting of a Hungarian grammar and started work on his *Bibliography of Italian Linguistics*. In 1939, he obtained an instructorship at Princeton, and in 1940, began teaching Italian language and literature at Brown where his acquaintance with Hans Kurath and Bernard Bloch further stimulated his interest in linguistics. In the following year, he was elected to the editorial board of the *Linguistic Society of America*. That was also the year in which Leonard Bloomfield moved to neighboring Yale, whose Linguistics Club served both Yale and Brown.

It was during this first decade of his scholarly life that Bob Hall began his many disputes with a number of European scholars. He developed what can only be called an antipathy toward a European style of academic behavior. He has sharp words in his memoirs for the prideful arrogance of some. He hated pretension and had none of his own. But this did not affect his love for Europe, European tradition, and respect for many European scholars, thus freeing him, in the eyes of at least some, from the charge of bias and prejudice. In fact, he characterized some of his American colleagues' reaction to the influx of European scholars into the U.S. in the 1930s and 1940s as "xenophobic". Like H.L. Mencken and others of an earlier day, he was in the habit of identifying people by their ethnic or cultural background, and he was accused of bias against one nationality or another, but judging from the language of his memoirs, no nationality was spared. In speaking of Professor Jakob Jud, whom he met in Zurich, he says, "He was a fine, honorable, upright gentleman, far above the petty quarrelling of the Italians and equally far removed from the grandiose but empty verbiage of many of the Germans". He was not impressed by those Europeans who insisted on "the inherent superiority of European culture", because, he says, "My parents and, indeed, our whole culture had always taught me that people coming to America and settling permanently owed it to themselves and their adopted country to discard older customs or attitudes which might conflict with those prevailing in their new home-land"—a stance he never retreated from and one which would not endear him to the modern multiculturalist.

Bob Hall shared with Bloomfield and many other American linguists a dislike of academic "schools" of thought, with their gurus and sycophants, dogmas, and unwillingness to entertain opposing viewpoints. This is certainly one of the many sources of Hall's antipathy to Chomskyan linguistics. Nevertheless, he always treated people with whom he disagreed with utmost civility and never allowed his scholarly predisposition to interfere with respectful treatment of students holding differing views. In his later career at Cornell, for example, he served as chairman of graduate examination committees of students whose theses were written on generative principles; his attitude toward prospective scholars was that all they had to do was to demonstrate competence in their research, no matter what linguistic theory they were operating under.

World War II entailed a need for language teaching research and research on the structure of many of the world's languages, and that need was met in part by the cooperation of the Linguistic Society of America with the American Council of Learned Societies to develop such materials. Hall's first significant contribution in this effort was the description and teaching of Melanesian Pidgin, later in Haitian Creole and Taki-Taki. Hall was a pioneer in the

study of Creoles and pidgins, in devising orthographies for them, and in attempting, particularly in Australia, to convince politicians that Pidgin was a language in its own right and should not be stamped out.

In 1943, Hall went to Washington to work in the U.S. Armed Forces Institute (USAFI), where he joined in the production of textbooks on French, Spanish, Italian, and Portuguese, 4 of the 50-odd language textbooks of the Spoken Language series, a project that effected a significant change in the teaching of languages in this country by emphasizing the spoken language and by introducing linguistic principles into pedagogy. He also worked in the ASTP (Armed Services Training Program). During the war years, Bob Hall became more closely acquainted with many of the figures who were or would become prominent in the field of linguistics—Leonard Bloomfield, Edgar Sturtevant, Franklin Edgerton, Isadore Dyen, George Trager, Bernard Bloch, and many others.

It was during these years also that he got to know many of his future colleagues at Cornell, where he went in 1946 at the invitation of J Milton Cowan to join Charles F. Hockett, Frederick B. Agard, Gordon H. Fairbanks, and in 1947, William G. Moulton, in the founding of an academic unit—the Division of Modern Languages—which would introduce the new approaches to language teaching into the academic world, along with the then novel discipline of linguistics. There he spent the rest of his life of scholarship and teaching, both of which he found gratifying.

In 1975, he retired from teaching, becoming Professor Emeritus of Linguistics and Italian, but continued his research as actively as ever. He was then in the midst of working on his *Comparative Romance Grammar*. In that year, his wife Frances died. He subsequently married Alice M. Colby-Hall, Professor of Romance Studies.

For most of his life he believed—naïvely, he would himself confess—that the academic world was the rare place one could express one's views freely, however unwelcome they may be, without untoward consequences of the sort one might encounter in normal life. At one point toward the end of his academic career, he expressed politically incorrect views on the Holocaust. Although this was in fact a demonstration of his strict adherence to an unprejudiced scholarly approach to any matter to which he turned his attention, his interdisciplinary conversation companions at the faculty cafeteria excluded him from their luncheon table, and generally shunned him thereafter, much to his distress.

Robert A. Hall, Jr. is remembered by the colleagues of his that remain among the living as an incredibly prolific writer on a wide variety of topics. One can recall him back in the 1950s in a corner of the hectic main office of the department busily typing away on one of his books during the 10-minute breaks between classes of the 5 courses

he normally taught per semester, using the only departmental typewriter that had the proper array of phonetic symbols for his purposes.

He published over fifty books and over five hundred and fifty articles and reviews in learned journals on: structural linguistics; the history of American Linguistics; graphemics; the application of linguistics to language teaching; Italian linguistics; the history of Italian literature; the life and works of Antonio Fogazzaro; Pidgin and Creole languages; the external history of the Romance languages; proto-Romance phonology and morphology; English linguistics; Hungarian grammar; cultural symbolism in literature; and the genuineness of the Kensington runestone. He also wrote fiction, and composed some music, for his own amusement and was a prolific contributor to the Letters to the Editor department of various newspapers.

Bob Hall's sense of humor ran to puns, limericks, the apt quotation (often in Latin), and an appreciation of the work of P.G. Wodehouse, on whose comic style he wrote a book appreciated in turn by Wodehouse himself. He took delight in Wodehousean phrases such as "His finely-chiselled features were twisted with agony and what not". He was as serious about his avocations as he was about his profession. In addition to his book and articles on Wodehouse, he traveled the world over to ride trolleys and trains, keeping close track of train schedules and writing pieces on electric railways. In addition to singing in various local choral groups, he was an extremely knowledgeable listener and wrote a number of pieces on music, including a demonstration that the origin of the term *terce de Picardie* had nothing to do with Picardy.

His writings include much of what might be called popularizing, though for him, writing for non-academic audiences was very much a duty. In his book, *Leave Your Language Alone*, an attack on correctness and normative grammar (although elsewhere he confesses his quickness to correct others' errors in English grammar, and woe betide an interlocutor who failed to pronounce Wodehouse Woodhouse) he has this to say: "The contribution of linguistics is simply a part of the effort of all science in modern democratic society to find out the truth and to act upon it".

Although, while appreciative of good administrators such as J M. Cowan who left him free to pursue his scholarly work, he eschewed administrative work, and he was active in many professional organizations. He served as Vice President of the American Association of Teachers of Italian in 1945, Vice President of the Linguistic Society of America in 1961, President of the Wodehouse Society in 1983-85, and President of the Linguistic Association of Canada and the United States in 1983-84, and in 1984-85. He was a Guggenheim Fellow in 1954 and 1970 and a Fulbright lecturer in linguistics at the University of Rome in 1950-51 and 1957-58. In 1978, he received

a Professional Achievement Award from the University of Chicago, and in 1992, a Distinguished Achievement Award from the Alumni Association of Poly Prep Country Day School in Brooklyn, New York, where he had completed his secondary education in 1927.

Bob Hall felt it his civic duty not only to apply linguistics to social problems, but also to speak out forcefully on other social and political issues. Although usually labeled a conservative (a true characterization in some respects), it would be just as fitting to label him an American socialist, one of his favorite and oft-cited books being Thorstein Veblen's, *Theory of the Leisure Class*. He was a great respecter of tradition and at the same time an ardent iconoclast.

Robert A. Hall, Jr. was an old-fashioned man from his earliest years and clung to ideals that became rather unfashionable in the course of his life (honor, duty, temperance, civility, decency, piety, integrity, intellectual honesty, love of country, and what not). Some found this ridiculous, others admirable.

Richard L. Leed, Charles F. Hockett

William J. Hamilton, Jr.

December 11, 1902 — July 27, 1990

To reduce a highly accomplished, multidimensional life, such as Bill Hamilton's, to a few pages of text is a challenge. The statistics of accomplishment are relatively easy. Professor William J. Hamilton, Jr. studied the natural history of organisms, primarily small mammals, but also fishes, amphibians, insects, disease organisms, and plants. His bibliography (which will be published by two of his students in the *Bulletin of the Ecological Society of America*) extends from 1928 to 1988 and includes 225 papers on animals, another ten on plants, and three books that have appeared in five editions to date. *Mammals of Eastern United States* published by Cornell University Press, was a pioneering effort that remains indispensable even now, almost fifty years after it first appeared. Bill Hamilton was a member of many scientific societies, but was most devoted to two, the American Society of Mammalogists and the Ecological Society of America. He was a founding member of the latter and he served both in several offices including that of president, and as zoological editor of *Ecological Monographs*. Bill Hamilton was a fellow of the American Association of Arts and Sciences, the New York Academy of Science, and the Royal Horticultural Society of England and his biography appears in *Who's Who in America*. Special honors include the prestigious Marcel LePinec Award of the American Rock Garden Society, the Outstanding Alumni Award of the New York State College of Agriculture and Life Sciences, and the establishment of the William J. Hamilton, Jr. Lecture Series at Cornell Plantations, where he served on the advisory board for years. Bill Hamilton was also instrumental in the founding and later direction of the Edmund Nyles Huyck Preserve and Biological Laboratory in Rensselaerville, New York. He is further honored and will be remembered in the scientific name *hamiltoni* applied to one fish, four invertebrates, and one black bear.

Bill Hamilton's remarkable, extended relationship with Cornell University is also easily delineated. He entered as a student in 1922, progressed without break through B.S., M.S., and Ph.D. degrees, the last as a student of Albert Hazen Wright. He was then immediately appointed an instructor and thereby commenced a steady progression through the ranks of faculty, interrupted only by military service of three and one-half years during the second world war. Bill was awarded professor emeritus status in 1963. At his death, this close Cornell relationship was just two months shy of 68 years' duration.

Bill Hamilton married a Cornell student and native Ithacan, Nellie Rightmyer, a collector and connoisseur of stamps and sea shells who has donated her shell collection to Cornell. They had three children all of whom

graduated from Cornell. Their son, William J. Hamilton, III, is now a professor of zoology at the University of California at Davis.

Among 150 graduate students on whose committees he served, and in his undergraduate courses, Bill taught at least seven students who themselves were later chosen as faculty members at Cornell. Others are also now sprinkled through a host of distinguished American colleges and universities.

To capture in a few words the man whose character and soul are behind this remarkable record is the real challenge.

As a child growing up in Corona, Queens County, (greater New York City), Bill Hamilton exhibited an entrepreneurial instinct and an urgent curiosity about the organisms, both plant and animal, that populated the world about him. He trapped muskrats in the Flushing Meadows and sold the pelts. He caught timber rattlesnakes in the Ramapo Mountains, a short distance away, for the Bronx Zoo. He speared carp for local fish markets. He dug and peddled soft-shelled clams from the mud flats where within a decade appeared the New York World's Fair, and later, Laguardia Airport. He vended packets of flower seeds door to door. He trapped specimens of local wildlife for the museums of New York City. In all these endeavors it appears that Bill Hamilton made a good profit.

When the time came, young William J. Hamilton, Jr. applied, and was admitted at Harvard College. He chose to come to Cornell instead when he saw that Cornell had the better array of courses dealing with organisms of all kinds.

In the years that followed, any incompatibility of Bill Hamilton's entrepreneurial instinct with the life of a scholar had to be subjugated to the strictures and mores of academia. That he did this successfully is indelibly certified by his attainment of the Cornell Ph.D. degree. Signs of incomplete subjugation were, however, visible throughout the remainder of Bill Hamilton's life. He eschewed administrative responsibilities, acting as department head only briefly and on an interim basis. His character was not comfortably compatible with the academic granting system that developed over his lifetime. Bill wrote few if any grant applications. His remarkable record of research publication was built largely on materials at hand in his own backyard. His investigations were accomplished mostly in a research laboratory based on a sink. A razor blade was his chief exploratory instrument. A trickle of Hatch Act funding requiring little paperwork and his own salary provided investigator Hamilton's principal financial support.

In a word, Bill Hamilton was impatient. He was goal-directed and impatient of any artificial impediment. He was focused and impatient of any unnecessary diversion. He was direct and impatient of any dissimulation. He

was particularly impatient with the customary veneer of human civilization, thin though it sometimes is, and preferred the unvarnished reality of the natural world. The clichés of ordinary human life were anathema to him. Consciously or unconsciously he aimed to provoke a reaction from those around him that exposed the genuine individual. His principal tool was a sharp wit often used outrageously but never caustically. His famous tall stories regularly progressed from the false but believable to the patently ridiculous, to which the auditor was eventually forced to react.

At the same time Bill Hamilton was a warm, engaged, helpful friend to students and colleagues who got beyond a superficial reaction to him. Fundamentally a shy person, he allowed his enthusiasm for his subject to transcend his shyness when teaching. He attracted serious students easily and he led them carefully, but he minced no words. He insisted not only on meticulous recording of observations, but additionally on developing the habit that made such record-keeping second nature. He, himself, kept a detailed daily journal throughout his life, and drew from it heavily in his publications.

Bill Hamilton believed deeply that the public should be better informed about the natural world of animals and plants. All of his publications were written in a style intended to be easily accessible and functionally useful. In addition to purely scholarly articles, he wrote frequently for general-circulation publications. All inquiries from the public that reached his desk were answered carefully and immediately. In his classes, Professor Hamilton showed especial concern and compassion for floundering students, helping them without stint.

Professor Hamilton came to Cornell to study with the first generation of Cornell greats in biology. He was among the second generation of those greats, and he taught a large number of persons who were chosen into the third academic generation of Cornell faculty in biological sciences. He saw the subject evolve around him, and he experienced the shifting organization that characterized Cornell's need to refine the roles of the Medical College, the Veterinary College, and the basic science of biology as taught in the College of Arts and Sciences and the New York State College of Agriculture and Life Sciences. Over those long years he was required to move from building to building, and department to department with each new restructuring. Eventually he balked at a final move into the Division of Biological Sciences and retired at age 60 instead.

Retirement allowed Bill Hamilton to refocus a lifelong interest in plants. He had already turned the three-acre plot around his suburban home into a genuine botanical garden which often attracted visitors literally by the bus load. Now he gave increased attention to techniques and "tricks" based on an intimate knowledge of fundamental growth requirements often derived from his own observations, for establishing tender southern species outdoors

in Ithaca. He added almost one hundred new names to the list of plants demonstrated as winter-hardy in upstate New York. He also competed annually to be the top supplier in an informal seed exchange of the American Rock Garden Society, and in recent years usually won.

William J. Hamilton, Jr. served Cornell splendidly and long with a humility rare in the academic world. When visited by friends and former students during his final illness the twinkle in his eye showed that while death would consume his body, nothing will quench his spirit. May it live on in all who knew him.

Howard E. Evans, Ray T. Oglesby, Perry W. Gilbert, John M. Kingsbury

David Birney Hand

November 24, 1905 — January 22, 1998

Dr. David B. Hand, Emeritus Professor of Biochemistry and former chairman of the Department of Food Science and Technology at the New York State Agricultural Experiment Station in Geneva, died in Annapolis, Maryland on January 22, 1998, at the age of 92 years.

Professor Hand was born in Berkeley, California on November 24, 1905. His career in science developed from an early interest in nature and experimentation. He received the B.A. degree majoring in Chemistry from Pomona College in 1926, and the Ph.D. degree from Cornell University in 1930. While obtaining the Doctorate, he held a position as Instructor of Biochemistry and assisted Professor Sumner in his Nobel Prize winning work on urease. From 1930-32, he did postdoctoral work in enzyme chemistry at the Kaiser-Wilhelm Institute, Heidelberg, as a National Research Council Fellow. Upon his return to the United States in 1932, he rejoined Cornell as an Instructor of Biochemistry, becoming Assistant Professor in 1936 and Associate Professor in 1940.

As a teacher in the classroom and laboratory, Dr. Hand was known for his clear and well-prepared lectures. His command of the field of Biochemistry stimulated and inspired his students. During this time, he became increasingly interested in the application of chemistry to the study and improvement of foods, particularly dairy products. In 1942, he became Technical Director for Sheffield Farms, Inc., a position he held for five years. He was elected to the Board of Directors of Sealtest, Inc.

His appointment as Professor of Biochemistry and head of the Department of Food Science and Technology, Geneva, came in 1947. He continued as department head until December 31, 1966 and retired in December 1967 after 39 years association with Cornell. During his 20 years as head of the Department of Food Science and Technology, he helped guide that department to a position of strength and depth in food research. Highlighting his tenure as department chairman, was the construction of the Food Research Laboratory in 1960 housing laboratories, offices and support services for twenty faculty. It was equipped with the most advanced scientific instrumentation and featured an outstanding fruit and vegetable processing pilot plant.

Dr. Hand had an abiding interest in the use of food technology to improve nutrition in America and in developing countries. He served as a member of the Food and Nutrition Board of the National Research Council, a member of the Advisory Committee on Research of the Food and Drug Administration, and a member of the Council

on Foods and Nutrition of the American Medical Association. He was a consultant to the Interdepartmental Committee on Nutrition for National Development of the U.S. Public Health Service and engaged in nutrition surveys in Iran, Pakistan, and Lebanon. He was a member of the Technical Advisory Committee of the Institute for Nutrition for Central America and Panama and the Pan American Health Organization. In 1953, he spent six months in Taiwan as a food-processing specialist for the U.S. Agency for International Development. He designed the food technology program for the Cornell University of the Philippines collaborative program in Los Banos in the 1960s.

Much of his extracurricular activity, all of his sabbatic leaves, and a large share of his working time and talents were devoted to establishing the importance of food technology to human nutrition and to the economic progress of non-industrial nations. His keen, penetrating mind, coupled with a warm and generous personality, made him a successful ambassador in carrying this idea from the American food technologists to those in other lands. At the same time, he impressed American nutritionists, biochemists, and government officials with the role that food technology can play in the progress of developing nations at a time when international outreach activities were not assigned the high priority they enjoy today.

Dr. Hand strongly believed in the importance of international exchange of knowledge and backed that belief by inviting visiting professors, postdoctoral fellows, and graduate students from other lands to serve temporary appointments on the staff at Geneva. At the same time, he encouraged his own faculty to participate in international professional activities. This philosophy is still evident in the Geneva Food Science and Technology Department where there is always a large number of visiting scientists and graduate students from other lands. His effectiveness in generating international interests among his faculty is attested to by the fact that four faculty (Hand, Kertesz, Steinkraus and Bourne) have received the prestigious Institute of Food Technologists International Award. No other institution can match this number of awardees.

Dr. Hand's research was directed toward the processing and nutritive value of plant proteins including soybean protein, measurement of food quality, and use of food additives. He had more than 80 publications. His research combined both basic and applied aspects of food science and technology and made him well known and respected by both the scientific and industrial communities. His work was acknowledged by two prestigious awards from the Institute of Food Technologists. In 1970, he received the International Award for international exchange and ideas in food technology, and in 1977, he received the Babcock-Hart Award for significant contributions to food technology resulting in improved public health through some aspect of nutrition.

He foresaw the importance of soybeans as an economic resource of high grade protein and that the objectionable flavor of foods such as soymilk was a major barrier to its widespread acceptance. His keen interest in this work was spurred by his first-hand knowledge of the world protein deficit and his conviction that food technology research must play a major role in the battle for Freedom from Hunger. Under his leadership, a group of scientists in his department studied this problem and discovered that the terrible flavor was caused by the enzyme lipoxygenase. They worked out a commercial process to manufacture soy-based food free from this bad flavor. This process and spin-offs from it are now used worldwide. As a result, the consumption of soy-based foods has sky rocketed.

As a scientist and humanitarian, he firmly believed that education and rational thinking could resolve most of the world's problems. In a radio talk in November 1966, he said:

“Through education, man learns to seek out the evidence, sift facts from fantasies, and weigh the alternatives. Rational thinking is a vital necessity in times of crises. Never before in history has there been a greater need for the application of reason. Rational thinking leads to self-confidence and peace of mind. The educated man is not disturbed by controversies nor is he upset by imaginary dangers. Mankind can build a better world if he can develop the power of reason through education.”

Professor Hand was a member of a number of societies including the American Chemical Society, Institute of Food Technologists, which made him a Fellow in 1970, Society of Biological Chemists, and American Institute of Nutrition. He was elected a member of two honorary scientific societies, Phi Kappa Phi and Sigma Xi.

Dave Hand was a strong department head. He not only guided the individual faculty members, but he was able to fight for the rights of the department in his contacts with the Dean, the Director, and other members of the Cornell Administration. He and his wife, Eleanor, had frequent social evenings in their home that developed a friendliness and camaraderie among the faculty and led to a high degree of “team” research which contributed to a high degree of productivity in the department.

David Hand married Eleanor Foote in 1929. They had two children; Clifford Hand of Tuscaloosa, Alabama and Sylvia Pott of South Orleans, Massachusetts; and six grandchildren. Eleanor died in 1996, ending a marriage that lasted 67 years.

An active sportsman, Dave Hand excelled at tennis as a young man winning many trophies. As he grew older, he devoted his athletic skills to sailing and golfing. After his retirement, he and Eleanor moved to Annapolis, Maryland and purchased a 30-foot sailboat, which they used frequently.

Professor Hand was a consummate gentleman whose high expectations for himself extended to others as reflected in his tactful but firm leadership of the Food Science and Technology Department. For those of us who worked with him, he was a mentor and a friend. The Food Science and Technology Department at the New York State Agricultural Experiment Station is a lasting tribute to his vision and leadership.

Donald Barton, John Stamer, Malcolm Bourne

George Raymond Hanselman

January 5, 1901 — January 1, 1993

George Raymond Hanselman was associated with Cornell for just over fifty years and lived in the Ithaca area for seventy-five years. He was born in Dunkirk in 1901 and graduated from high school in 1918. He moved to Ithaca for the rest of his life. He died in 1993 following a prolonged illness. He was survived by his wife of 69 years, Hazel M. Hanselman. There were no children.

From high school he entered the Sibley School of Mechanical Engineering and received the degree of mechanical engineer in 1922. During academic vacations, he gained practical experience at the American Locomotive Company, the Goodyear Tire and Rubber Company, and the American Creosoting Company. The first-named company gave him a total of 9 months in drafting, checking, assembly, etc., the second a training in the company's proceedings, and the third six weeks operation of retorts. Following graduation, although it is said that he declared that he did not intend to make teaching a life-time profession, he did accept an offer of a position as instructor in the Department of Engineering Drawing in the Sibley School. Here we recognize that seventy years ago, engineering drawing was a very important branch of mechanical engineering. This factor, together with his exposure to steam engines, automobile tires, and tar, may have led him to consider an academic career. This was fortunate for Sibley, as shown by his distinguished service in the years to come.

In 1931 George was made instructor of administrative engineering. Here he could start to build his lifetime career and prepare for it by studying business law, accounting, and factory cost control. He studied law assiduously in order to teach business law and with that as his minor subject and accounting as his major subject, he gained a master's degree in 1936. At the same time, he was promoted to assistant professor of administrative engineering. He wrote *Cases on Business Law* (1934 and 1935) and, with J.R. Bangs, *Principles of Accounting* and a problem book (1941).

As if to make up for the lengthy initial period of instructor of engineering drawing and because of his resolute studying for teaching business law and engineering accounting, he was promoted to associate professor in 1941 and to professor of administrative engineering in 1945.

At war's end in 1945, there was a time of confusion engendered by the rapid demobilization of the armed forces and the re-establishment of the system of past years. He was made the first assistant director of Sibley. He had shown the capability for administration in the sorting out of the post-war growth of admissions, of veteran's problems,

of counseling of individual students, of record keeping, of pre-registration, etc. Typically, he would seldom make a quick decision of any magnitude but would take his time to work all around a problem before establishing a satisfactory solution—he had seen too many ill-considered effects on others. Not long after being made assistant director of Sibley, he braved this opening answer to the office of the dean of the College of Engineering: “You have repeatedly asked me for specific recommendations as to the re-organization of the office of the School of Mechanical Engineering. I have given this matter a great deal of consideration and am now ready to report”. There followed two pages of tightly-spaced administrative recommendations. His appointment was changed to professor of mechanical engineering in 1949.

A new five-year undergraduate program was introduced in 1946 with quite a different curriculum and this raised some scheduling difficulties because of its concurrence with students returning to complete their baccalaureate. There were choices and restrictions, a four-year curriculum and a five-year curriculum, and several points-of-entry. As the *College Announcements* of those times quoted optimistically, “such minor modifications have become necessary”. George was invaluable in the difficult task of reorganizing the administration of mechanical engineering to accommodate these problems.

George had about a score of years from his assistant directorship in 1946 to his nominal retirement in 1967, nominal because the dean requested that he remain for some part-time work, which he did for another three years. In that twenty years, he was able to develop and refine his ideas, his own as well as those which were thrust upon him. Engineering education changed from being mostly one of tutelage and representation to one of systematic analysis and exploration. The teaching of accounting grew less important as the years passed by. The subject matter had simply worn down and what remained was absorbed by others for their own special uses. Professor Hanselman, however, was in considerable demand across the campus for his knowledge and experience in scheduling and for his willingness to share them. For many years he coordinated the scheduling requirements of the College as chairman of the Engineering Scheduling Committee and also served as chairman of the University Faculty Committee on Registration and Schedules. Other University committees on which he served were those of the Faculty on Student Activities and on the Scheduling of Public Events. He also served as chairman of the College Faculty Committee on New York State Community Colleges and Technical Institutes, and was a member of the Joint Faculty Committee on Agricultural Engineering. In the early 1960s several changes within the College of Engineering were made that increased greatly the value to the Sibley School of George’s detailed knowledge of the operation of the various units within the University. In 1961, a Division of Basic Studies was set up within the College of Engineering.

This division effectively removed the first two years from the control of the individual schools and departments. Then in 1962 the Department of Industrial and Engineering Administration within the Sibley School of Mechanical Engineering became the Independent Department of Industrial Engineering and Administration in the College. Finally, in 1965 the five-year bachelor's degree program was eliminated and all programs had to be restructured to fit into four years.

Professor Hanselman was a member of the Atmos Society, Kappa Tau Chi, Pi Kappa Phi, the Cornell Society of Engineers, the American Accounting Association, the National Association of Cost Accountants, and the American Society for Engineering Education.

Yes, George Hanselman did indulge in some recreation but one finds that much of it was given to its literal meaning, re-creation as help for others. He was a Rotary Club member and held the position of the director in charge of work for crippled children and was active in making arrangements to bring Cornell dramatic productions to the infantile paralysis center. He served from 1955 to 1979 with the Cayuga Heights Volunteer Fire Department and the Fire Police, with many valuable volunteer actions for which he was recognized. For outside hobbies, he played golf regularly and grew fine flowers, but perhaps he would say his favorite pastime was attracting the birds and the small animals to his garden. Where many gardeners try to discourage the squirrels from eating the bird seed, George tried to get them eating from his hand and he made friends with a pair of raccoons.

He was always to be seen at the annual alumni reunions up to the time his health would no longer allow him. He knew many alumni and they knew him and appreciated his help in their student days.

Professor Emeritus George was the right man at the right time: self-assured but not self-opinionated; self-relied but not self-serving. Well did he serve his School. Well did he serve his College. Well did he serve his University.

Bart Conta, Richard M. Phelan, Dennis G. Shepherd

John Hartell

January 30, 1902 — October 12, 1995

John Hartell, an artist and teacher of artists and architects for forty years, died of congestive heart failure at his Ithaca home on Thursday, October 12, 1995. He was 93. Born in Brooklyn in 1902, he was the beloved husband for 67 years of Sylvia Muller Hartell.

In addition to his wife, he is survived by his daughters: Mari Hartell Quint of Baltimore, and Karin Hartell Cattarulla of Dallas; and grandsons, John Cattarulla of New York City, and Matthew Quint of Washington, DC.

Professor Hartell had a distinguished association with Cornell for over half a century which began in 1920 when he enrolled as an architecture student. His drawings were published in the *Cornell Widow* and he received a Bachelor of Architecture degree in 1925. In 1926, he was awarded the prestigious American-Scandinavian Foundation fellowship for graduate work in architecture at the Royal Academy of Fine Arts, Stockholm. He subsequently taught architecture at Clemson University and the University of Illinois and spent two summers as a fellow at MacDowell Colony in New Hampshire.

In the mid-twenties, he also worked as a draftsman and designer in various New York City architectural firms and later worked on buildings for the 1939 New York World's Fair. He designed or remodeled several residences in Ithaca.

Professor Hartell joined the faculty of Architecture at Cornell in 1930 and served as a first-year architecture design critic, a position he held for the next thirty-eight years. In 1940, he was appointed Professor of Art and served as the Chairman of the Department of Art from 1939 through 1959. He directed the graduate program in fine arts for ten years, until his retirement. In 1968, he was designated Professor of Architecture and Art Emeritus.

In 1982, the College of Architecture, Art and Planning and many friends, colleagues, and former students honored him by naming the John Hartell Gallery in Sibley Hall.

As Chairman of the Art Department, John carried on the enlightened pedagogic concepts of his predecessor, Olaf Brauner. He hired practicing artists as teachers, provided them with private studios, gave them carte blanche freedom to pursue their own aesthetic goals, and assigned them schedules that allowed for a sensible balance of time for teaching and creative work. He taught a design class for freshmen architects and conducted a seminar for graduate art students that became a model of professional skill. For his students, he maintained his own high

standards of quality, yet dealt with them in a tactful and sensitive way that brought out the best in them. Many of his charges moved on to distinguished careers as artists and professors.

While carrying on his academic duties, John found time and energy for a successful career as a painter. Starting in 1943, he produced fifteen, one-man exhibitions for the Kraushaur Galleries, one of the long established and most respected galleries in New York City. He participated in important national group shows at major American museums such as the Whitney Museum, the Metropolitan Museum, and the Chicago Art Institute. And in addition, he held one-man shows at other museums and university galleries.

Upon his retirement in 1968, he began a second career as a full-time painter and soon produced some of his best pictures. Working in his home studio, he created large and small scale works for which he designed and built frames that became part of a typically well-crafted ensemble.

John's painting was founded on the great formal and tactile tradition of Western art. His primary creative passion was the love of color and he used that element in a highly individual way. Starting out with carefully planned color programs that ran a wide gamut of tonal possibilities, he developed subtle nuances of color that sometimes dared to stretch the relationships to unusual limits of sweet or sour dissonance. He employed the conventional content of European painting, still life, figure and landscape and brought to these subjects his own poetic vision.

During an era of radical changes in the art world, he maintained his sense of serene independence, combining in his work the classic vertical and horizontal structure that derived from his architectural training with his own sensuous and romantic bent. This conjunction of seeming opposites gave his work a special character, and while he was well aware of significant currents in contemporary art, he incorporated them into his own style and in the process, produced a body of important 20th century painting.

Kenneth Evett, Norman Daly, Jack Squier

John Daniel Hartman

August 21, 1909 — June 1, 1993

A man who thrived on controversial issues. Professor John Daniel Hartman will be remembered by colleagues and friends for his dedication and the countless hours he spent researching, substantiating and writing lengthy reports in support of his beliefs and convictions regarding university and public issues.

John was born in Orwigsburg, Pennsylvania. He graduated with a B.S. degree from the Pennsylvania State College University in February, 1930. He took great pride in the fact that he attained the highest grade point average at the college for five of the seven semesters he was in residence. John's humble nature would not allow this fact to be expressed with qualification, "of course at that time there were only 4,500 students on campus". He completed his M.S. and Ph.D. degrees at Cornell in 1931 and 1933 respectively.

Upon completion of his degrees at Cornell he accepted a position at Purdue University and remained at Purdue for eleven years, attaining the rank of full professor. In 1948, John returned to Cornell as professor of vegetable crops.

His major research activity for 20 years centered around research on vegetable handling and marketing. His special interest was the objective measurement of color, texture and flavor of vegetables and the correlation of those measurements with the subjective evaluation of quality as perceived by the consumer. Color and texture was measured by adapting devices used in other scientific areas but flavor was an elusive factor. Many of the volatile compounds contributing to flavor are joined only after the cell membranes are damaged. However John and his graduate students demonstrated that their ephemeral compounds could be identified with suitably sensitized microelectrodes.

At Cornell he taught a course in post-harvest handling and quality grading and measurement with vegetables for 20 years. During his career he served as chairman of special committees of approximately 30 graduate students, seventeen of which were awarded Ph.D.'s.

His research at Purdue and Cornell resulted in more than 50 technical, scientific papers and a number of experiment station bulletins.

The decade of the sixties saw John actively involved with Cornell issues and the list of activities which directly or indirectly resulted in major legislative changes at Cornell is indeed an enviable one.

In 1965, as a member of an Ad Hoc Graduate School committee, he produced an extensive analysis (45,000 word discussion) of the then current status of the general foreign language requirements for the Ph.D. at Cornell, and a survey of some of the practices associated with the administration of these requirements. The study formed the basis for an informational campaign which culminated in 1966 in Graduate Faculty Legislation which abolished the general requirements for most departments.

A 27 page, 14,000 word document provided the rationale for a change of faculty government at Cornell. John tediously held to his view and campaigned diligently with a small group of faculty who shared his viewpoint. Their efforts resulted in the formation of the Faculty Council of Representatives.

When impending faculty action threatened the fraternity/sorority system at Cornell, John, although not a fraternity alumnus, took up the cause. The campaign was successful, most fraternities and sororities at Cornell were not forced to give up their national affiliation.

In the late sixties the military, and in particular ROTC, was not a welcome sight on campuses. Faculty resentment threatened the abolishment of ROTC on the Cornell campus. John again donned his Don Quixote armor and took up the crusade. Once again the effort was successful and ROTC remains a viable and active part of the University.

In his retirement years, John continued his quest for answers to controversial issues. He traveled from the east to the west coast in an attempt to document the need and value of solar radiation as an alternative to fossil fuels. Laetrile, a controversial drug proposed as a cure for cancer, intrigued John. His curiosity took him to the southwest and Mexico seeking answers regarding this "miracle cancer drug."

The combination of being a prolific reader, an individual interested in the philosophy of authorities in other fields, a master of detail and a prolific writer resulted in a personal library of over 500 books in which John took great pride.

John held membership in the honorary societies of the Sigma Xi, Phi Kappa Phi, and Gamma Sigma Delta, Sigma Phi Sigma, Potato Association of America, American Society of Plant Physiologists, Institute of Food Technologists, American Statistical Association, and American Association of University Professors. John was also very active in the Rotary Club.

John was active in an organization involved in vegetable crop production. For years he held office in one of the vegetable, or potato marketing advisory committees for the northeast region of the U.S. During this same period he was active in affairs of the American Society for Horticultural Science.

He was elected a Fellow of the American Association for the Advancement of Science, and a Fellow of the American Society for Horticultural Science.

William C. Kelly, Roger F. Sandsted, Leonard D. Topoleski

Harry George Henn

October 8, 1919 — October 11, 1994

Harry G. Henn, the Edward Cornell Professor of Law Emeritus, died of a blood disorder in Jacksonville, Florida, at the age of 75. His home since retirement had been in Naples, Florida.

A popular teacher and a productive legal scholar, Harry Henn was a nationally recognized authority in two important fields of law: corporate and copyright law. His books, articles, and teaching materials on corporations, agencies, and partnerships were widely used by law teachers and students as well as by practicing lawyers throughout the country. In 1963, he published his basic text on corporate law, the third and current edition of which was co-authored by John R. Alexander, a former student of Harry's. For many years, Harry contributed commentaries on the New York Business Corporation Law and served as a research and drafting consultant when that legislation was revised in 1963. He was co-author, again with John Alexander, of the Bureau of National Affairs Portfolio on New York corporations and acted as a consultant to the American Law Foundation on issues related to the Model Business Corporation Act.

Harry was also a leading figure in the field of copyright law and was highly respected as an expert in both American and international copyright matters. He was president of the Copyright Society of the U.S.A. and was a member of the Internationale Gesellschaft für Urheberrecht EV, and the Association Littéraire et Artistique Internationale (ALAI). He served as consultant to the Library of Congress in connection with the Universal Copyright Convention and the Copyright Revision Act of 1976 and contributed articles on copyright law to the Encyclopedia Britannica. His *Copyright Law—A Practitioner's Guide*, published by the Practising Law Institute, was widely used and relied on by copyright lawyers through the country. In 1986, he received the annual award of the Copyright Society for his contributions and leadership in the field.

Active in the work of the organized Bar, Harry's professional memberships included the American Bar Association, New York State Bar Association, Association of the Bar of the City of New York, New York County Lawyers Association, Westchester County Bar Association, and Tompkins County Bar Association.

Born in New Rochelle, New York, Harry retained a strong attachment to his hometown. He attended New York University at University Heights, graduating *summa cum laude* in political science in 1941. He was elected to Phi Beta Kappa.

Harry pursued his legal education at Cornell, earning his LL.B. degree in 1943. He served as Editor-in-Chief of the *Cornell Law Quarterly*, was elected to the Order of the Coif, and graduated first in his class, with distinction.

Following law school, Harry became associated with the New York City firm of Whitman, Ransom and Coulson, whose clients included many publishers with copyright, trademark, libel, and corporate law problems. Meanwhile, he pursued graduate study in law at New York University, earning the degree of Doctor of Juridical Science.

Harry returned to Cornell as an Assistant Professor of Law in 1953. At the time of his retirement in 1985, he was the Edward Cornell Professor of Law, the first occupant of that Chair to which he was named in 1970. During his Cornell years, he also taught as a Visiting Professor of Law at Hastings College of Law, the University of California and New York University.

Harry was an individual with a broad range of diverse interests. At Cornell, he participated actively in campus affairs chairing the University Faculty Committee on Music, serving on the Cornell Library Board, and the Board of Directors of the *Cornell Daily Sun*, including a term as president. In the larger Ithaca community, he was president of the Ithaca Opera Association, and for seven years he was Acting Village Justice of Cayuga Heights.

Two of Harry's main outside interests were foreign travel and birding. A prominent feature in Harry's apartment was a wall map of the world whereon the places he visited were marked by pins and the routes taken to get to them lined by red ribbon. It is hard to believe that there were places worth visiting that he had not taken in, or that there was an ocean-going tour or safari across land in search of bird sightings that he had not accompanied. Memorabilia acquired from these expeditions filled his apartment to nearly overflowing, leaving little room for his excellent collection of bird books.

Harry's sense of humor was one of the most memorable personal qualities for which he will long be remembered. He enjoyed people, loved to entertain friends and students in his home, and enriched any conversation whether in a one-on-one or group situation. Harry was a prodigious worker and he held himself to the same high standard of performance he expected of others.

Harry is survived by his brother, Robert A. Henn of New Bern, North Carolina; a nephew; two nieces; and four great-nephews. A service in memory of Harry was held on October 29, 1994 at the Larchmont Avenue Presbyterian Church in Larchmont, New York. On November 4, 1994, a group of Harry's associates and friends drawn from both the Law School and Ithaca communities gathered in the faculty lounge in Myron Taylor Hall to commemorate his life.

Barbour Lawson (B.L.) Herrington

June 12, 1904 — February 6, 1998

B.L. Herrington was born in Akron, Ohio and lived there until 1911. After the death of his father, the family moved to a ranch located on a remote bench above the Salmon River, Idaho. The house burned during the winter 1915-16. The family finished the winter in Kendrick, Idaho where B.L. picked coal along the railroad tracks to help out. They moved to St. Mary's, West Virginia. There, B.L. graduated in absentia from high school in 1922, having already entered Montana State College in 1921 as a student of chemical engineering. He earned a B.S. degree in 1925, and worked for three years as an assistant chemist in the Montana State Experiment Station. B.L. entered graduate school at Cornell in 1928 completing his Ph.D. degree in February of 1933, with a major in Dairy Chemistry under Dr. P.F. Sharp, and minors in Physical Chemistry under T.R. Briggs, and in Biochemistry under Dr. James B. Sumner. He had gradually assumed a major teaching load in the Department of Dairy Industry and was offered a permanent position upon graduation. He became Professor of Dairy Chemistry in 1936, and held that post until his retirement.

During the summer of 1935, B.L. developed a commercial method for isolating pure riboflavin from milk. The product was marketed until a method to synthesize the vitamin became more economical. He later (1944) devised a commercial method for the production of lactose.

Professor Herrington was an excellent teacher. Many alumni of CALS remember "Dairy 1," a course he taught for 17 years, often both terms. In 1948, he published a textbook for this course entitled, *Milk and Milk Processing*. This book was also used at several other universities. In his graduate level course in food analysis, he stressed mastery of the basics while introducing the latest in laboratory technology. His office was always open to students, and weekly he would clear a patch on that great long table for a "brown bag" informal seminar open to all. He fostered intellectual curiosity, willingness to try new approaches, and critical judgement or research data. He encouraged –nay– expected students to explore and excel.

In 1945, B.L. developed a teaching program in the field of Food Science. He developed the curriculum, including four new courses (two of which he taught himself), advised all students in the curriculum, and aided the placement of graduates.

In July 1964, B.L. accepted a three-year appointment in the Cornell program at the Philippine College of Agriculture at Los Banos, where he taught chemistry until he retired.

Herrington published on a variety of subjects in dairy science. He wrote a series of papers on lactose and another series on lipase in milk. Both were well regarded. Indirectly he contributed a great deal to research by serving as an unpaid consultant and advisor to faculty members and graduate students in animal and food sciences, microbiology, and nutrition. Much of his research was of an interdisciplinary nature. For example, he built a machine to milk guinea pigs, demonstrated its usefulness and persuaded others that we should know more about the natural food of guinea pigs before using them as test animals in nutrition studies. In 1948, the American Chemical Society presented him with the Borden Award for his contributions to dairy chemistry.

Professor Herrington was active in the development of the College of Agriculture and of Cornell University. Committees on which he served include: University Library Board, Mann Library Committee, Improvement of Instruction in Freshman English, Freshman Mathematics, Admission and Counseling (School of Nutrition), Field Representative (Food Science), and Field Representative (Dairy Science). He participated in the establishment of the Division of Biological Sciences.

Even after his retirement, B.L. continued to contribute to education. For fifteen years, he taught remedial math to fifth grade students in Rio Rancho, New Mexico.

John Sherbon, William Shipe

Oliver H. Hewitt

May 21, 1916 — January 27, 1999

To encapsulate the numerous and varied contributions of this enormously popular, energetic and productive Professor of Wildlife Management through his 50 years of exemplary service to Cornell, is challenging. His career developed in two distinct segments: 22 whirlwind years in teaching and research, ending in early retirement in 1971 at age 55; followed by 27 years as Emeritus Professor residing on Florida's southwestern coast, where he taught "Fundamentals of Ornithology," his wildlife specialization, to all interested persons, including alumni through Cornell's Adult University (CAU) programs. Also much involved with others to conserve this area's rich bird life, he sparred often with developers, striving to save fragments of critical habitat.

Oliver H. Hewitt was a native Canadian, born at Blind River, Ontario, later naturalized a U.S. citizen. He received a B.A. degree from McMaster University at Hamilton, Ontario, in 1939, having majored in Zoology and Chemistry. That year he also matriculated in a Master's program in Vertebrate Zoology at Cornell with Arthur A. Allen, "America's First Professor of Ornithology." Following award of the M.S. degree in 1941, Ollie Hewitt continued with Allen for the Ph.D. degree, pursuing interests in waterfowl ecology, and receiving the degree in 1944. Dr. Hewitt then joined Canada's new Dominion Wildlife Service, starting in enforcement as a Migratory Bird Officer. After World War II, changes at Cornell included formation of a Department of Conservation in 1948. Based in the College of Agriculture, it brought together in Fernow Hall scattered positions including vertebrate specialists from Zoology, a fishery biologist from Entomology, and several foresters from a former Department of Forestry. Arthur Allen's Laboratory of Ornithology was already present in the building. His diverse accomplishments had included working with other national leaders such as Aldo Leopold, to establish the new discipline of Wildlife Management. When Oliver Hewitt started his Master's program, Dr. Allen had just completed a year as second President of the Wildlife Society, which he had helped to form.

When Oliver Hewitt accepted one of the new faculty lines in Conservation in 1948-49, he became Cornell's first Professor of Wildlife Management, joining an academic community notably advanced in the incipient field. Ollie already possessed a thorough familiarity with Allen's wildlife program; he had instructed in the courses, knew field study sites, was acquainted with most of his faculty colleagues, and even knew many of the New York conservation agency staff with whom he would be working. These advantages boosted him into high productivity from the start. His strong personal traits combined admirably to facilitate his immediate and sustained success in teaching and

mentoring roles with both undergraduate and graduate students, and interactions with his professional colleagues. Essentially, he exuded a wonderful good humor, always cheerful, positive, and enthusiastic. As his students still comment, it simply was fun to be with Ollie, and often exciting, too, for he was always exploring new challenges in imaginative ways. These are especially well illustrated by the new research methodologies he developed, including census methods and techniques for animal capture and handling.

Dr. Gustav A. Swanson was the head of Cornell's Conservation Department for 18 years (1948-66). He and Ollie collaborated on a number of projects, including a seven-year stint as lead editors of the *Journal of Wildlife Management*. Gus assumed the editorship in 1949, and proceeded without assistance until 1951, when he persuaded Ollie to become Associate Editor to help with editing and proof reading. The *Journal* grew and prospered under this management. In mid-1953, Ollie took over as Editor at the young age of 37. While he had three associate editors, all at other locations, Ollie continued to introduce valued innovations, and reported enjoying particularly the numerous associations it brought with authors and other members. He retired from the editorship in 1956, but later served The Wildlife Society as Vice President in 1958-59.

From 1961-67, Ollie Hewitt functioned as Assistant Leader in the new federal Cooperative Wildlife Research Unit at Cornell, which directed special assistance to graduate education. In 1965, he and Cornell animal nutritionist, J. Thomas Reid, became co-directors of a two-year study comparing cattle and gazelle as human food sources in Kenya. A sabbatical leave following in 1967-68, allowed Ollie to spend a year in Africa consulting on wildlife problems and teaching a post graduate honors course in wildlife management at the University of Pretoria. Professor Hewitt's first book, *The Wild Turkey and Its Management*, a 589-page tome for which he was sole editor, was published in 1965 by The Wildlife Society and was remarkably successful. Its appearance was coincident with the extensive natural restoration of turkey habitat accompanying regeneration of our Eastern forests on lands released from farming. The ensuing restoration of the wild turkey in America stands as one of the most significant wildlife success stories of our time.

Also in 1965, concerned for the poor opportunities undergraduate students then had for studying marine biology in a field setting, Professor Hewitt joined with five other Cornell professors to plan a summer course at the Isles of Shoals in the Gulf of Maine. Dr. Hewitt's role is now permanently remembered on a bronze plaque in Founders Hall at Cornell's internationally recognized Shoals Marine Laboratory, which grew from these small beginnings. In the early years, evenings on an otherwise uninhabited island ten miles offshore were enlivened by Ollie's stories about his own youthful experiences as a conservation officer, bringing government by small boat to the isolated

coastal villages of the Canadian northeast. The theme of these stories involved how to cope successfully with wildlife problems and difficult political, social, and personal conditions of these tiny, isolated, marine-dependent communities. Ollie's formal lectures and informal stories resonated deeply among 30 students embraced by the rumbling sound of the restless sea.

That first year, anticipating the need for students to observe different species of nesting marine birds on other islands, Ollie Hewitt—fearless by nature and impervious to rigid academic bureaucracy—persuaded his dean to provide a budget of \$200 for that purpose. With it, he obtained a sixteen foot, homemade, wooden boat at Rye, New Hampshire, then ran it solo over ten miles of open ocean to Star Island. These characteristics, and that action, made Ollie Hewitt an instant hero to the students—but also enabled him to demonstrate the nests that established new breeding records in North America for two species of marine birds. With the exception of one absence while in Africa, Ollie Hewitt continued teaching summers at the Shoals until tragic events overtook him.

Early in 1971, Oliver Hewitt's beloved wife, Jean, succumbed to a brain tumor after an extended illness. To the great surprise of many, Ollie retired that August, and soon left Ithaca. The Cornell Board of Trustees named him Professor Emeritus at their October meeting. Abruptly, the significant presence of both Ollie's family and his professional role on campus had ended. For 22 years, the Hewitts—Ollie, Jean, and daughters Eleanor, Nancy, and Virginia—until this tragedy, had maintained a special brand of hospitality for visitors at their home, from entering freshmen to distinguished international scholars.

In his brief academic career of 22 years, Ollie directed 38 advanced degree candidates, wrote more than fifty journal articles, and served annually some 20 to 25 undergraduate advisees, and numerous others who sought his sage counsel.

In 1972, Ollie married a family friend of long standing. He and Martha Hewitt enjoyed a new life together at Port Charlotte, Florida, on the West Coast. The presence there of Professor Perry W. Gilbert, a fellow graduate student of Ollie's and another of the six founders of the Shoals Lab, probably influenced that move.

The following 27 years of Ollie's life constituted a virtual continuation of his academic career, changed only in context from formal classroom to informal adult education. What Ollie undertook primarily as a volunteer for almost three decades, represents a shining example of a regional extension-wildlife specialist's program in ornithology, for it involved a newspaper column and collaboration with professionals in organizations such as local Audubon groups and the Florida Division of Wildlife. Also, he wrote the basic text for this audience, entitled,

Field Book of Birds of the Florida Suncoast, his second book; it appeared in 1976. Professor Perry Gilbert has commented that, despite the geographic restriction in its title, this book serves the entire peninsula well.

In Florida, Dr. Hewitt continued an active correspondence with many of the students he had mentored at Cornell. In addition, he remained directly connected to the university in several other important ways. He was much in demand as speaker at alumni gatherings, and he joined with Professor Emeritus Richard B. Fischer to conduct CAU programs in the Everglades. Ollie's longest and strongest Cornell ties, however, remained with the Library of Natural Sounds at the Laboratory of Ornithology. With constant resolve, Ollie pursued and recorded songs of rare and unusual bird species in the wild, demonstrating special efforts that won him high acclaim. Library Director Greg Budney regarded Ollie's annual trips north to deliver his recordings of inestimable academic and commercial value, as a high point in the Library's year!

Throughout his life, Oliver H. Hewitt's relationships with students and the public embodied the ultimate in personal consideration and helpfulness. In Florida, he was also effective as an activist, employing strategies to confront, contest, and educate developers whose actions threatened special habitats in this region of extremely rapid development. Testimony to these characteristics poured forth from his citizen-clientele at a memorial service following his death in Florida. More quietly, perhaps, Oliver Hewitt's impact on individuals will be genuinely lasting, as his inspiration and knowledge are passed along from one generation to the next, and the many teachers who once listened intently and walked with him in the field, strive to emulate his enthusiastic, caring, helpful, and effective approaches to education and to life.

John M. Kingsbury, Milo E. Richmond, Harlan Brumsted

James Lynn Hoard

December 28, 1905 — April 10, 1993

James Lynn Hoard, or Lynn as he was known to his many friends and colleagues, was a central figure on the faculty of Cornell's Chemistry Department for 35 years before his formal retirement in 1971. For more than a decade, in the ensuing years, he continued his distinguished career in structural crystallography, appearing daily at his office immersed in the painstaking scholarship that was characteristic of his entire career.

The sixth of seven children, Hoard was born on a family farm in Beckham County in the Oklahoma Territory. He was five when his family moved to Seattle, Washington where he spent his formative years. He studied the piano and for a number of years considered undertaking a career in classical music and interrupted his undergraduate studies for a year of music study. He was blessed with a remarkable memory and a strong sense of enquiry that eventually led to a lifetime of scholarship.

In 1927, Hoard was graduated from the University of Washington *magna cum laude* in chemical engineering. He was also awarded Phi Beta Kappa, the first chemical engineering student at that institution to be so honored. He continued at the University of Washington, earning a Master's degree in chemistry in 1929. He then went on to graduate work at the California Institute of Technology. This institution was rapidly rising as a major world center in science and it was there that he met and worked with Linus Pauling, forming a lifelong friendship. Pauling, reflecting on those early days with Hoard, wrote: "One memory I have of him, from several occasions, is the following. He would have learned about something surprising that had been discovered in the field of science, perhaps just told to him by me. He would stand for some minutes with a look on his face that suggested strongly to me his feeling of surprise and pleasure about the new discovery—his mouth held somewhat open and his eyes seeming to flash with pleasure."

Following Pauling, Lynn Hoard became one of the early pioneers in the application of x-ray diffraction techniques to the determination of crystal and molecular structures. In those days, the challenge of truly arduous calculations required both determination and structural insight of the investigator. In the midst of the Great Depression, Hoard brought his newly acquired skills to Stanford University where he served as an instructor for three years. After a brief term at Ohio State University, he joined Cornell in 1936.

It was characteristic of Hoard's approach to science that he did not—indeed, by nature, could not—turn away from difficult or seemingly intractable problems. His determination and self-confidence led him to pursue them

relentlessly even if it took a decade of effort. Thus, at Cornell, he undertook the study of the element boron and its binary compounds. The structures of these systems are among the most complicated in the Periodic Table. His initial achievement was the landmark structure of boron carbide which established the icosahedron as the basic building block of boron and borides. Later structures of the element itself and related systems led to an authoritative treatise in 1965 that stands today as a primary reference in the field.

In another area, Hoard's work in the structural chemistry of discrete coordination compounds comprises a touchstone for other investigators. His analyses, from the first report of a seven-coordinate complex through pioneering studies of eight-, nine-, and ten-coordinate complexes, have been marked by a singularly comprehensive view of the field.

This is particularly evident in his enunciation of stereochemical principles governing eight-coordination, an invariably cited standard. He also produced an extensive series of papers on coordination compounds of ethylenediaminetetraacetic acid (EDTA) that remain the outstanding source of carefully measured and critically evaluated structural data for these important systems. A dramatic illustration of the value of the insights developed by Hoard was his prediction and subsequent discovery of a seven-coordinate complex of iron (III), a complex that had been thought to be unrealizable.

Hoard's analyses of metalloporphyrin stereochemistry provided analytical underpinnings to a new era in the understanding of hemoproteins and their biological functions. His exacting interpretations of model compound crystal structures led him to set forth quantitative first principles as a basis for understanding such phenomena as cooperativity in the reversible oxygenation of hemoglobin. This approach led others to revise theories of biological processes and to seek and find key results in previously overlooked experimental observations.

Hoard's versatility as a scientist was evident in his work with the Manhattan Project during World War II. In addition to determining the structure of a critical compound of uranium, he conducted a large and successful project on the development of a smokeless propellant for JATO units for the Navy. He also participated in studies of diffusion mechanisms in polymeric materials.

Although he published some 115 papers, Hoard was not a facile writer. He combined faultless syntax with precision and economy of expression. Each paper became a labor of love, written and rewritten, paragraph by paragraph, sentence by sentence, clause by clause. He devoted the same attention to papers from other authors sent to him for review, sometimes spending days reforming ideas, recalculating and giving freely of his own contributions.

Editors, recognizing this, sent him more than his fair share to review. He applied the same stringent criteria to his teaching and would spend hours trying to improve the clarity of a single important concept.

Lynn Hoard loved Cornell and Ithaca and was reluctant to travel, although he frequently did so in later years. He came to Ithaca with his bride, Florence Fahey Hoard of Seattle, and raised a family of three sons, David and the twins Thomas and Laurence. In the early years, although under constant pressure from Lynn's participation in the Manhattan Project and his intense dedication to research, they nevertheless completed a major family project. They helped to design and manage the construction of a unique home which they were to share for forty-five years. Modeled along the lines of a Frank Lloyd Wright design, it has been an Ithaca landmark, graced by carefully planned and beautifully kept gardens.

Hoard's scientific contributions were widely recognized, even at the early stages of his career. In 1946, he was awarded a Guggenheim fellowship which he pursued at the California Institute of Technology. He received a second Guggenheim award in 1960 and then a very rare third fellowship in 1966. It was this third sojourn, spent largely in Cambridge, England that spurred his interest in the relationships between metalloporphyrin structures and biological mechanisms in hemoglobin.

In recognition of his great body of work in three important areas of structural chemistry, Hoard was elected to the National Academy of Sciences in 1972. This was followed in 1977 by the American Chemical Society Award for Distinguished Service in the Advancement of Inorganic Chemistry. Perhaps the most significant recognition he received was the warm esteem in which he was held by his Cornell colleagues, students and friends for more than a half-century.

W.D. Cooke, B. Widom, R.E. Hughes

Hugh Cecil Hockett

July 13, 1890 — March 22, 1989

Hugh Hockett was born in Madagascar, the eldest of three sons of missionary parents. At the age of six, he and his brother Arnold were sent to England for their schooling. When he left school he had no specific plans for the future and drifted from farm labor to horticulture. His father then arranged for him to go to Canada to learn scientific agriculture at the Ontario Agricultural College (now University of Guelph). He arrived in Canada in 1912 and the staff at Guelph recommended research in entomology, for which he was forever grateful.

When WWI broke out, Hockett joined the Canadian Expeditionary Force and was posted to the Princess Patricia Canadian Light Infantry. With practically no training, his unit tried to defend the Salient at Ypres. The unit was overrun and Hockett's right hand was smashed by a shell fragment. The hand healed to the point where he had some muscular control. Hockett rarely spoke of his injury and most people thought it was caused by some malignant form of arthritis. Both of his brothers, Arnold and Oliver, were killed in WWI.

He returned to Guelph for a B.S.A. degree in 1919 and M.A. degree in 1921 and then went to Cornell where he received a Ph.D. degree in 1923. He was appointed assistant professor at the New York Agricultural Experiment Station, Geneva, and after the end of WW II, he went to work at the Long Island Vegetable Research Farm at Riverhead.

His work was largely in economic entomology and related mostly to insects attacking vegetables. He published many well received papers. However, his fame, which extends well beyond Cornell, is based on his taxonomic studies of the family Anthomyiidae and related groups in the Diptera. These flies are of considerable economic importance. His systematic studies began in 1924 and resulted in many long papers culminating in 1965 with his monograph on the "Muscidae of Northern Canada, Alaska and Greenland". Several years later another two papers covered the California genera. His contribution in 1987 to the *Manual of Nearctic Diptera* is outstanding although most of the work was done prior to 1987.

Most of Hockett's work was done at his home, which was located directly across the highway from the Vegetable Research Farm. He visited European museums to study type specimens and usually managed to collect specimens on these trips. He loved field work and collected specimens in various localities, but mostly in New Hampshire and Maine.

Hugh Hockett was married for many years to Grace Watkins who died in 1964. There were no children. Since 1983 he lived with a niece, Mrs. Meg McCrystal of Henrietta, New York.

J.G. Franclemont, L.L. Pechuman

Note: Much of the information ON the part played by Hockett in WWI is from Dr. G.E. Shewell, Ottawa, Canada.

John Hutchins

October 15, 1909 — October 28, 1996

John Hutchins was one of the pioneer faculty members of Cornell's Samuel Curtis Johnson Graduate School of Management. Over the years, he devoted his talent and energies to the school initially called the Graduate School of Business and Public Administration ("B&PA") and to the Department of Economics. Throughout his long career at Cornell, he retained a joint appointment in the Department of Economics and was deeply involved in the affairs of that department.

John received his undergraduate degree from MIT, where he was honored with membership in Tau Beta Pi. He did his graduate work at Harvard, where he became an expert on Business History and Transportation (the latter, the fore-runner of what has evolved into the field of Business Logistics.) At Harvard, he was the recipient of the David Ames Wells Prize, the most coveted and prestigious accolade in economics graduate (Ph.D.) study, awarded annually by Harvard's Economics Department. John's dissertation was published in the "Harvard Economic Studies" series.

From 1942-45, John served as director of the Russian and East European Shipping Area of the War Shipping Administration in Washington. He was also a member of the President's Soviet Protocol Committee, of which Harry Hopkins was chairman, working to resolve a number of disputes with the Soviets. In 1945, John handled transportation for the United Nations relief for Poland and Czechoslovakia.

His book, *The American Maritime Industry and Public Policy, 1789-1914*, published by the Harvard University Press in 1941 and reprinted in 1969, is one of the outstanding works in the field of transportation economics and business history. For many years, John served as a Trustee of the Business History Foundation and as a Trustee of the Committee on Research in Economic History, Inc.

John Hutchins was a member of that group of unusual scholars that first created and then provided the backbone for Cornell's Management School over which they presided with intellectual honesty, openness, and magnanimity. Their personal and professional loyalty to the institution was legendary. Their breadth, commitment, and insight made possible the creation of the new school and its culture of civility, a culture that has survived and flourished with its tradition of the faculty "open door." Generations of students benefited from their inspiration and instruction.

John was an active participant in the fundamental decisions that created B&PA. For example, John originated and taught the required course, *Business and Government*, to the full second year class. The architecture of the first

two floors of Malott Hall was determined by John's judgment that it was important that the school have a large lecture hall. The result was Bache amphitheater — a teaching and lecture space that has served the school and the university well since its construction more than thirty years ago.

In 1960, John published a review article in the *Administrative Science Quarterly* dealing with two studies of American business education (one by the Ford Foundation and the other by the Carnegie Foundation) that together had a huge impact on the development of modern M.B.A programs. John had little quarrel with the contents or recommendations of these reports; rather, he used his article to discuss further, broad issues including the relationship between administration and entrepreneurship, and between business education and the quality of business leadership. These issues are on the agendas of leading business schools today; John's article is worthy of a careful re-reading today.

At faculty meetings of the school, John assumed his seat at the right hand of the dean. He contributed his observations and insights to discussions on every topic in his quiet and dignified way. His colleagues will never forget his comments on an applicant for a faculty position with the school's economics group. While attesting to the candidate's intellect and excellent record, John described the candidate as, "Not being cooked yet!" That phrase captured an intellectual immaturity and naiveté of the candidate — matters that would not have stood him in good stead with M.B.A. and M.P.A. graduate students.

At another level, John would take the extra steps to support the intellectual freedom of his junior colleagues. He volunteered assistance whenever it was needed.

Back in the days when the University Faculty met as a Faculty, John was a welcome and active commentator on the vital policy issues of the day. It was rare that John missed a session. His comments enriched and influenced the understanding and perceptions of this group, thus influencing the policies and direction of Cornell for over thirty years.

John Hutchins was a "Boston Brahmin" in the best sense of those words. He was consistently pleasant, optimistic, courtly, and gracious. He and his wife Leila were active creators of community and comity for the school and its faculty. All faculty newcomers to the school, were "called-on" by Leila and John. This welcome to Ithaca was unique. No matter what the circumstance—even with the Hutchins arriving to welcome a young faculty couple busily painting their living room or changing diapers—each occasion is remembered to this day with warmth and affection.

The Hutchins' lovely, livable home was frequently a site for gracious and tasteful entertainment to welcome the new arrivals to the school, to celebrate the holiday season, to signal the coming of Spring. Leila was a wonderful, friendly hostess who put everyone at ease. John's stentorian laughter (and unique bridge-play) kept guests at ease.

John's commitment to maritime matters took many forms. He was a scholar but also an avid and expert recreational sailor, an activity he shared with a multitude of guests each summer. They would put to sea from the Hutchins' summer home in York, Maine in "Blue Squawl," a yawl of some forty feet.

John Hutchins is survived by Leila, his wife; daughters, Leila Phipps and Mary Adelman; and sons, Morton, B&PA '67, and John; as well as by a dozen grandchildren: six granddaughters and six grandsons; and two great grandchildren. We all miss him.

Harold Bierman, Jr., Alan K. McAdams, Seymour Smidt

Margaret Hutchins

October 24, 1893 — February 24, 1992

Born in Palmyra, New York, Margaret Hutchins died, after a short illness, in Rochester, New York at the age of ninety-eight. She had been a member of the Cornell faculty for twenty-two years prior to her retirement. Professor Hutchins received her undergraduate education at the Rochester Mechanics Institute (now Rochester Institute of Technology). Before going to Columbia University to study for a Master's degree, she ran a dressmaking business where she could indulge her love of beautiful fabrics and her skill in clothing design. This gift never left her and to the end of her life she enjoyed beautiful colors and designs.

Professor Hutchins started her academic career as a faculty member in the Department of Home Economics at Russell Sage College in Troy, New York. Subsequently, she supervised the Home Economics program in the secondary schools of Syracuse, New York. Later she joined the New York State Department of Education as a supervisor in the statewide program of Home Economics in elementary and secondary schools.

She came to Cornell in 1935 as an Instructor of Home Economics Education in the Rural Education Department of the College of Agriculture; she also assumed responsibility for supervising the Home Economics program in the Ithaca city school system. In 1943 she was granted a Cornell Ph.D. in the field of Education with minors in Psychology and Economics of the Household. She was a member of the honorary societies of Pi Lambda Theta and Phi Kappa Phi.

In 1946 a Department of Home Economics Education was established in the College of Home Economics (now the College of Human Ecology) and Dr. Hutchins was appointed Professor and Chairman. She held this position until her retirement in 1957.

The years between 1946-57 were a time of rapid development. In addition to the programs for undergraduate preparation of teachers and extension agents, the graduate program increased considerably. Women were returning from service in World War II ready to study for an advanced degree. Foreign students were once more able to travel freely from their own countries and U.S. nationals came from many states including Hawaii.

Professor Hutchins was well inbred in the Cornell tradition and worked hard to insure that students should understand the freedom and responsibility provided at graduate level for individual program and thesis development. She was patient with those students who either were at a loss for a thesis topic or who underestimated

the magnitude of what they hoped to develop. Rarely imposing her own preference she was able to guide them to a suitable choice through friendly discussion and a realistic approach to the problem.

Students remember Margaret's interest and concern for their welfare. One student remembers her entrance interview and feeling apprehensive about her financial status. She was not only assured of an assistantship but arrangements were made for her to interview for a dormitory counsellor's job. Others remember the enjoyable gathering in Miss Hutchins' apartment where tea, sherry and cheese straws were invariably the refreshments offered! For many years she maintained contact with past students and was able to visit several in the U.S.A. and Europe during her frequent travels after her retirement.

Professor Hutchins was appreciated by faculty in her department and elsewhere on campus for her skills as a mediator and in achieving consensus in group discussions. She rarely took an adversarial position supporting others when she could, yet knowing when to accept a situation which appeared inevitable. One of her most endearing gifts was her zest for life and her active sense of humor. She could be relied upon to lighten an occasion even when circumstances were difficult. Her jokes were always to the point particularly when told against herself.

During her working years she maintained a close relationship with the Bureau of Home Economics of the New York State Education Department. She was a valued adviser and consultant on program development particularly in the area of in-service education. Many group conferences and short courses throughout the state were developed at her instigation. She was also a leader in the North East Interstate Conferences organized by the U.S. Office of Education. In addition, besides a substantial summer session program, she would frequently organize short courses for supervisors and administrators throughout the country.

After her retirement in 1957, Margaret remained in Ithaca accompanied first by her cousin Margaret Stevens and then by her sister, Ruth. During this period she had time to devote to her love for travel and for reading, an important part of her life. She was also an active participant in the programs of her church.

In 1975, Margaret moved to Rochester to be nearer to her brother, Irving, and his family. She kept close contact with her friends in Ithaca as well as becoming involved in many activities in Rochester. In 1985, she received the Distinguished Alumni Award from the College of Applied Science and Technology,

Margaret Hutchins will be remembered as a loving and compassionate human being with a warm sense of humor; she was a true professional in her work and a wise administrator.

Irene Patterson, Kathryn Walker, Kathleen Rhodes

Frederick Bruce Hutt

August 20, 1897 — September 6, 1991

Because of his outstanding background, training, and experience, Frederick Bruce Hutt was invited to Cornell in 1934 to become the second Chairman of the Department of Poultry Husbandry, replacing the popular “Jimmy” Rice who had retired after serving approximately 35 years as the Chairman of the Department which he originated at the turn of the century.

Hutt’s academic career began with a B.S.A. degree in Poultry Husbandry in 1923 from the Ontario Agricultural College in Guelph, Ontario, Canada. This was a follow-up of his interest and experience with chickens that began in 1909 and included raising chickens as a source of income to pay his way through college. He earned the M.S. degree in Genetics in 1925 from the University of Wisconsin. A position as Lecturer in Poultry Husbandry at the University of Manitoba, that permitted time for continued graduate work, led to a M.A. degree in Zoology in 1927. To advance his knowledge of animal genetics, he took a leave and went to the University of Edinburgh in Scotland for a Ph.D. in 1929. Based on the extent and quality of his research over the next 10 years, he earned a D.Sc. degree in Genetics from the University of Edinburgh in 1939.

In 1931, Dr. Hutt went to the University of Minnesota as Professor of Poultry Husbandry and Animal Genetics. Members of the Poultry Science Association, which included many that had been or were at Cornell, recognized his many abilities and elected him President of the Association in 1932. He was the youngest person ever to hold that position.

At Cornell, President Edmund Day soon recognized Hutt’s capabilities and moved him from the College of Agriculture to the College of Arts and Sciences as Chairman of the Department of Zoology, a position he held from 1939-1944. During this period, he continued his research at the Poultry Department and taught a course in Human Genetics.

Professor Hutt’s teaching at Cornell began with a course in Poultry Genetics that continued for about 30 years. In 1949, after gathering research information over the years for his lectures from his own research and that from all over the world, he wrote the classic work, *Genetics of the Fowl*, which soon became the “bible” for all those interested in poultry genetics and poultry breeding. Its importance and need all over the world led to its translation into Spanish and Polish.

Soon after his return to full time at the Poultry Department, without any administrative responsibilities, his long-term interests in genetics of domestic animals and resistance to disease led, with the approval of Dean Hagan of the College of Veterinary Medicine, to a course in genetics designed especially for veterinary students. The purpose was to teach them the role of heredity as it applied to their profession. He taught this basic course for 20 years and used only material dealing with animal traits of interest to the veterinary student rather than those involving the fruit fly or plants when such was needed to explain the basic principles of Mendelian genetics. This was the first time such a course was taught at any veterinary college. This activity led in 1964 to another excellent text book, *Animal Genetics*. A little earlier (1958), he had written another book – *Genetic Resistance to Disease in Domestic Animals*. After retiring in 1965, as then required, a continuing request from many people for information on genetic traits of importance to dogs led to his *Genetics for Dog Breeders* in 1979. Then, in 1982 with the help of a former graduate student as junior author, he prepared the 2nd edition of *Animal Genetics*. All of his books, like his scientific publications, were extremely well written in a form easily understood by laymen and scientists alike. He would cite the facts from the literature, rather than opinions or beliefs, and then state his interpretations of the information provided.

His extensive research in genetics, especially of the fowl, involved many traits and thus added much to the existing knowledge of heredity in poultry. He constructed the first chromosome map for the chicken. Among the 250± scientific publications was one concerning his discovery of the sex-linked gene that causes dwarfism. This gene is now used around the world to produce economically efficient mothers of broiler chicks.

Throughout his long professional career, Dr. Hutt emphasized the role of heredity in resistance to disease of all types. He demonstrated how to use proper procedures for the selection of breeders that could lead to better viability, in spite of the presence of disease producing agents or conditions such as poor nutrition. He set an excellent example of neatness and orderliness in all his research records and other material, including that used in classes, and encouraged his graduate students to do likewise. His critiques of seminars and of papers being written by students bore forewarnings that these be not only factual but also correct in diction, spelling, and grammar.

At seminars and scientific presentations by others, he would often ask very specific and incisive questions. They would often force the speaker to come to some conclusion or to recognize that other information had not been considered. A common question involved the extent to which heredity might have played a part in the findings when the subject being discussed was not one of genetics.

Professor Hutt enjoyed using examples to illustrate the strong influence of genetics on resistance to diseases. On one occasion, he lectured to animal scientists on the potential value of selecting for resistance to mastitis in cattle. He suggested that if oysters could develop resistance to a specific disease, as they had done at Malpeque Bay in Canada, so might cows. He was also very responsive in a similar manner to some questions. At an evening banquet in England, Dr. Hutt was introduced to a famous Englishman, Dr. J.B.S. Haldane, who responded – “you must be the chicken geneticist.” The answer was – “no, I am the fowl geneticist – but please make sure you spell that word correctly.”

His office door was always open to anyone who wanted help, advice, or information. Many times it did not involve genetics, but, if in the field of biology, he often could provide an answer. His memory of what had been done and by whom many years ago provided answers to many questions.

Fred Hutt had many interests in the early years following his birth in Guelph that continued throughout life. At the early age of 8, he sent a letter to the local newspaper in Guelph pointing out that their report of the date of return of a specific butterfly was incorrect. He had seen that butterfly at two different locations which he then specified. As a teenager, his collection of insects became a source of specimens needed by some of the college students to meet their quotas for Entomology courses. Other interests involved wild birds, upon which he published several articles, and stamp collection where he concentrated on those of Britain and the Commonwealth.

Dr. Hutt served on the Editorial Board of the *Journal of Heredity* for 25 years. He was a visiting lecturer at many universities in the United States and elsewhere. He also served as a consultant to commercial poultry breeders in England and the United States. He was a member of 10 or more scientific societies or associations.

He received many awards for his outstanding accomplishments that started with the Poultry Science Association Research Award in 1929 and later their Borden Award for Research in 1946. He received the Tom Newman International Award for Poultry Husbandry Research in 1960 for his discovery and detailed study of the sex-linked gene for dwarfism in chickens. The ones he appreciated most were being made an Honorary Fellow in the Royal Society of Edinburgh in 1975 and elections to the American Poultry Hall of Fame in 1980 and to the International Poultry Hall of Fame in 1988. He also received an Honorary Doctor of Science degree from the University of Brno, Czechoslovakia in 1965. This was especially significant since it was at this institution, then listed as in Brüun, Austria, that the science of genetics had its origin under Mendel. His alma mater, the University of Guelph, bestowed the Honorary Doctor of Science degree on Dr. Hutt in 1974.

Professor Hutt is survived by two sons, Bruce and Robert; a daughter, Margaret; thirteen grandchildren; and twelve great grandchildren. There are many others, not genetically related to him, who will continue to remember Professor Hutt for his wit and for his contributions to their erudition, education, training, knowledge, and careers related to poultry science and the poultry industry.

Stephen E. Bloom, Milton L. Scott, Randall K. Cole

Clyde Edwin Ingalls

October 11, 1904 — December 6, 1992

Clyde Edwin Ingalls was born in Canisteo, New York on October 11, 1904. As boys, Clyde and his brother, Arthur, worked in their father's hardware store in Canisteo and became known locally as a pair of inventive youngsters. His interest in engineering and technology followed naturally from these activities and led him to enter Rensselaer Polytechnic Institute (RPI) in Rochester, New York. He received the degree of electrical engineer in June 1927 and remained at RPI until 1929 as a graduate student, instructor in electrical engineering and communications, and as assistant operator of broadcast, experimental, and amateur radio stations. During this period Clyde developed his deep interest in radio engineering, the field that was to become a major component of his life's work.

Clyde had a distinguished career in non-academic circles before coming to Cornell. From 1929 to 1941 he was with the Stromberg-Carlson Telephone Manufacturing Company in Rochester, New York as radio engineer, head of the Research Laboratory, and head of the Instrument Development Laboratory. In those capacities Clyde made many innovative contributions to high-frequency electronic engineering, particularly in radio broadcasting and reception and in early television. During the war years, from 1941 to 1945, Clyde was with the eminent Massachusetts Institute of Technology Radiation Laboratory where he was in charge of all work on fire-control radar receivers. One of his most significant developments in that period was a fast automatic-gain-control technique that reduced feedback instabilities and minimized most forms of radar jamming. He was also the author of several articles in the Radiation Laboratory Series of books on radar. In 1946 he formed a private consulting firm, Canisteo Electronic Instrument Laboratories, with which he was affiliated for many years afterward.

In 1947, Clyde was recruited by Charles R. Burrows, director of the School of Electrical Engineering. He joined the EE Faculty as an associate professor in September of that year, and was associated with the School for 24 years until his retirement in 1971. Throughout his career as a member of the EE Faculty, Professor Ingalls taught both elementary and advanced courses, but principally theory and laboratory courses to upper-class and graduate students. He taught the first course in television at Cornell, which developed into two courses, one in transient operation of networks, and the other in network analysis and synthesis based on the use of the Laplace transform and convolution methods. He taught the first course in transistors in the School and developed several courses in acoustics. He built the first computer at Cornell and was chairman of a committee that established computing facilities on campus that eventually developed into the Cornell Computing Center.

Clyde was active on many committees in the School and in the College, with particular emphasis on those involved with graduate study. For three years he was chairman of the Graduate Committee of the Engineering Division of the Graduate School, and in that period served as the first adviser in the School to all graduate students in the M. Eng. (Electrical) Program. He also served as special committee chairman and minor committee member for many doctoral and masters graduate students. He was a member of a committee in the School that revised the entire laboratory program beyond the second year to conform with a new Engineering College program that placed all engineering students in a common curriculum in their first two years.

The EE School building, Phillips Hall, has a tower without windows that was originally designed to house an acoustics laboratory. It is likely that Director Burrows had that project in mind when he convinced Clyde to come to Cornell. Since the funding for an elaborate anechoic chamber for the tower never materialized, Clyde had to conduct his acoustic research with electric organs and various loudspeaker configurations in an inexpensive chamber that he designed, built, and installed in the tower.

In 1961, Clyde and a colleague from the General Electric Laboratory conducted some acoustic research of an unusual nature. He presented the results of that study at a meeting of the Acoustical Society of America at the University of Texas in Austin in October 1964. The newspaper, *The Austin Statesman*, reported (erroneously) that Clyde had said humans could hear electromagnetic waves, specifically radar waves. The resulting flurry of reports by other newspapers created a minor sensation that did not subside until Walter Sullivan reported the correct version of the phenomenon in the *New York Times* of December 6, 1964. It seems Clyde and his colleague had found that certain individuals with good hearing at high frequencies could indeed detect pulsed radar waves that impinged directly on the cranium, and that the pulse-repetition rate of the radar signal could be “heard” without benefit of the ear. Clyde reported he had experienced the phenomenon himself, although he advised others not to try the experiment. He also said that a somewhat parallel phenomenon had been reported on several occasions by people who had heard a hissing sound when they observed a falling meteorite, even though the object was travelling at a speed far exceeding that of sound. Clyde received many letters and inquiries as a result of all this publicity and was particularly amused by a book about UFOs that justified their existence on the basis of his work. His paper, “The Sensation of Hearing in Electromagnetic Fields,” was published in the *New York State Journal of Medicine*, Vol. 67, No. 22, November 15, 1967.

Clyde was a senior member of the Institute of Electrical and Electronic Engineers (IEEE) and of the Institute of Radio Engineers (IRE), and a member of the Acoustical Society of America. He held all of the offices in the Ithaca

Section of IRE and served as program chairman of the Cornell Chapter of the Society of Sigma Xi. He was a licensed Professional Engineer in New York State.

Although Clyde maintained he was not a musician, he enjoyed playing the piano as a hobby and always tuned the instrument himself. In the latter stages of his illness, when he could no longer speak coherently, he still retained his ability to sing and harmonize. Some members of St. Paul's United Methodist Church in Ithaca may recall that Clyde used his acoustical expertise to design and install the church sound system.

When Clyde retired from Cornell he moved to Potsdam, New York and taught in the Electrical Engineering Department at Clarkson University for one semester until an accident and subsequent ill health caused him to end his academic activities. He was able to continue as an amateur radio operator and to enjoy music for some time until increasing medical difficulties necessitated admission to a nursing home.

Well before his retirement Professor Ingalls had the satisfaction of knowing that many of the innovative ideas and techniques he introduced into the EE curriculum and in the laboratories of the School for the first time had become standard material in many courses. He came to the School at a time when electrical engineering education was undergoing major changes. In his quiet and modest way he preferred to work behind the scenes, but his extensive theoretical background, clear understanding of engineering principles, and broad industrial experience allowed him to make key contributions to the evolving new standards in the EE School.

On June 29, 1929, Clyde married Mary Ann Ross in Canisteo, New York. He is survived by his wife who lives in Potsdam, New York; a daughter, Barbara Trerise of Potsdam, New York; a son, Norman R. of Parish, New York; a daughter, Janet Cameron of Washington, Pennsylvania; a brother, Arthur of Huntington, West Virginia; twin sisters, Rachel Titus of Bloomfield, Connecticut and Ruth Morrison of Lakeland, Florida; and nine grandchildren.

Professor Ingalls will be long remembered as a dedicated teacher and adviser, and a respected colleague and friend.

Nelson H. Bryant, William H. Erickson, Simpson Linke

Francis Marion R. Isenberg

May 13, 1910 — March 18, 1997

Francis Marion R. Isenberg, better known as “Ike”, died at age 86 after several years of poor health in Pennsylvania at the Masonic Home in Elizabethtown, where he and his family had moved seven years before. He was born in Pennsylvania when Halley’s Comet was observed in 1910, and always felt that he came in with the comet and might go out with it like Mark Twain, and was therefore very worried about its reappearance during May 1986.

Dr. Isenberg was Professor of Vegetable Crops at Cornell for 23 years specializing in postharvest physiology, and was involved in extension, research, and teaching in the area of handling and storage of vegetables. He will always be remembered for his innovative part, in cooperation with other Cornell workers, in extending the process of Controlled Atmosphere Storage (CA), which had already been successful in prolonging the storage period with apples, to the cabbage industry in New York State. The nation’s first cabbage CA storage was built on a commercial farm in New York State and has been very successful. He was also instrumental in developing the commercial use of maleic hydrazide (MH), a chemical sprout inhibitor, to extend the storage life of onions. When applied in the field just before maturity, MH prevents sprouting and increases the storage longevity of onions placed in storage. He introduced the paper carton packing box for lettuce and the method of vacuum cooling harvested lettuce. As well as such practical research, he was well known for his basic research particularly in early plant hormone research, and was one of the first to try an early version of the now sophisticated high performance liquid chromatography (HPLC). As an active member of the international postharvest community of the International Society for Horticultural Science, he organized the Third International Symposium on Vegetable Storage that was held at Cornell, and was well known and respected by the International Postharvest Working Group.

Ike had a very active and fertile mind, and after retirement in 1975 he continued to work with growers as a consultant on problems of cabbage storage. The New York State Vegetable Growers Association honored him in recognition of his outstanding service to the vegetable industry, and the Oswego Vegetable Association also cited him for his many contributions. He later carved out a special niche for himself as a special consultant in legal disputes, planning experiments to solve problems between growers and shippers when produce arrived in an unacceptable condition.

Ike grew up in Altoona, Pennsylvania, and was full of stories of that town when he was a boy. He attended Penn State Nautical School and served as the Junior Captain for one year, graduating in the class of 1932. He was in the

Merchant Marine from 1932-34. During the Depression, only three of thirty ships “fitted out,” so he therefore went into business selling office equipment. Because of his nautical training and experience, in World War II, he served the United States as a Navy Reserve Officer, volunteering for active duty in 1941. He served four and a half years in the navy, mainly as captain of a minesweeper in the Pacific, around Australia, and in the Indian Ocean, and as commanding officer of a small fleet of mine sweepers in the South West Pacific and Indian Oceans. He served the United States Navy, the British Navy, and the Australian Navy. At the end of the war he returned to school on the GI Bill, going back to Penn State University for Graduate School. Originally intending to become a diesel engineer, he was sidetracked by a charming Professor of Horticulture (his words), and obtained a Master’s degree in Soil Chemistry followed by a Ph.D. degree in Horticulture with Biochemistry and Physiology as minors in 1953. He was an active member of the Ithaca Rotary Club and also served terms as president and treasurer, and he attended Rotary meetings in Stratford, England, when he was on sabbatical at the Vegetable Research Station at Wellesbourne. He was also a Mason, and a long time member and officer of the First Presbyterian Church of Ithaca.

He is survived by his wife of nearly 58 years, Arlee; and by his daughter, Nancy.

James R. Hicks, William C. Kelly, Henry M. Munger, Pamela M. Ludford

Vernon Jensen

July 10, 1907 — September 27, 1998

His students knew Vernon (“Pete”) Jensen as a teacher-writer, but there was much more. He was also a staunch family man, father of four (Vernon Jr., Karen, Linda and Margo), active in his church, a dedicated floriculturalist and an active athlete well into his sixties. The Fall Creek Drive residence which he and his wife, Esther, called “home” was a welcoming location for many students, especially when Linda and Margo, the Jensen’s ice-skating twins, were at Ithaca High School and, later, at Cornell. Whether it was black-eyed susans, fritillarium imperialis, meadow rue or wood hyacinth, floriculture was a consuming hobby. The child of Danish immigrants who came to the Great Salt Lake Basin as Mormon converts, Pete was active in the Ithaca Church of Jesus Christ of Latter Day Saints and a long-time teacher in its Adult Gospel Doctrine class. A varsity baseball player as an undergraduate at Brigham Young University, he starred in faculty-student softball games.

Pete received his Bachelor’s degree in American History in 1932. He learned through personal experience about unemployment during the Great Depression when the only paid work available was as a substitute teacher in his hometown Salt Lake City public schools. Pete and Esther, who had married when he was still in college, decided that he would enter the Master’s degree program at the University of California at Berkeley; that seemed to be all they could manage. Pete excelled there with the assistance of Professor Charles Gulick whom Pete fondly remembered as a “wonderful mentor.” When Pete told Gulick he could not continue his studies because he had a wife and child to support, Gulick arranged to have the university provide the financial support Pete needed. Pete often recalled: “that’s when I was launched in pursuit of a Ph.D.” Pete also remembered his fellow graduate students as an exceptionally “illustrious crowd” that included Clark Kerr, John Dunlop, Lloyd Fisher, Sam Kagel, George Hildebrand, and Arthur Ross.

While working on his dissertation, Pete accepted a one-year appointment to teach economic history and labor problems at the University of Colorado. The one-year assignment lasted nine years from 1937-46. During these years, Pete received his Ph.D. degree in 1939, and became a consultant to the National Defense Mediation Board in 1941. During the war, he served as a public panel member, mediator and arbitrator for the National War Labor Board (NWLB) and Wage Stabilization Director of the NWLB’s Ninth Region.

While working for the NWLB, Pete learned about a newly established School of Industrial and Labor Relations from Phillips Bradley, a touring member of New York State’s Joint Legislative Committee on Industrial and Labor

Conditions (the “Ives Committee”). This committee, chaired by the Leader of the New York State Assembly, Irving M. Ives— who became the School’s first Dean in 1945—played a key role in the creation of a state-supported School of Industrial and Labor Relations at Cornell University. At Bradley’s urging, Pete applied for a professorship and joined the School’s faculty in 1946. As Pete was fond of saying, “The future of the School was subjected to five days of discussion.”

Pete’s first book, *Lumber and Labor*, was published in 1945 and was reprinted in 1971 by Arno Press and the *New York Times* in their series “Classics in American Labor.” In 1950, Cornell University Press published *Heritage of Conflict-Labor Relations in the Nonferrous Metals Industry Up to 1930*. Greenwood Press reissued *Heritage of Conflict* in 1968 in its important series “The Making of Industrial America.” In 1954, the ILR Press published the second volume, *Nonferrous Metals Unionism, 1932-1952*—a masterful description and analysis of Communist infiltration and capture of the International Union of Mine, Mill and Smelter Workers (formerly the Western Federation of Miners) and the subsequent expulsion of the union from the CIO. Other important books include, *Hiring of Dock Workers and Employment Practices in the Ports of New York, Liverpool, London, Rotterdam, and Marseilles*, published by Harvard University Press in 1964, and *Decasualization and Modernization of Dock Work* in London, published by the ILR Press in 1971.

In 1973, the same year that the Cornell University Trustees elected Pete, Professor Emeritus, Cornell University Press published his *Strife on the Waterfront: The Port of New York Since 1945*. One reviewer’s comments provide insight into not only the importance of that book but also into Pete’s approach to scholarship:

“Strife on the Waterfront is a first-rate account of labor-management-government relations; it is not a narrow study in labor economics...The author is concerned with humanistic and institutional as well as economic and political facets of the industry.”

Pete became Associate Dean in July 1965 at a time when the faculty again was seriously disputing the ILR School’s future direction. He maintained steadfastly that neither unionism nor collective bargaining should be written off because collective bargaining is a basic democratic institution based on the rights of individual workers in a democratic society. He wrote:

“It was my belief from the beginning that it was intended by the framers of the School, and as it was embodied in the legislation creating the School, that collective bargaining was to be the heart and soul of the School.”

We who were colleagues are honored to prepare these all too brief comments about one of the ILR School’s most distinguished professors. We remember him as a towering volleyball player who loved to needle the graduate

students on the other side of the net when he would spike the ball. We also remember him as the Dean who told one of us that the faculty had recommended tenure (and with that wry grin on his face, added that the faculty was not infallible) and another of us when newly arrived and frustrated and disillusioned about the inability to find suitable housing, “to keep in mind that sooner or later everyone who moved to Ithaca finds a place to live. We haven’t lost a faculty member yet because he couldn’t find a place to live.” He was the Dean who raised hell with a colleague who had the audacity to paint his own office something other than institutional green (one of the very best confrontations in ILR School history) followed, wonderfully, some months later by a wastepaper basket fire in that same office (replete with trucks and sirens) caused by cigar ashes flicked by that same colleague who had to suffer the wrath of Pete once again.

In an era of too many entrepreneur-academics, Pete’s selfless dedication to the School, his love of teaching and scholarship, and his genuine concern for his colleagues’ welfare stand out as the standard of what a distinguished professor and administrator should be.

David B. Lipsky, Duncan MacIntyre, James A. Gross

Philip Gustaf Johnson

September 21, 1900 — October 3, 1994

Philip Gustaf Johnson, Professor Emeritus of Science Education, died in Chapel Hill, North Carolina, on October 3, 1994. Born September 21, 1900, on a farm in Loomis, Nebraska, the fifth of six children of Swedish immigrants, he began his education in a one-room school, speaking only Swedish. From the village public school he entered the county high school from which he graduated. He entered the University of Nebraska engineering program and dropped out after one year, but he returned to the Teachers College and, with careful planning, graduated in 1923 with his entering class and with a Certificate to teach Science and Mathematics. For two years he was a high school teacher of science, mathematics, and Spanish in Havelock, Nebraska.

From 1925-26, he was a graduate student at the University of Minnesota, but the following year was invited to the University of Nebraska as a graduate student and staff member. He earned his M.S. degree from the University of Nebraska in 1931, with a major in chemistry and minors in biological science and chemistry. From Nebraska, he came to Cornell on a scholarship in pursuit of a more advanced degree, initially as a Fellow in Nature Study and Forestry. He completed his Ph.D. degree in 1933, with a major in science education and minors in biological science and chemistry.

After a brief sojourn in Nebraska, and armed with his degree, he returned to Cornell in 1935 as an Assistant Professor of Science Education. In this position, he assumed the dual responsibility of preparing certified teachers for secondary school science and teaching classes at Ithaca High School. He rose quickly to the rank of Professor of Science Education, and in his early professorship saw the need for a formal, national organization of science teachers. Encouraged by his work with the NEA's Department of Science Instruction, and supported by affiliation with the AAAS, he was largely responsible for the founding, in 1944, of the National Science Teachers Association, which today boasts 50,000 members. He was the first president of NSTA. An energetic visionary, he was called to Washington in 1946, where for seven years he was Specialist in Science Education in the U.S. Office of Education.

In 1953, Dr. Johnson returned to Cornell as Professor and Head of Science Education, which included what was then called "Nature Study," but today is more widely accepted as environmental education. It was after his return that he, together with Professor Paul deH. Hurd of Stanford University, entered an agreement with the Shell Oil Company to support the influential Shell Merit Fellowship Program, a program of graduate study whereby highly selected high school science and math teachers were brought together for special training to become

leaders in their fields. Many of today's outstanding program leaders, department chairs, authors, and educational administrators are products of that far-sighted program that spanned the years 1953-68 and was one of the first industry-supported university programs in science education.

During his tenure at Cornell, Professor Johnson was exceedingly active as lecturer, consultant, and author. He was Director of the NSF Program for Science Teachers at Cornell from 1959-63; Fulbright Lecturer at the University of Chile in Valparaiso; and Lecturer in Residence or Visiting Professor at the University of Costa Rica, Emory University, the University of California at Berkeley, the University of South Dakota, and Oregon State University. There was almost no science education program of size or substance in which Professor Johnson did not have a role or considerable influence.

A serious heart attack in the late 1950s slowed him only momentarily, and he returned to full-time duties at a self-regulated pace that would have worn out most people. He was instrumental in basing at Cornell the AAAS Feasibility Study that led to NSF's development of the largest and one of the most innovative elementary school science programs to that time—*Science, A Process Approach*. Few people are aware that it was Professor Philip Johnson's foresight that gave birth to that program.

When he retired from his Cornell professorship in 1967, Professor Johnson did not retire from professional education. He continued to serve as a Visiting Professor and Science Education Consultant to Puerto Rico and Canada and his active involvement in NSTA. Numerous recognitions and awards from that body attest to his creative and devoted support to science education. He received the Recognition Award of the Science Teachers Association of New York State (1947 and 1987); the Canadian Science Teachers awarded him their Centennial Award in Science Education (1967); and the National Science Teachers Association awarded him their Distinguished Service Citation (1970).

Professor Johnson authored many journal articles and was a co-author of the widely-used, pre-War science textbook series, *Modern Science*, by Dull, Mann, and Johnson. He was the senior author of NSTA's *School Facilities for Science Instruction* and author of numerous articles in various journals and bulletins from NSTA and the U.S. Office of Education. In all his writing, he remained modestly in the background, preferring to create and administer than to accept credit and public acclaim.

A life member of NSTA, NEA, and STANYS, his interests broadened in his final years. He was a consultant on human rights for North Carolina Memorial Hospital; had a lively interest in human rights in educational and medical research; and remained very active in church work.

Philip Johnson married Elsie Thiel in 1929. They had two children: Tom, born in 1935, now an architect in California; and Pat (Evans), born in 1937, now residing in Chapel Hill, North Carolina. His first wife, Elsie, died in 1979 after fifty years of marriage. In 1981, he remarried. Olive, who gave unstinting support to Professor Johnson in his professional as well as social and family life, continues to live in their Chapel Hill home. Into his nineties, Professor Johnson was a regular participant in annual conventions of NSTA, where he continued to host the Shell Merit Fellows. Productive into his last decade, he still produced articles for journals such as *The Science Teacher*.

Always a gentleman of impeccable taste and sense of propriety, he had an infectious sense of humor as well as a rare insight into the problems and programs of public education, especially science education. He was truly a giant of the old school. One of his grandchildren expressed a fitting family tribute to Professor Johnson when he said, "Grandfathers are for loving and fixing things." Phil was that kind of man.

Joe Bail, Helen Wardeberg, Verne Rockcastle

Thomas Homer Johnson

February 18, 1940 — October 6, 1994

Professor Thomas Johnson was born in Geneva, Illinois. He recalled, in a recent career statement, the foundations of his future in landscape architecture. He remembered fondly childhood experiences learning tree identification at the Morton Arboretum, “keeping bird migration records, being fascinated by films like *The Vanishing Prairie*, and identifying with the buildings of Frank Lloyd Wright” that he discovered in his native state of Illinois and nearby Wisconsin. From these beginnings grew a heartfelt desire to integrate people, art, design and the natural world. Embarking on a path to become a landscape architect led him first to the University of Illinois. There he studied under his mentor, Stanley White, graduating first in his class with a Bachelor in Landscape Architecture degree. The recipient of the Edward L. Ryerson Travelling Fellowship, he then travelled to Europe to explore the Italian villa gardens and European cities and towns.

Returning to the United States, Professor Johnson entered Harvard University’s Graduate School of Design where he studied under Hideo Sasaki, graduating with a Master of Landscape Architecture degree in 1966. He spent until 1974 actively engaged in professional practice, from which he developed a firm grounding in design as an applied art.

It was practicing as a design associate in the office of his Harvard teacher, Hideo Sasaki, which Professor Johnson often recalled as a significant influence on his emergence as a designer. While at the firm of Sasaki, Dawson, De May Associates from 1966-70, he was a team member on many projects including the first place award-winning St. Louis Missouri Mall Competition. His design for the State University of New York at Buffalo is featured in Geoffrey and Susan Jellicoe’s *The Landscapes of Man* (1975), and is recognized as a significant modern landscape work.

From 1970-74, Professor Johnson was co-principal of his own firm, Lawrence & Johnson Associates of Barnstable, Massachusetts. The firm’s projects included large-scale housing developments, residences, and communities. Often cited among his accomplishments was the establishment of The Old Kings Highway Regional Historic District Commission, an agency which preserved traditional visual patterns in the public landscape of Cape Cod.

Professor Johnson joined the Cornell Landscape Architecture Program faculty in 1974 where he was a devoted teacher to both graduate and undergraduate students. His twenty years of instruction helped to train students who

went on to become Rome Prize winners, Presidential scholars, university professors, and design practitioners in internationally known landscape architecture firms.

Notable among his numerous extension and community service activities were his design seminars, workshop series, and accompanying publications that he developed to address local applications of the New York State Environmental Quality Review Act (SEQR), a project funded by a Cornell University Rockefeller Foundation Grant (1977).

Professor Johnson was active in campus committees: chair of the Landscape Architecture Program Internship Committee and member of both the Campus Planning and the Agriculture College Land Use Committees. In addition to his teaching, research, and extension work, he also maintained a consulting practice, engaging in projects on the Cornell University campus and in the Ithaca area (Cornell Business and Technology Park, 1988).

Design Theory and Education were the focus of Professor Johnson's teaching and research during his years at Cornell. Motivated by the belief that the landscape architectural profession lacked an educational text on design theory, he endeavored to develop basic two- and three-dimensional design teaching techniques. Using the classroom as his research lab, Professor Johnson originated a landscape architectural design language theory accompanied by a "building blocks" design learning sequence in which elements, syntax, references, and procedures for classical, naturalistic, modern, and post-modern design approaches were articulated. His design languages theory became the principal subject of papers given at professional conferences and a manuscript he was preparing at the time of his death entitled: *From Basic Design to Design Languages, Design Theory in Landscape Architecture*. "Classicism, naturalism, the fried egg, the inverted sweatshirt, the nine-square," were the words and concepts he championed and which continue to resonate in the minds and memories of students who benefited from his inspired teaching.

Professor Johnson was the leader of several award-winning Cornell student design studio teams. With his students, he was awarded first prize in the Genesee River Design Competition (Rochester, New York, 1978), a Merit Award in the Jacobs Pillow National Design Competition (National Endowment for the Arts, 1984), and exhibition selection in both the Sesquicentennial Park National Design Competition (Houston, Texas, 1986) and the Minnesota State Capital National Design Competition (St. Paul, Minnesota, 1987).

Professor Johnson is remembered for his open-mindedness, his imagination, his compassionate heart and his generosity. Those qualities made him both a devoted teacher and a guiding spirit in Cornell's landscape architecture program. Because he appreciated and cultivated individuality, he was able to guide and motivate students, drawing

forth while instilling a passion for the creative effort. Those very qualities led to Professor Johnson's selection as an outstanding teacher by Cornell's Merrill Presidential Scholar Program in 1986.

Many will, for years to come, recall Professor Johnson's animated and inspirational "criticisms" delivered during the final design critiques (held at semester end when students typically present their work to a faculty jury). Professor Johnson would rise out of his chair and as though he were cutting right through the layers of ideas imbedded on the student's drawings, he could "see" with laser precision, so clearly what a design was trying to do and where it could take the next step. He always stood, faced the students and faculty and, with a knowing grin, gesturing hands and flowing thoughts, would have us all (students and faculty alike) under his spell for a moment. Usually he would finish with encouraging words saying "and if you just do this, and this, and then this, ah-ha, you'll have it!" All of us gained and learned from Professor Johnson's critiques, lucid remarks, and lively demonstrations. Design was truly part of his being and nature, and the legacy of his teaching will continue to endure in the eyes and hands of the hundreds of students and colleagues to whom he made a real difference.

Professor Johnson is survived by his wife, Helen Elizabeth Hunsberger Johnson; his two sons, Travis Muirhead Johnson and Jay Benjamin Johnson; his sister, Jane Johnson Sims of Wayne, Michigan; as well as five sisters and brothers-in-law and their families.

Marvin Adleman, Peter Trowbridge, Paula Horrigan

Warren T. Johnson

April 22, 1925 — November 9, 1994

Warren T. Johnson, Professor of Entomology Emeritus, died after an extended illness. Born in Charleston, West Virginia, he received his B.S. degree from Morris Harvey College in Charleston. Following service in the Army, he received his Master's degree from Ohio State University and his Ph.D. degree in entomology from the University of Maryland where he remained a member of the faculty for ten years. He joined the Cornell faculty in 1962 with a joint appointment in the Departments of Entomology and Plant Pathology, was appointed Professor in the Department of Entomology in 1972, and Professor Emeritus in 1991.

Dr. Johnson was the author or co-author of more than 75 publications on arthropods affecting woody ornamental plants and their control. His early interests were with insects affecting nut trees; later he worked on strategies for controlling the forest tent caterpillar, scale insects, and many others; and he ended his career with much work on the use of horticultural oils and growing degree days for pest management. He co-authored and revised yearly the Cornell Recommendations for Maintenance of Trees and Shrubs.

Professor Johnson was a member of several professional societies including the Entomological Society of America, Entomological Society of Canada, the International Society of Arboriculture, American Phytopathological Society and the honorary scientific fraternity, Sigma Xi.

One of his greatest rewards came from his association with students and young professionals. In 1965, he established TIEG (Teen International Entomology Group) to introduce youth worldwide to the science of entomology. TIEG encouraged the study of entomology and the exchange of ideas and material related to the science. A newsletter was published which included comprehensive life history studies, scientific notes, do-it-yourself techniques, and a list of materials for exchange and sale. At one time, the organization boasted over 2,000 members. The project was deemed worthy of support by the Entomological Society of America and the Entomological Society of Canada.

Dr. Johnson served as Chairman of the Youth Program for the International Congress of Entomology held in Washington, D.C. (1976); and as advisor to numerous graduate and undergraduate students—many of whom sought his friendship and counsel until his death.

Dr. Johnson's distinguished career in extension won him numerous awards and reflected his thorough grounding in insect pest management, his concern for the problems of the people, and his skill as a teacher. His widely

acclaimed reference book, *Insects That Feed on Trees and Shrubs: An Illustrated Practical Guide* (first published in 1976), is a classic in its field and is used by plant care professionals throughout the world. He was also a co-author, with Dr. Wayne Sinclair, of the book *Diseases of Trees and Shrubs*, which was published in 1987.

His career in extension kept him busy with lectures and demonstrations at county, regional, and statewide meetings of cooperative extension staff and leaders in the horticultural field.

Warren was a stimulating mentor for young people with an interest in entomology and plant pathology, always keenly aware of public and industry concerns and of conceptions and misconceptions in his field. He truly believed in using a problem-solving approach to teaching and in learning by doing. He was a caring, concerned mentor.

Warren's work brought him some travels. From a National Science Foundation grant in 1964, Johnson went to London for the International Congress of Entomology. He participated in the same congress in Moscow, in the former Soviet Union, in 1968. Four years later, he went to the congressional meeting in Canberra, Australia. He also performed entomological research at the Archbold Research Station in Florida and at the Gulf Coast Research Laboratory in Mississippi in the early 1970s. On one of his sabbatical leaves, Johnson was a Visiting Scientist at the Canada Department of Forestry where he studied microbial pesticides. On another at U.C. Berkeley, he began laying the groundwork for his book *Insects that Feed on Trees and Shrubs*. Most recently he visited China for the International Conference of Entomology and for some sightseeing afterward. The community benefited from his active involvement and leadership with the Ithaca Rotary Club, 4-H, and the Boy Scouts of America. In addition he attended St. Paul's United Methodist Church, where he was a choir member for 32 years. He served on many committees of the church and as president and longtime board member of the Wesley Foundation of Cornell United Religious Work. He will best be remembered for his cheerfulness and caring for others.

He is survived by his wife of 45 years, the former Alice Rose Bent; two children, daughter Marilyn Barnard and son Warren Edward Johnson; and four -grandsons, Nicholas Johnson and Benjamin, Taylor, and Jay Barnard; and a sister, Jean Biernat.

George Hudler, Carolyn Klass, Richard Hoebeke, Roger Morse

Barclay Gibbs Jones

June 3, 1925 — May 26, 1997

Barclay Jones, Professor of City and Regional Planning at Cornell University since 1961, played a key international role in the intellectual development of urban economics, city planning, regional science, and historic preservation. He trained scores of young people who have gone on to become academics, professionals, and heads of academic departments and research organizations throughout the world

After he served in the U.S. Army in World War II, where he received the Purple Heart, he earned Bachelor's degrees in both Art and Architecture from the University of Pennsylvania; a Master's degree in Regional Planning in 1955; and a Ph.D. degree in Economics from the University of North Carolina in 1961. He married Ann Tompkins in 1957. They had two children, Barclay Gibbs Jones, 3rd, and Louise Jones. Barclay first joined the planning faculty at the University of California at Berkeley and in 1961 moved to the Department of City and Regional Planning at Cornell. Ann died in 1994.

Barclay contributed immeasurably to the growth of the graduate programs in City and Regional Planning, Regional Science, and Historic Preservation Planning at Cornell. When he arrived at Cornell, the department was very small with only two full time and two part time faculty members. He played a major role in the subsequent development of the department and its expansion from primarily a professional planning program to one with parallel emphases on research and scholarship. He placed great importance on synergy among professional education, research, and academic scholarship, the three components of the department's programs.

Barclay supported the building of many scholarly and academic institutions. He was a major force not only in the building of the graduate program in planning at Cornell but also at the University of Puerto Rico. With Professor Stephen Jacobs he built and maintained the historic preservation program and established connections with Chinese, Russian, and East European researchers. He actively lobbied for scholarly research in architecture, and he served as the lone social scientist in an earthquake research group, dominated by engineers and geologists. Throughout his career for over 30 years, he generated the bulk of graduate planning research fellowships at Cornell. An endowment in the City and Regional Planning programs at Cornell University was established to support teaching and quantitative research methods in Professor Jones' name by former student, Thomas W. Jones, former President and Chief Operating Officer to TIAA-CREF.

Barclay was a member of the American Institute of Architects, the American Institute of Certified Planners, Phi Kappa Phi, the American Economic Association, the American Association for the Advancement of Science, and the Society of Architectural Historians. He served as president of the Urban and Regional Information Systems Association from 1966-69, president of the North East Regional Science Association in both 1975-76 and 1987-88, and president of the Regional Science Association in 1983. He was the chairman of the City of Ithaca Landmarks Preservation Commission from 1984-91 and was president of Historic Ithaca and the Tompkins County Landmarks Commission, a local nonprofit organization concerned with historic preservation. He was named a Fellow of the U.S. International Council on Monuments and Sites in 1986 and received the National Parks Service's 1988 Public Service Award from the U.S. Department of the Interior.

Barclay was an active researcher, scholar, teacher, and consultant, in addition to his many achievements in teaching, program building and development, and community service. His research encompassed important issues in regional science, city and regional planning, and historic preservation planning, and he published over 50 papers in these fields, many of them co-authored with his students. In 1990, he was named Distinguished Planning Educator by the American Collegiate Schools of Planning. His consulting activities, which extend back more than 30 years, ranged from small towns in upstate New York to national governments around the world. His most recent assignments were with the United Nations and the World Bank. He was also an active member of the executive and research committees of the National Center for Earthquake Engineering Research at the State University of New York in Buffalo.

Barclay Jones will be remembered not only for his scholarly and professional accomplishments, but also, perhaps particularly for the great emphasis he placed on his relationships with his students. He dedicated his career to supervising and guiding his graduate students in planning at Cornell University. He gave special attention to Ph.D. candidates in planning and was responsible for supervising more doctoral candidates in the department than any other single faculty member. Nearly twenty department chairpersons in planning at universities throughout the United States were products of the Cornell program, and Barclay served on the committees of most of them. It has been estimated that he served as a chairperson for more than one-third of all the students who received doctoral degrees in planning and regional science from Cornell in addition to his work with professional planning students and undergraduates.

Barclay's enthusiasm for planning, its history and its constant evolution were infectious. Among Cornell students his sessions with his doctoral candidates and his advisees were legendary: 10 p.m. for the early appointment

and 1:00 a.m. for the late appointment. It was in these leisurely but intellectually challenging sessions that the mentor-student relationship was most obvious and students were encouraged to develop their own philosophies of planning. One of his former doctoral students has been quoted as saying, "All of his students felt like me, that they were getting 90 percent of Barclay's attention." His philosophy of education is perhaps best summed-up in his own words:

"If you do it right, your students will go on to do things you could never do, write things you could never write, conduct research you could never carry out, solve problems beyond your capacity, and surpass you in numerous ways. What you must do as an educator is create a learning opportunity for younger people that will make you obsolete."

Pierre Clavel, John Forester, Sidney Saltzman, K.C. Parsons

Peter Kahn

July 5, 1921 — February 16, 1997

Peter Kahn was an accomplished artist and a deeply learned man. His vivifying and exemplary presence had such an impact on students, colleagues, and friends, and was expressed in such a dazzling variety of activities, that his life is not readily captured by focusing simply on his academic career or his artistic production. What gets lost is his warmth, his contagious enthusiasm, his generosity, and his almost infinite capacity for friendship. During almost forty years of association with Cornell, he combined with light but disciplined skill, such elaborate forms of cultural creation as painting, graphic production, typography, and theatre design, with the arts of daily life: conversation, gardening, cooking and mushroom collecting. He altered the visual landscape around him through his abundant and freely-given posters, so effectively announcing forthcoming cultural events that they were often collected as soon as they were put up, and very few of his contemporaries will be able to imagine the Finger Lakes region without seeing it through Peter's paintings, woodcuts and drawings.

Peter was born in Leipzig, Germany in 1921. He immigrated to New York in 1937 where he rejoined his father, Emil Kahn, the former conductor of the Stuttgart Philharmonic Orchestra. During World War II, Peter served in the U.S. Army as a tank mechanic and also as a court interpreter at the Nuremberg pre-trials. After the war, in 1945, Peter returned to New York where he participated in the emergence of Abstract Expressionist painting, a movement that made New York the creative center of the international art world at that time. He was a student of the master teacher and artist, Hans Hoffman, whose impact and influence were enormous on what came to be called "action" painting. At the same time, Peter completed a Master's degree in Philosophy at New York University in 1951.

After two years of teaching art at Louisiana State University, Peter was appointed in 1954 to the chairmanship of the Art Department at what is now Hampton University. He was an active participant in the nascent civil rights movement during this period before accepting a position at Cornell in the Fine Arts Department of the College of Architecture in 1957.

Peter remained at Cornell until his death, except for a brief stint at the University of Victoria in Canada from 1968-69, a move undertaken in part as a protest against the Vietnam War. On his return, Peter was offered a position in the Art History Department of the College of Arts and Sciences. The appointment was both unusual and imaginative. Although not strictly an art historian either by training or inclination, he was encouraged to give

students direct, experiential acquaintance with the traditional materials and methods of the artists, and to offer courses on the development of letter forms and the history of the book. At the same time, and in recognition of his wide learning, Peter was given free rein to form alliances across academic disciplines. The result was a series of interdisciplinary courses in music, mathematics, the theatre, sociology, European history and French and German literature, and in the Rare Books Department of the University Libraries.

Peter's commitment to teaching was simply an overflow of his ebullient and generous nature. It didn't matter if the setting was a university classroom, a group of aspiring local artists meeting in his barn after work, or a study tour abroad offered under the auspices of the Cornell Alumni University (CAU). From 1978 until his death (with no break following his "retirement" in 1984), he offered thirteen CAU courses. These covered, in addition to study tours in Europe, such varied subjects as drawing, rare books, the "Art of Seeing" and "Learning from the Modern Masters". It is no exaggeration to say that Peter played an indispensable role in making CAU a major part of the Cornell experience for many alumni.

Peter chaired the Advanced Placement in Art Program of the Educational Testing Service in Princeton from 1970-74. He was a visiting artist and teacher at the University of Virginia, London Royal College of Art, Cal Tech, Purdue, New York University, and Hobart. He also directed the Cornell Program in Hamburg during 1985-86.

His activities were not limited to academic projects, however far-flung. From involvement in Amnesty International, whose logo is a variant on Peter's original design and of which he was a founding member and generous supporter of the Ithaca chapter, to such civic activities as the Trumansburg Fire Department, Library Board and Board of Zoning Appeals. As one of his co-workers says, "he was everywhere." He inspired the poster for an exhibition of "Edible Art" that raised funds for the Tompkins County Arts Council. He was a supporter of the Upstate Crafts Fair, active in the local movement for Historic Preservation, and in the creation of the "Summer Ithaca" guide to promote Ithaca's rich resources of crafts and cultural events. The Ithaca Festival which grew out of the latter initiative honored him in 1997 by adopting a Peter Kahn watercolor of the local landscape as their emblem and disseminating it in thousands of reproductions on T-shirts, badges, and mugs.

Peter's energy and inventiveness seemed to spill over into every domain, but he was especially devoted to the theater. He was interested in every aspect of staging and performance (including musical performance) and was often the first person who came to mind when a group contemplated "putting on a show."

Peter was not an actor or a director but he was an ideal collaborator who contributed to every facet of the undertaking from program design to costumes, stage setting and all forms of interpretation. Here, his many talents fully came

into play. Thanks to his education and general culture, he understood different styles and traditions and could unerringly find the right note. He was also a good reader of texts and could link what he saw on the page to what would eventually be seen on a stage. His practical sense blended well with his painterly eye so that his sets not only worked technically (Peter was a real craftsman) but were wonderfully evocative and handsome, as were his costumes. Yet, Peter was frugal and disciplined. He shunned the ornate and the bombastic. Thus his esthetic sense worked hand in hand with an ethical sensitivity that required honest labor and simplicity.

To all this, Peter added enthusiasm and inventiveness so that his very presence during rehearsals and, later, performances was a joy for actors and directors alike. All of these activities brought out the very best in him and blended the depth of the serious artist with the playfulness of the Renaissance man.

Peter and his wife of fifty years, Ruth Stiles Gannett Kahn, author of the Children's classic, *My Father's Dragon*, were noted for the warmth of their hospitality. Friends, students and visitors found welcome and sparkling conversation in the large yellow Victorian farm-house on the edge of Trumansburg, with its print-shop, studio-barn, orchard and carefully tended flower gardens.

It was in Trumansburg in 1977, when Peter was 55 years old, that he became a volunteer firefighter. For twenty years, he responded to fires, directed traffic at emergencies, cooked omelets and pancakes at fund raisers. He was on duty at the scene of an accident on a cold February night when he had a fatal heart attack. He died as he lived, always at the center of things and giving generously of his energy and his gifts.

Peter's work has been shown widely in this country, most recently in 1997 at the Museum of American Art in New Britain, Connecticut in an exhibition, "All in the Family". This title follows from the fact that the exhibition includes work by Peter; his brother, Wolf; his sister-in-law, Emily Mason; her mother, Alice Trumbull Mason; their daughter, Cecily Kahn and her husband, David Kapp.

Peter is survived by his wife, Ruth; their seven daughters: Charlotte Kahn, Margaret Kahn Crone, Sarah Manfredi, Hannah Kahn, Louise Kahn, Catherine Kahn, and Elizabeth Ratzlaff; and also by his brothers, Wolf and Hans Alfred; his sister, Eva Ekvall; and eight grandchildren.

Alain Seznec, Esther Dotson, Stanley O'Connor

Robert J. Kane

April 24, 1911 — May 31, 1992

Robert J. Kane, 81, Dean Emeritus of Health and Physical Education at Cornell University and the President of the United States Olympic Committee from 1977 to 1981, died Sunday, May 31, 1992, in Ithaca, New York of heart and respiratory failure.

Kane, a 1934 graduate of Cornell, had been an athletic administrator with the University for 36 years until his retirement in June 1976. He served as Assistant Director under James Lynah for three years (1939-41) and as Acting Director from 1941 through 1944 when he was named Director. Through his last five years, he was promoted to Dean of the Department of Physical Education and Athletics and served as Assistant to the President of the University.

During his tenure at Cornell, the Big Red won national championships in hockey, lacrosse, rowing and polo, and Ivy League championships in football, basketball, hockey, lacrosse, gymnastics, soccer, fencing, track, tennis, rifle and wrestling.

While he was Director, new athletic facilities costing \$9 million were built: Teagle gymnasium for men; Helen Newman gymnasium for women; Lynah ice rink; Collyer boathouse; Grumman squash courts; the University's 18-hole golf course and Moakley clubhouse; Paul Schoellkopf House for visiting teams; a Poly-Turf football field and a Poly-Surf track. He also started an endowment fund for men's and women's athletics.

"Bob Kane was one of the all-time great Cornell athletes," Frank H. T. Rhodes, president of Cornell, has said. "He was an outstanding athletic director and in fact he has been the dean of Cornell athletic directors. He went from his position at Cornell to national and international prominence. He was a great sportsman, a great Cornellian and a good friend. I salute his accomplishments. He did an excellent job in bringing strength across the board to Cornell athletics, and served as a mentor and friend to generations of Cornellians."

An outstanding track athlete, Kane held the Cornell record for the 200-meter dash until 1977. In 1933 and 1934, he was runner-up in that event at the IC4A championships and in his senior year he ran on winning 440- and 880-yard relay teams at the Penn Relays. As a representative of the New York Athletic Club, he was a member of the National AAU relay champions on 440, 880 and mile relay teams in 1933, 1934 and 1935. While touring Europe with a select group of American stars in 1934, he set the European record for the 300-meter dash.

A native Ithacan, he earned letters at Ithaca High School in track, football and basketball. He was the New York State high school champion in the 100- and 200-yard dashes.

Robert Kane was closely associated with the U.S. Olympic Committee, beginning in 1951 when he was elected to its Board of Directors. He was manager of the 1952 men's track and field team for the Games at Helsinki. In 1960, he became Assistant Administrative Chairman for all U.S. teams in Rome. In 1964, he served as Chief Administrative official of the U.S. delegation in Tokyo and was elected Secretary of the Olympic Committee, a position he also held in 1968 at the Games in Mexico City. Kane served as Second Vice President for the 1972 Munich Games and was Executive Vice President for the 1976 Games in Montreal. He was elected President of the USOC for a four-year term in April 1977 and led the USOC through a period of great growth, only to be bitterly disappointed by the boycott of the Moscow Games in 1980 by the United States at the request of President Jimmy Carter.

He created the idea of the U.S. Olympic Festival (originally called the National Sports Festival) and put it into motion in 1978 at Colorado Springs, Colorado. He was inducted into the U.S. Olympic Hall of Fame in 1986.

Kane, who served on a State Department panel that offered advice on ways of furthering international understanding through sports, held numerous high positions in intercollegiate athletics. He was Vice President of the National Collegiate Athletic Association in 1948 and was a two-time President of the Eastern College Athletic Conference.

Kane had been a member of the Cornell University Board of Trustees and the Cornell University Council, a group of alumni and friends who help the University in its immediate and long-range development, since it was established in 1951.

He is the author of a book about the history of Cornell Athletics, titled *Good Sports*, published by the University in July 1992.

He is survived by his wife, Ruth Brosmer Kane; one daughter, Karen K. Nichol of Freeville, New York; one son, Christopher R. (Kip) Kane of Phoenix, Arizona; seven grandchildren; one brother, Thomas J. Kane of New York City; three sisters, Claudine Malone of Oneida, New York; Kathleen Reynolds of Palos Verdes Estates, California; and Eileen McNamara of Ridgewood, New Jersey; and several nieces and nephews.

Memorial donations may be made to the Cornell University Moakley Fund for the support of track and field athletics, c/o Cornell University, P. O. Box 729, Ithaca, New York 14851.

Elizabeth B. Keller

December 28, 1917 — December 20, 1997

Dr. Elizabeth B. Keller, a member of the Cornell University faculty for 23 years, died of leukemia on December 20, 1997 at the age of 79. She was a valued friend and colleague to many of us in the Section of Biochemistry, Molecular, and Cell Biology and to others on this campus. Like some other biochemists of her generation, she had an unending love of her discipline that led her to continue her research and teaching up until a week of her death.

Dr. Keller (born Elizabeth Waterbury Beach) was the youngest of three daughters of Frederick P. Beach and Ruth W. Beach, Congregational missionaries in China. Her childhood in Fujian Province, China, had a major impact upon her character and outlook on life. She attended Oberlin College for two years and received a B.A. degree from the University of Chicago in 1940. Her Ph.D. work, carried out under the direction of Dr. Vincent duVigneaud at the Cornell Medical College in New York City, was on the formation and transfer of methyl groups in metabolism and involved some of the early uses of radioisotopes to trace metabolic pathways. From 1949-60 at Harvard University and the Massachusetts Institute of Technology, she studied the process by which cells make proteins, a subject that was central to biochemistry and the newly emerging field of molecular biology at that time. Among her major accomplishments of that period were working out methods for concentrating all of the protein factors necessary for performing protein synthesis in a test tube, showing that GTP was required for protein synthesis in addition to ATP, and finding that large particles (now called ribosomes) are necessary for protein synthesis.

Recruited to Cornell by Dr. Robert Holley, Dr. Keller became a member of the faculty in 1965. She contributed to the work that culminated in the determination of the nucleotide sequence of a transfer RNA from yeast, work for which Holley received the Nobel Prize. Dr. Holley shared the prize money with his close colleagues, including Dr. Keller. A feature of transfer RNAs that is mentioned in every biochemistry textbook, its ability to fold into a cloverleaf structure, was the brainchild of Dr. Keller. The focus of some of her later work centered on signals required for initiation of transcription of genes in multicellular organisms, using as an example a muscle-specific gene from the fruit fly. In addition, she chose to study a family of genes and their protein gene products, the Ras family, that are known to be altered in a large percentage of some cancers. She worked on where these proteins are localized within cells, and investigated changes in the properties of cells caused by different members of the Ras family.

In reviewing Dr. Keller's scientific work, one can find a continuous thread that runs through it, all related to the expression of genes. She was a major participant in three landmark areas of biochemistry, starting with her work reporting the chemical synthesis of methionine labeled with carbon 14 that was the starting point for tracing the flow of methyl groups in metabolism. The Nobel prize awarded to Vincent duVigneaud was based in part upon this work. Having a labeled amino acid in hand, it was natural to extend her studies to how amino acids made their way into proteins, a problem that she tackled in collaboration with Dr. Paul C. Zamecnik at the Huntington Laboratories at Harvard and the Massachusetts General Hospital in Boston. Her papers during that period of the 1950s are classics, essentially laying out the major outlines of protein synthesis. The protein synthesis trail led inevitably to RNA, and her admiration for Robert Holley's work led her to Cornell in Ithaca and her important contribution to the structure of tRNA. The last-mentioned contribution stemmed in part from her love of and need to visualize molecules with models, usually simple models that she constructed from paper and paper clips, or pieces of wire. Some of her models were used by colleagues for decades in teaching undergraduate students.

Dr. Keller's work was funded continuously by the National Institutes of Health from the time of her appointment at Cornell University until her retirement. She trained nine Ph.D. students, two of whom work in industry and the others having faculty positions in various parts of the world. In addition, her laboratory provided training to nine postdoctoral students. Dr. Keller was a mentor to many undergraduate students. At the time of her death, four undergraduate students were working on independent research projects with her, and three of them continued their projects and wrote honors theses. Dr. Keller maintained an active correspondence with many of her students, including undergraduate students who worked with her.

Dr. Keller was instrumental in designing and teaching laboratory exercises that served well a generation of undergraduate and graduate students. She was not comfortable in front of large audiences, but overcame that shyness when asked to present lectures in cell biology, something she did for the last 10 years. Her lectures were characterized by meticulous preparation.

Dr. Keller's style was to work behind the scenes to insure an environment where all could work effectively. She was the person who made sure that common equipment worked, that the distilled water was of high purity, and that the library had the best collection of books. Inspection of the library in the Biotechnology Building, now the Elizabeth B. Keller Reading Room, offers a glimpse of her personality. The choice of books and journals reflects Dr. Keller's tendency to focus on the essentials, and the orderly atmosphere mirrors her uncluttered mind.

Burnham Kelly

January 23, 1912 — February 3, 1999

On February 3, 1999, the AAP College lost one of its most important members, Burnham Kelly, who gave the college its current shape and form. As Dean from 1960-71, Kelly guided the college into a new era of growth and change. He caused it to have greater recognition and prestige among the recognized leading schools teaching architecture, art and city and regional planning. His impact was felt across the college in the undergraduate and graduate teaching areas where he expanded the college's professional offerings to embrace urban design, historic preservation, and regional science. He re-established the dormant Landscape Architecture Program, and initiated a Masters and Doctoral program in Architectural and Urban History. He also helped build the excellent Ph.D. degree program in Regional Planning. During his term as Dean, the college gave the signal to the world about its new approach by restructuring itself into three departments and several new graduate fields. This was reflected in a change of name from the College of Architecture to the College of Architecture, Art and Planning.

The scope of change did not stop there. Kelly was a visionary builder in other areas as well. He started a New York City program for architects and planners, which gave AAP students an opportunity to study in an environment much different from Ithaca. In New York, they could experience the urban environment first-hand, and see the work of top architects, planners and artists. While there, students could meet with many of the leaders in their fields, an opportunity not readily available in Ithaca. In addition, Burnham embraced community service as an important responsibility of the college, and an integral part of the education of design and planning professionals. Indeed, with his urging and support, the college became the leader in service among the endowed schools at Cornell. The breadth and depth of these changes, in retrospect, is remarkable. The deans who followed him from the 1970s on built on the foundation he established.

Burnham Kelly was born in 1912 in Evanston, Illinois. He attended Williams College, graduating in 1933. He went on to study law at Harvard, graduating in 1936, and practiced law briefly in Rhode Island before returning to study city planning at MIT. He received the Master of City Planning degree from MIT in 1941, and eventually returned there to join the faculty of its Planning Department after a stint in the service during World War II. During the war years, 1941-45, Kelly worked with the National Defense Research Council and the Office of Scientific Research and Development in Washington, D.C. He also served overseas during this period, primarily in France, on war-related research. In 1946, he was awarded the Army-Navy Certificate of Appreciation for his work for the government.

Kelly taught and did research at MIT from 1945-60. His teaching dealt primarily with land use law and housing. In those years, Burnham's strong interests were focussed on research on industrialized housing. While there, he served as the head of MIT's Bemis Foundation that was concerned with the U.S. housing industry. His record of accomplishments at MIT brought him to the attention of the Cornell faculty and administrators as they searched for a new dean for what was then called the Architecture College. He was selected for the deanship in 1960. At Cornell, Kelly pursued his interests in land use law and housing. After leaving the deanship in 1971, he returned to the classroom to offer those subjects in the Department of City and Regional Planning. He continued to teach well after he retired from the faculty, until 1987. CRP students considered Burnham an excellent teacher who taught a rigorous course that was critically important to their preparation as planning professionals.

In his long career, Burnham was widely recognized for his abilities and accomplishments; for these, he garnered many awards. Among the most important to him was the recognition by his alma mater, Williams College, which awarded him the honorary degree of Doctor of Humane Letters in 1963. In addition, Kelly was appointed by President Kennedy to the National Fine Arts Commission, serving from 1963-67. This committee influenced all federal architecture and art in the nation's capital. Following this, New York's Governor Rockefeller appointed him to the New York State Council on Architecture where he served with distinction from 1968-72. He also served as a trustee for the institute for Architecture and Urban Studies in New York City from 1968-1974, and was a director of the Housing Association of Metropolitan Boston during his MIT days. Dean Kelly also published many articles and authored or edited two books emanating from his housing research with the Bemis Foundation: *Prefabrication of Houses and Design* in 1951, and *Production of Houses* in 1959.

Those who knew Burnham and who served with him at the AAP College when he was Dean remember him as always willing to listen and entertain new ideas. In a sense, he was a futurist, although he would be too modest to allow that term to be applied to him. He was easy to approach, thoughtful and supportive of the faculty's initiatives, but always looking to further ideas brought to him that would put the college at the cutting edge of the professions. His colleagues then and now think of him as a builder of programs at the college, especially those in the City and Regional Planning Department. He gave CRP the guidance, backing and encouragement it needed, at a critical time in its development, to make it the world-class department it is today.

His closest colleagues and friends knew him to be a warm and devoted father. He adored his wife, Jean, who shared many years of life with him until her death a few years previously. Burnham was a man who fully enjoyed life, especially being outdoors in nature. He loved skiing, both downhill and cross-country, enjoyed camping and

canoeing, and most other outdoor sports. In his retirement years, he continued to be physically active, expanding his interests to include square dancing, worldwide travel and the study of art. In retrospect, those who knew him well remember a man who led a full and productive life, leaving behind important contributions to his family, his university and to the community.

In later years, when he shared his life experiences, he seemed somewhat surprised that people thought he had done so much in his lifetime. He was truly modest, believing that he was not really deserving of any credit; he claimed that he was just doing his job. He believed that he was exceptionally lucky throughout his life, lucky with his wife and family, with the people who worked with him, and with the places he worked. His colleagues and friends felt fortunate, also, that he lived and worked with them in Ithaca at Cornell.

Pierre Clavel, John W. Reps, Stuart W. Stein

Matthew A. Kelly

June 17, 1913 — January 18, 1993

Matt Kelly grew up in the Bronx, the son of a textile salesman who died when Matt was very young. He was raised by his mother along with a younger sister and together they faced the depression. In addition to his considerable intellect and academic ability, Matt was a world class swimmer. He soon learned that he could use his swimming ability to further his academic ability. For example, he was recruited by Evander Childs High School in the Bronx to be a member of its swimming team. He won a scholarship to Mercersburg Academy where his swim team set a world record. He turned down an offer to be on the U.S. Olympic swim team to continue his education at Amherst College which he attended on scholarship and graduated *cum laude*, Phi Beta Kappa and with high honors in economics. He married Perce, who helped him work his way through Princeton University graduate school as coach of the Westchester Country Club swim team. After receiving his Ph.D. degree in economics from Princeton, Matt joined the Department of Economics as a faculty member from 1940 to 1950.

During World War II he took a leave of absence from academia to serve the United States government as chief economist for the Office of Price Administration and labor relations specialist officer in the U.S.N.R. Following the war he was enlisted by the Office of Military Government to represent the United States in negotiations and developing labor relations policies with U.S. allies, Great Britain, France and the Soviet Union for occupied Germany. After returning to the classroom at Princeton, he was again enlisted as a negotiator by the Printing Industry in Washington, D.C. and later in New York City where he represented unionized printers at the bargaining table for sixteen years, acquiring a reputation for labor relations expertise which was widely respected by both employers and Unions.

With his combination of academic and professional accomplishments, Matt was an ideal candidate for appointment to the ILR faculty as a member of the Collective Bargaining and Extension Departments, a position created in 1966, which involved him in resident teaching on campus and in designing and teaching courses for ILR practitioners in New York City. He also conducted a seminar for ILR resident students who spent a semester in New York City.

In the 1970s he directed a national conference and a series of seminars on “Automation and Employment” and an international conference held in Jerusalem on “Technological Changes and Human Development.” Conference proceedings which he edited were published as monographs. His research interests ranged from public sector bargaining to railroad labor relations and publications included a book on *Labor and Industrial Relations: Terms,*

Laws, Court Decisions and Arbitration Standards which is widely used as a text and reference work along with numerous articles on collective bargaining and arbitration.

Matt was a moving force in faculty discussions which led to the establishment of the New York MSILR Program with Baruch College. This was an unusual venture, never undertaken before or since, of a joint degree program involving the collaboration of two independent tax supported institutions aimed at providing graduate instruction in the evening for individuals who for the most part were actively employed in the field of industrial relations and human resource management. Unique to the program was that the faculty was full time while the students were part-time. The degree itself bore the name of both institutions and some students attended graduation ceremonies at both campuses.

Matt Kelly was the academic director representing Cornell when the first classes met in 1977 and, in addition to his administrative responsibilities, taught each term a variety of courses, most notably collective bargaining and arbitration. The MSILR Program in New York would not have survived without his patient shepherding and it remains a monument to his abilities.

His retirement in 1982 was only nominal although he yielded his administrative duties. Without a pause in the pace of his life, he continued to teach in the MSILR Program for eleven years until the last month of his life. Within weeks of his death, he wrote a letter to his successor acknowledging his inability to teach in the spring term although he promised that he would be available in the fall. It must be observed that his pay for teaching was minimal. Indeed, as his health weakened in the last years, the cost of door to door transportation to meet his classes exceeded his remuneration.

Matt Kelly was a master teacher who incorporated the best in Cornell's traditional concern with students. His course outlines were long and elaborate with each week's assignment set forth in great detail. His lectures were carefully crafted and structured on the essential points of his subject. He was a demanding teacher, insisting on high quality student performance, and somehow the students met his demands. He challenged them and they responded by rising beyond themselves. Homework assignments, exams and term papers were riddled with Matt Kelly's red pencilled comments which were an extension of his lectures.

Matt's service to the wider community of industrial relations was to be found in his work as an arbitrator, fact finder and mediator in many labor-management disputes.

As early as 1941, the Governor of New Jersey appointed him to a labor panel of arbitrators. Since then, he arbitrated in an enormous number of cases in both the private and public sectors. In 1971, during a period of wage and salary controls, he was a consultant with the Cost of Living Council, an alternate member of the Pay Board, a member of the Pay Panel and a Special Hearing Officer for Cases and Appeals. He was a mediator in disputes involving the City of New York and police officers and other uniform services, chairman of the President's Emergency Board for the Long Island Railroad and its non-operating unions, member of a Board of Inquiry in a contract dispute between cemetery workers and cemeteries in the metropolitan area of New York, and was arbitrator for the North American Soccer League and Players Association, New York City Transit Authority and Transit Supervisors Organization, District 1199, National Union of Hospital and Health Care Employees, and League of Voluntary Hospitals, and the International Association of Machinists and Aerospace Workers and the Trans World Airlines System Board of Adjustment. For over 20 years, he was the arbitrator of the Consolidated Edison Company of New York and the Utility Workers Union of America, Local 1-2.

To his colleagues, Matt was an endearing, outgoing and enthusiastic partner and friend in the complicated, ambiguous and wonderful world of academe. A wise and kind man, he remains in memory as he was in life a lodestar for personal decency and professional responsibility.

He is survived by his lifelong companion—his wife Perce—and two children. His son, Randy, has followed in his footsteps as an arbitrator and teacher in the labor relations field and his daughter, Debbie, is a practicing attorney.

Esta Bigler, Phil Ross, Lois S. Gray

William C. Kelly

June 14, 1919 — March 20, 1999

William Cary (Bill) Kelly, Professor Emeritus in the Department of Fruit and Vegetable Science at Cornell University, died at his daughter's home in California after a brief struggle with lung cancer. Bill Kelly was born in Memphis, Tennessee. He received his B.S. degree in 1940 from the University of Tennessee, his M.S. degree in 1941 from Ohio State University, and his Ph.D. degree in Vegetable Crops at Cornell University in 1945.

Bill married Judith Neil, December 27, 1942. They had four children—David, Karen, Steven, and Nancy—and seven grandchildren. Judy Kelly died in 1990 after a very protracted illness.

Bill's first position after the Ph.D. degree was as Horticulturist at the U.S. Plant Soil and Nutrition Laboratory in Ithaca. In 1948, he was appointed Assistant Professor in the Department of Vegetable Crops, where he conducted research and extension work in mineral nutrition and vegetable crop physiology. Although gifted in both research and extension, it was teaching and advising students that became Professor Kelly's real passion. He taught "Vegetable Crop Physiology" and "Research Methods in Vegetable Crops" for 30 years, and "Organic Gardening" for 11 years. In all of these courses, Bill took a personal approach to his students. For example, he typically knew the name, major subject, and interests of each of the 80 or so students enrolled in his two-hour course in organic gardening.

Bill Kelly pioneered new teaching methods. In his class in organic gardening, he did not lecture; students who previously had participated in the course made short presentations, followed by lively class discussions under Bill's supervision. In teaching vegetable physiology, he relied heavily upon classic research papers to make his points, and in so doing helped his students learn how to interpret and appreciate research. Students were organized into teams, and the members of each team worked cooperatively to "dig into" the research literature and develop answers to assigned problems. The product of these exercises provided the focus for a discussion period that Bill held weekly with each team. Students were expected to defend their conclusions based upon experimental data from the research articles. "Look at the data, not the abstract," was the constant reminder. Examinations were not written, but were given orally to the teams as an extension of the weekly discussion periods. In this way, Professor Kelly gave students experience in critical thinking, assimilation of information, and oral defense of one's position.

Bill Kelly's teaching assistants were encouraged to experiment, and he often adapted their ideas into the framework of his courses. Because of their association with Bill, graduate students wanted to teach and wanted to learn

to be better teachers. In recognition of his innovative teaching, Dr. Kelly received the Distinguished Graduate Teaching M.A. Blake Award from the American Society of Horticultural Science, the College of Agriculture and Life Sciences Edgerton Teaching Career Award, and the College of Agriculture and Life Sciences Professor of Merit Award.

Because of the personable traits evident in Bill's teaching style, he was much sought after as an advisor. Professor Kelly advised both graduate and undergraduate students, and over the years became a leading mentor for the department. He was known and loved for his warmth, independent thought, keen insight, honest criticism, and straightforward suggestions. He had a way of being supportive yet making people think for themselves. During the turbulent Vietnam era, when many professors were viewed with suspicion, Bill found ways to break through the barriers. His friendly counsel and non-judgmental attitude helped scores of undergraduate and graduate students survive those years. No count is available of the total number of undergraduate students for whom Bill served as advisor; but by the time of his retirement, he was advising 25-30 undergraduates per year, most from outside his department. Dr. Kelly's graduate advising was equally remarkable. He directed studies for 32 M.S. and 25 Ph.D. candidates and served on approximately 120 graduate student committees in the fields of International Agriculture and Vegetable Crops.

Bill Kelly was also appreciated for his technical abilities and common sense insights. He was a master of experimental design and analysis, and his ability with statistics served not only his own graduate students, but also many other graduate students inside and outside of the department. Faculty members frequently consulted with Bill, too. His memory for detail was remarkable; he never ceased to surprise with his ability to recall names of former students, authors of relevant papers, or obscure published material that might be helpful to the person who was asking him for advice.

Dr. Kelly's sabbatical leaves took him to the Philippines, Iran, and the United Arab Emirates. With H.C. Thompson, he co-authored the fifth edition of *Vegetable Crops*, the most influential college text on commercial vegetables. For more than 20 years, this classic publication was by far the leading college text on the subject.

Dr. Kelly was a member of the American Society of Horticultural Science, American Society of Plant Physiologists, American Association for Advancement of Science, Empire State Soil Fertility Association, International Society for Horticultural Science, Sigma Xi, Phi Kappa Phi, Gamma Sigma Delta, and Alpha Zeta. In addition to his teaching awards, he was a Fellow of the American Association for Advancement of Science.

Bill Kelly became Professor Emeritus in 1983 but continued his contributions to the department. In his retirement years, he found many ways to keep his mind sharp. He took courses in crafts, especially at the Farmers' Museum in Cooperstown, and collected antique tools. He enjoyed educational travel experiences, which he often combined with visits to his family. He continued to attend scientific meetings, where he was always a center of attention from former students; and when at home he hardly ever missed a departmental seminar. On Monday nights, Bill carried on his life-long love of bowling with other members of his department in the Ag Bowling League. Bill Kelly was one who helped shape the former Department of Vegetable Crops, and he will be remembered with affection by his former students and colleagues from around the world.

Robert D. Sweet, Leonard D. Topoleski, Elmer E. Ewing

Eldon Kenworthy

May 27, 1935 — March 14, 1998

Eldon “Bud” Kenworthy, formerly of Ithaca, New York, died on March 14, 1998 at Saint Mary Medical Center in Walla Walla, Washington of injuries sustained after he was accidentally struck by an automobile. Bud had resided in Walla Walla with his wife, Cynthia Witman, since 1992. An internationally recognized expert in Latin American politics, Professor Kenworthy went to Whitman College as the Arnold Distinguished Visiting Professor in 1991, and joined the faculty of the politics department the following year.

From 1996-92, Bud was a member of the faculty of Cornell University, where he taught Latin American politics and served as director of undergraduate studies in the Government Department. In 1970, he received Cornell’s Clark Award for Excellence in Teaching. An inspiring and devoted teacher, he is remembered by his colleagues for his insistence that teaching and advising undergraduates be a priority even at a university known for its research and graduate programs.

Bud Kenworthy was born in Pasadena, California. He received his Bachelor’s degree from Oberlin College in 1956 and his Doctorate in Political Science in 1970 from Yale University. Author of six books, including *America Americas: Myth in the Making of U.S. Policy toward Latin America*, he both studied and deeply loved the area and its people. He and Cynthia were involved with a number of Ithacans in reforestation and other environmental projects in Costa Rica.

Bud Kenworthy’s close relationship with students became critically important during the period of unrest that troubled many universities in the late 1960s. In 1969, at Cornell University, he addressed a gathering of 4,000 students whose leaders were urging violent tactics. Known to students as a young and sympathetic professor, Kenworthy cautioned them to be “rational radicals.” His influence prevailed.

Bud will be remembered for many reasons. Those who knew him well might still hear his warm rich voice and recall his enthusiasm for the good life of gardens and homesteading and community. Bud was also a lover of wild places, and frequently backpacked in the high country. He died surrounded by friends.

He is survived by his wife, Cynthia Witman; his brother and sister, Dudley Kenworthy and Janet Walls; his daughter, Lauren Kenworthy; and his grandsons Byron Kenworthy Schaeffer and Jesse Schaeffer Kenworthy. His younger daughter, Shannon, died in 1973.

Anwar A. Khan

October 16, 1934 — June 28, 1997

Dr. Anwar A. Khan, a world-renowned scientist in the fields of Seed Physiology, Biochemistry, and Molecular Biology, died suddenly on Saturday, June 28, 1997 at Geneva General Hospital. He suffered a heart attack at his home on White Springs Road in Geneva. Funeral services were held on June 30, 1997 at the Islamic Center in Rochester, New York. A Memorial Recognition attended by many of his colleagues, friends and family was held on July 8, 1997 in Jordan Hall at the New York State Agricultural Experiment Station in Geneva, New York. His wife, Tamken, and two children, Karim and Zeba, survive Dr. Khan.

Professor Khan was borne in Monghyr, Pakistan. He received his B.S. and M.S. degrees from the University of Karachi, Pakistan, in Chemistry, Biology, and Physiology in 1956 and 1957, respectively. He was awarded his Doctorate degree from the Department of Biology at the University of Chicago in 1963. He was a postdoctoral fellow in the Department of Biochemistry at Michigan State University from 1963-65. Dr. Khan was appointed Assistant Professor at Cornell University on the Geneva Campus in 1965. He was promoted to Associate Professor in 1971 and to Professor in 1980.

Dr. Khan was one of the most highly respected scientists in his field. His work on dormancy and germination of seeds, on hormone physiology, on stress physiology, and physiological and chemical seed treatments was known throughout the world. He was looked to by his peers for advice from throughout the world. He spent his life learning everything he could about the dormancy period of seeds and also how they germinated. He was concerned about seed quality and being sure that when seeds germinated they would establish themselves as well as possible under varying soil and climatic conditions. Professor Khan collaborated on various aspects of seed physiology and seed treatments with many colleagues at Cornell and elsewhere. He was a great collaborator to all, always a delight to work with, always pleasant and very generous with his time and efforts. He will be sorely missed by many of his colleagues in the scientific community as well as by his wonderful family and numerous friends.

A prolific writer, Professor Khan had more than 170 refereed scientific journal articles to his credit. He also was editor of three books in the areas of seed physiology and biology that were published in 1977, 1982, and 1992. Additionally, he was awarded a U.S. Patent in 1994 that covered some of his more critical work on inducing dormancy in non-dormant seeds.

Besides his work at the Geneva Station, Khan spent sabbatical leaves at the International Rice Research Institute, Los Banos, Philippines (1985-86); the Agricultural University, Wageningen, Holland (1978); the University of Liege, Belgium (1971); the University of Ghent, Belgium (1971-72); and the University of Clermont-Ferrand, France (1972).

Because his research had application on a worldwide basis, Dr. Khan was a frequent invited speaker to international symposia, special workshops, research projects reviews, and other involvements and consultancies. Most recently he was an invited speaker at the 1995 Annual Meeting of the Korean Society of Horticultural Science. He presented results of his research at symposia in such countries as Brazil, Honduras, Denmark, Saudi Arabia, China, India, Karachi, Pakistan, Turkey, Poland, Russia, Japan, New Zealand, Australia, Canada, as well as at many different meetings in the United States.

Khan received many research grants from throughout the world to help support his research. Major grants included those from the United States Agency for International Development, the American Seed Research Foundation, the Herman Frasch Foundation, the New York Seed Association, the National Science Foundation, the New York Beet Research Association, the New York Snap Bean Research Association, the New York Sweet Corn Research Association, and many others.

Khan was a member of the American Society of Plant Physiologists, American Society of Horticultural Sciences, American Society of Crop Science, American Society of Agronomy, Weed Science Society of America, International Plant Growth Substance Association, and Sigma Xi.

George Abawi, Gary Harman, Hugh Price

Huynh Kim Khanh

April 20, 1936 — March 27, 1990

Professor Huynh Kim Khanh of Cornell's Department of Government and Southeast Asia Program died in Ithaca on March 27, 1990 of heart failure at the age of 53. One of the foremost scholars of modern Vietnam, he is best known for his classic *Vietnamese Communism, 1925-45*, published by Cornell University Press in 1982. Appointed associate professor in Cornell's Department of Government in July 1989, he taught courses on the Governments and Politics of Southeast Asia and on the Vietnam War, as well as a seminar on Issues in Contemporary Vietnamese Politics.

Huynh Kim Khanh was born April 20, 1936, in Quang Nam, Vietnam, where his father was a Presbyterian minister. Following the conclusion of the French-Vietnamese war in 1954, Khanh worked for nearly two years as interpreter and assistant to the director of the Mennonite's Church World Service in the settlement of refugees. For this work he was rewarded with a year's scholarship in the United States which was followed by a two-year U.S. government A.I.D. scholarship that saw him through a B.A. degree at Johns Hopkins and the beginning of graduate study at Lehigh University, where he received his M.A. degree. Then followed modest scholarships at the University of California at Berkeley, which together with earnings from various jobs enabled him to commence his study towards a Ph.D. degree in political science. But then in 1965 came the United States' deepening involvement in the Vietnam War. Khanh, who viewed this American involvement as morally abhorrent and politically wrong, went to the more congenial political climate of Canada, where he became a Canadian citizen and taught at the Universities of Dalhousie and Western Ontario. Two years after completing his doctorate at Berkeley in 1972, he spent eight years as senior research fellow at the Institute of Southeast Asian Studies in Singapore, for two of these years editing its journal, *Southeast Asian Affairs*. Then, following a year as visiting professor at the Institute National des Langues et Civilisations Orientales at the Université de Paris III (Sorbonne Nouvelle), in 1986 he accepted a position as research fellow and director of the Indochina Project in the Toronto-York Universities' Joint Center for Asia-Pacific Studies. A year after being appointed associate professor at York University's French-speaking Glendon College in 1988 he was invited to come to Cornell.

During the past two years Professor Khanh made two substantial visits to Vietnam in connection with his own research. He was also active in consulting on Indochina with the Canadian Ministry of External Affairs and in working towards normalization of relations between the United States and Vietnam. When he died he was well

advanced in work on what would have been three important books: *Communism in Vietnam, 1945-54*; *Contemporary Vietnamese Foreign Relations*; and *The Vietnamese Revolutionary Experience*.

Huynh Kim Khanh is survived by his 90 year-old father, Luyen Kim Huynh; and two brothers, Binh Thai Huynh and Tinh Trang Huynh, all of Washington, D.C.; two sisters resident in Toronto, Mrs. Xuan My Nguyen and Mrs. Ngoc Dung Hoang, and another sister, Miss Ngoc Tran Huynh of Paris.

Khanh was here with us in Ithaca only very briefly, less than eight months. He was happy at Cornell as was indicated by his having bought a house just before he died. Members of the Department of Government and the Southeast Asia Program and our students will miss him not only for his teaching and scholarship, but also for his personal warmth and his ebullient and infectious enthusiasm that tended to give a lift to all who interacted with him.

John H. Badgley, Keith W. Taylor, George McT. Kahin

Myunghwan Kim

February 8, 1932 — December 23, 1991

Myunghwan Kim was born in Seoul, Korea on February 8, 1932. After completing his secondary education in Seoul, he served in the Republic of Korea Army from 1950 to 1954, and was honorably discharged with the rank of Lieutenant. Because of his excellent command of English, Kim (as he preferred to be called by his colleagues) had been assigned to the U.S. Army as an interpreter. During this tour of duty he became acquainted with an officer on leave from the faculty of the University of Alabama, who persuaded him to come to the United States as an exchange student after he was done with his army service. Kim received a B.S. degree in Electrical Engineering, with distinction, from the University of Alabama in 1958, and entered graduate study at Yale University, where he was a Danforth Fellow. He received the M.Eng. degree in Electrical Engineering in 1959, worked as an electrical engineer for the Tennessee Valley Authority (TVA) in Chattanooga, Tennessee for a year, and returned to Yale where he obtained the Ph.D. in 1962. In the same year Kim joined the faculty of the School of Electrical Engineering and was associated with Cornell for the remainder of his career.

Professor Kim began his career in the Electrical Engineering School in the field of control theory with concentration on applications to electromechanical systems. During his early years his teaching activities were confined to this area with principal attention given to the courses in Feedback Control Systems and in Random Processes in Control Systems. Soon after joining the Electrical Engineering Faculty he developed an interest in the electrical aspects of biological processes, the field that eventually became the basis for his major contributions to the School. Following a sabbatical leave at the California Institute of Technology where he was a Visiting Associate in biology and a Senior Postdoctoral Associate at the Jet Propulsion Laboratory in Pasadena, California, he began research on the application of control theory to biological systems. In 1970 he established a Bioelectric Systems Laboratory in the Electrical Engineering School that attracted several young faculty members and a number of graduate students. The research of that group concerned the application of instrumentation, control theory, computer engineering, and integrated circuit technology to biomedical problems, particularly in learning how information is coded and processed in the nervous system. Special instrumentation was developed to help decipher the behavior of complex interconnections of neurons, both in the peripheral and central nervous systems. Kim and his group also studied the feasibility of employing optimal control techniques in the problem of administering chemotherapy to treat cancer. Activity in this area centered on the development of a very large-scale integrated (VLSI) circuit chip that would be able to track the growth of many individual cells and to monitor the concentration of a particular drug

in their vicinity. During this period Kim taught undergraduate courses in Digital Systems and Theory of Linear Systems, and graduate-level courses in Bioelectric Systems and Bioinstrumentation. He also conducted frequent graduate seminars in Bioelectric Systems.

The presence of a bioelectronic laboratory in Phillips Hall created some unusual occurrences in the normal course of events in an electrical-engineering building. One day, for example, a large wooden crate marked FRAGILE-SEA WATER-HANDLE WITH CARE appeared on the loading dock. Eventually the crate was unpacked in Kim's lab. It contained a glass aquarium, indeed filled with sea water, that was to be the home of *Aplysia*, a sea snail popular with neurophysiologists because of the simple organization of its nervous system and the large size of many of its neurons. Kim delighted in showing his "pet" to visitors, and with characteristic enthusiasm would describe the bioelectric studies that his group could perform with the aid of the creature. In later years, when interest in biological studies declined in the School, Kim returned to control-system theory, but his research on the application of VLSI techniques to biological systems stimulated a strong interest in computer technology. In this period he taught course EE 230, Introduction to Digital Systems, served as a class advisor, and was a member of the EE Faculty Committee. During a leave of absence in 1984, he began an association with the Korean Advanced Institute of Science and Technology (KAIST) in Seoul as an Adjunct Professor of Electrical Engineering. He taught courses there in computer engineering and control theory and worked on VLSI system designs applied to advanced computers. On his return to Cornell, he taught again in the areas of control theory and in the electrical machine laboratory. Following his retirement he returned to KAIST and directed development of a Korean version of a supercomputer until his death in 1991.

At Cornell Professor Kim was also a member of the National Nanofabrication Facility (NNF), the Engineering and Theory Center, and the Applied Mathematics Center. He held a National Institute of Health Special Research Fellowship in 1970-71. He was a Senior Member of the Institute of Electrical and Electronic Engineers, a member of the New York Academy of Sciences, and a member of the Cell Kinetic Society. Kim had 52 formal publications and 33 conference papers, with the majority being in the bioelectronics and bioscience fields. His friends and colleagues at KAIST held a special memorial service in Seoul, and arranged to collect and publish his papers in a memorial volume.

While Kim was a student at the University of Alabama he attended an ecumenical conference at Ohio State University in Columbus, Ohio and met Young Sook Susan Hyun. They were married on Tennessee when he was with the TVA. He is survived by his wife who resides in Ithaca, New York; a son, Eugene of Ithaca, New York; a son

and daughter-in-law, Erwin and Tina of Rutherford, New Jersey; a son, Edward of Cortland, New York; a daughter, Julie of Ithaca, New York; a brother, Dr. Gene H. Kim of Searingtown, New York; and two sisters, Mrs. Pauline Kim of Riverside, California, and Mrs. June Kim Yeum of Landsdale, Pennsylvania.

Professor Kim will be long remembered as a caring teacher and adviser, a dedicated researcher, and a respected colleague and friend.

James S. Thorp, H.C. Torng, Simpson Linke

John Edward Kinsella

February 22, 1938 — May 2, 1993

John Kinsella was born in Ireland and received his Bachelor's degree in Dublin. He received his Master's and Doctorate degrees at Penn State in biology and food chemistry in 1965 and 1967 respectively. Cornell's Dairy Science Department hired John in 1967 to replace Professor Krukovsky to teach lipid chemistry as one of his responsibilities.

Within a very short time, John established himself as a leading researcher in the physical chemistry of food proteins, as well as in lipid biochemistry. Space in Stocking Hall was soon stretched to accommodate researchers that came from far and wide to study and work with Professor Kinsella. He and his associates applied the results of their research to improve food, and formulated new uses for lipid and protein fractions. These efforts were extended into a myriad of related programs that were health related. He worked on the mechanism of lipid oxidation, the effects of natural antioxidants, and the nutritional value of polyunsaturated fatty acids. Through John's vision, as well as his leadership, important changes in departmental programs were made.

To his credit, it seems as if almost heaven and earth were moved to secure support and funds to build the new Food Processing and Development Laboratory. What would not be so visible to outsiders would be the subtleness of change he made in focus that attracted new faculty with expertise in biotechnology, chemical engineering, and theoretical biophysics. The Department of Food Science that evolved from dairy science was enriched with an emphasis placed in packaging, toxicology and other areas. The merging of the past with the present with a cadre of young people to challenge the future was set in place to serve the future.

John served as departmental chair (1977-85), associate director of the Institute of Food Science (1977-80), and then director (1987). In 1976, he was the recipient of the Borden Award for his early research accomplishments in the biochemistry of milk lipid biosynthesis. In 1981, he was named the Liberty Hyde Bailey Professor of Food Biochemistry. In 1984, he was honored by being awarded the first General Foods Distinguished Professor Chair of Food Science. He held several patents, published more than 500 papers, numerous book chapters and reviews, and was the author of one book and the editor of two others. John received many honors and awards. He was named a Fulbright Fellow in 1983, was the recipient of the prestigious Babcock-Hart Award in 1987, the Atwater International Award from the USDA in 1988 and two awards from the American Chemical Society—the Advancement of Food Chemistry Award for Outstanding Research in Chemistry in 1990 and the Spencer Award in 1991. In 1991, John

was also presented with the Stephen S. Chang Award for distinguished research in lipid biochemistry at the 82nd AOCS Annual Meeting in Chicago, Illinois.

In 1990, John Kinsella, the distinguished scientist, academic leader and dedicated educator accepted still another challenge, deanship of the College of Agriculture and Environmental Sciences at the University of California. Here, too, he was recognized for vision and strength in leading the college through some of its most challenging periods. His dedication to science, scholarship, and service to society was well recognized.

John had so much more to contribute to science with his special gift of vision and leadership which has been lost with his sudden and untimely death. Those of us lucky enough to have known and worked with him realized he was endowed with special gifts that brought great credit to his students, his department, his college, the university, and himself. The twinkling eyes, the short lab coat, and the cup of tea were familiar characteristics of both the young and then later the more mature professor. Regardless of the many national and international accolades and honors that were bestowed on him, he seemed unchanged to those of us with whom he worked. John was modest to a fault and quick to praise others for achievements made in their professional careers. Food science is a better field because of him. We are sure to continue to harvest benefits from his work in the years ahead and these will attest to his distinguished scholarly achievements. A bright star has been extinguished.

Carl Bait, Syed Rizvi, Robert R. Zall

Thomas Kirsch

May 29, 1930 — May 17, 1999

When A. Thomas Kirsch died, we all lost a valued scholar, colleague, and friend. An anthropologist, a Southeast Asia specialist, a student of religion, and an experienced academic administrator, he was an ideal colleague and is sorely missed. Born in Syracuse, he was educated at the Christian Brothers Academy, Syracuse, and Syracuse University. After serving in the U.S. Army during the Korean War, he entered Harvard University and obtained his Doctorate in Anthropology, studying Phu Thai religious syncretism in Northeastern Thailand. He remained at Harvard as an Instructor until 1966 when he moved to Princeton University. In 1970, he joined Cornell's Department of Anthropology and Southeast Asia Program. In 1984, he married Yohko Tsuji, a fellow anthropologist. They were a happy couple. Yohko won the admiration and gratitude of all for the encouragement she gave Tom in continuing to lead a full life after his surgery in 1992. During his Cornell career, Tom served as the Department of Anthropology's Chair for nine-and-a-half years and was Acting Chair of the Department of Asian Studies.

Tom Kirsch's graduate training in the 1960s coincided with a very special period in the history of social anthropology in the United States. He studied in the Social Relations Department at Harvard, the forerunner of all interdisciplinary programs that sought to integrate anthropology, social and clinical psychology, and sociology. All of his subsequent teaching and writing bears the strong stamp of Talcott Parsons and the particular understanding of the concept of evolution that Parsonian theory entailed. One of the enduring criticisms of Parsons's work has been that it remained unattached to empirical data, and it was one of Tom's most enduring achievements that he linked the two in such profitable ways. His research focused primarily on religious syncretism and changes in religion and society in Northeast Thailand. He returned to Harvard to write his dissertation. In the roughly 25 years between the time he took his Ph.D. degree in 1967 and was stricken by cancer, he was able to return to Thailand for four more periods of research.

With James L. Peacock, he co-authored, *The Human Direction: An Evolutionary Introduction to Social and Cultural Anthropology*, published in 1970. His subsequent publications deal almost exclusively with religion and their style of argument is both clear and remarkably trenchant. Tom's steady stream of reviews are models of what an academic book reviewer ought to aim to do, but perhaps his most impressive contributions to scholarship on Theravada Buddhism and syncretism were delivered in the form of (uncollected) lectures, panel papers, workshop contributions, and seminar presentations. At the time of his death, when many anthropologists were engaged in

renouncing empirical research in favor of disembodied theory, Tom never wavered from his commitment to the project of fostering their interaction.

Kirsch's influence as a Southeast Asian specialist was the result of the disciplinary approach he brought to his studies of mainland Southeast Asia and especially of Thailand. Trained as a cultural anthropologist, he was always concerned with the dynamic relation of culture and society, maintained a special focus on religion and worldview, and possessed a keen sense of the influence of history. An awareness of the role of human agency and motivation informed his work.

Early in his career, he came to see culture as a system of values, concepts, and ideas that shaped and controlled individual action and the structure of society. When, in 1962, he began fieldwork in northeastern Thailand, he discovered a Buddhist country with ample cultural resources to engage his particular interests. Continually exploring the ramifications of the Buddhist concept of merit, over the years Kirsch undertook important studies of, for example, Thai gender roles, Thai economic activities, Buddhist monastic reform, and the persisting relationship of animism and brahmanism with Theravada Buddhism. However, he was more than a fieldworker. He also wrote on early Thai and Khmer history and mobilized his anthropological expertise to challenge conventional historical wisdom on such topics as the significance of kinship systems or the rise and fall of political systems. In the context of Khmer history, he argued that more attention should be paid to the achievement of social integration through, among other things, polygamy or the varying relationship between the cosmological claims of divine kingship and of the Buddhist monkhood. His Southeast Asian interests were even more extensive, and by many he is best known for his classic study in 1973 of religion and society in upland Southeast Asia, where his focus was on religion and world view rather than on the political explanations preferred by others. In this study, Kirsch avoided seeing rituals and feasting simply as part of the traditional cultures of "tribal" groups and, instead, saw them as being dynamically connected with the negotiation and contestation of social arrangements and rank. In the field of Thai studies, his influence was considerable. Some might say that it was profound. His judgment was invariably sought.

Kirsch's work in the anthropology of Thai village life also situated his work within the field of Religious Studies. Because of his extensive fieldwork in rural Thailand, he became a leading ethnographer of Thai Buddhist village life. During the years he worked and conducted research in Thailand, the central structures of Thai village life shifted dramatically. His ethnographies, therefore, made not only important theoretical contributions, but also became some of the last anthropological descriptions of Thai village religious life when the forest monk tradition was a

vibrant modality of religious expression. The attention to religious institutions and structures in his scholarship was also passed on to his many doctoral students.

At Cornell, he played a central role in the establishment of the academic study of religion as a field of study in the College of Arts and Sciences. In 1989, he was one of several scholars in the college asked to serve on a Religious Studies steering committee charged with creating an academic program for the study of religion at Cornell. With his active participation and often-direct intellectual leadership, Religious Studies was approved as a major in 1991, and the Religious Studies Program adopted a curriculum with core offerings the same year. He served on the steering committee for the program until his death. During that time, he chaired the curriculum committee, advised many Religious Studies majors, and served on numerous Honors committees.

No memory of Tom would be complete that failed to emphasize his delight in teaching and his success as a teacher. He was one of the most deceptively memorable teachers we have known. No orator, Tom quietly and patiently went through materials, questions, and issues with no attempt to enthrall the listener with high-sounding terminology or performative aplomb. Yet, as the students engaged him in discussion, they inevitably found a stronger “push back” than they expected, a mind that insisted on clarity and logic and rejected puffery. Perhaps the detail that most captures this sheer intellectual intensity is what happened to his classes after his throat operation in 1992 left him with an electric monotone voice. For most academics, this would have signaled the end of lecturing and seminar leading. For Tom, it seemed to clear away the remaining underbrush, leaving the pure ideas only.

After his surgery, if anything, his classes were more intensely exciting to students. We all remember walking by his office during this period, hearing the monotone and seeing the students on the edge of their chairs, in the kind of rapt attention we always seek but rarely attain. Those of us who supervised students with him most remember his delight in them. What struck us most was Tom’s pure pleasure in students’ creativity, accomplishments, and intelligence. No professorial jealousies there, no need to hold the ground as their intellectual superior, just sheer joy. His students responded by outdoing themselves and by struggling to meet a standard that they alone set, thinking somehow they were trying to meet his expectations when he was simply enjoying the process of watching them grow as young colleagues. The symposium in his honor, organized by the Anthropology Department in February 1999, enabled them to express their gratitude clearly.

As a colleague, Tom embodied the virtues of judiciousness and patience; he was always ready to discuss issues with students and colleagues alike and enjoyed nothing more than trading critiques of newly published work and

reviewing yet again for the uninformed an anthropological classic that, more often than not, he had just re-read or found a reference to.

There was little he had not read, and he was the most generous of colleagues in his willingness to share his opinions and debate them with anyone who valued academic exchange. He will also be remembered by his colleagues as always being ready to take on responsibilities even when he was already shouldering more than enough. He set a tone for the rest of us that we will have to struggle to maintain.

Jane Marie Law, Robert J. Smith, Oliver W. Wolters, Davydd J. Greenwood

Ruth N. Klippstein

January 4, 1923 — May 14, 1993

A member of the Cornell University Faculty since 1961, Ruth Klippstein was a leader in nutrition education for the public. Through her work in Cooperative Extension she trained county-based professionals and developed printed and audio-visual educational materials on many topics including dietary guidance, food fads, organic and health foods, the nutritional value of foods, and food safety. Ruth was nationally recognized for her expertise related to home food preservation and for many years worked to advocate research and outreach to provide consumers with recommendations for safe methods of preserving foods at home. She developed the Food Value Wheel, a schematic for dietary guidance that was widely adapted by other nutrition educators. She was also one of the first nutrition education specialists to address vegetarianism and the nutrition education needs of the elderly. Her bulletin, *The Sodium Content of Your Food* (1981), was the basis for consumer education programming by the Food and Drug Administration and the U.S. Department of Agriculture.

Born in Ohio, Ruth received her Bachelor's degree in nutrition from the University of Cincinnati in 1944 and her Master's degree in nutrition and physiology from Michigan State University in 1946. She moved to Oregon in 1946 where she worked as a research assistant in nutrition prior to becoming an extension agent in Lane County. She became an assistant professor and nutrition extension specialist at Oregon State University in 1957 and held that position until moving to Cornell in 1961.

At Cornell, Ruth held the positions of assistant professor (1961-64), associate professor (1964-76), and professor (1976-85). For several years, she was the department extension leader and she taught an undergraduate course in Extension nutrition education methods. She was appointed professor emeritus in the Division of Nutritional Sciences in 1985. Soon after she retired, she received an award from the Extension honorary, Epsilon Sigma Phi, and was recognized by the New York State Extension Home Economics Association for her accomplishments. She left Ithaca to fulfil her long-time dream of returning to Oregon and living on the banks of the McKenzie River.

Ruth was involved in many professional activities. She was an active member of the New York State Nutrition Council for many years and chaired the Council from 1971-73. She served on the New York State Heart Affiliate Hypertension Committee and chaired the State Heart Affiliate Nutrition Committee from 1983-85. She was often called on by the media and policy-makers for advice in the areas of her expertise.

Throughout her career Ruth was a proponent of informal teaching methods and the leadership roles women needed to take in nutrition, health, and agriculture. She believed strongly that Cooperative Extension programs should take a proactive role in addressing issues and using innovative and appropriate teaching methods. She worked within the Cooperative Extension system as an advocate for change. In her own programs she tried to anticipate upcoming issues of importance to the public such as food fads, inflation, and energy usage, in order to have educational programs ready to address consumers' needs.

Ruth was active in the Presbyterian Church. With support from the National Council of Churches, she spent a 1967 sabbatical leave in Thailand as a consultant to nutrition education programs. She was a member of the Agricultural Missions Executive Board from 1970-72.

Ruth was respected and will be fondly remembered by her colleagues for her sense of humor, the support she provided for young faculty members and extension agents, her commitment to Cornell University and Cooperative Extension, and the role model she provided for working mothers. She is survived by her sister, Dr. Jeanne Nitchals of Cincinnati, Ohio; her daughter, Marjory Crouse of Atlanta, Georgia; her son, Rick Klippstein of Clinton, New Jersey; and three grandchildren.

Ardyth Gillespie, Martha Mopes, Carole Bisogni

James Stephen Knapp

October 15, 1908 — January 12, 1998

Professor Emeritus James S. Knapp died at his home in Ithaca at age 89. He was a retired faculty member of the Department of Communication in the New York State College of Agriculture and Life Sciences.

A native Ithacan and the son of the late Mr. and Mrs. John P. Knapp, he attended Immaculate Conception School, Ithaca High School, and Cornell University. After graduating from Cornell in 1931, he worked as a reporter and news editor of the *Adirondack Daily Enterprise* in Saranac Lake, New York. He returned to Cornell in 1934 as Assistant Editor in the College of Agriculture's Office of Publication. A short time later, he was appointed an Instructor in the Extension Service, and later became a full Professor in the Department of Extension Teaching and Information.

His accomplishments included 29 years as head of the Press Division in the college. During World War II (1942-44), he was Assistant and then Acting Director of Public Information for Cornell University.

He was an excellent writer, editor, and teacher. He taught news writing at the undergraduate level for 17 years, and contributed articles to many daily and weekly newspapers and farm publications. For several years, he maintained a close association with the New York Press Association, which, in 1960, presented him with their Community Service Award. He served the National Editorial Association as a judge of both weekly and daily newspapers and presented awards to those he rated as excellent in presentation and interpretation of agricultural and community information.

For 30 years, he issued a "Service Sheet" with items of journalistic interest gleaned from 125 New York State newspapers provided by publishers, and for many years prepared a publication, *Extension Echoes*, circulated weekly to the extension staff in the College of Agriculture. He and his small staff prepared news and feature articles for 85 daily and 350 weekly newspapers in the State, and for a selected list of national and regional publications. All of this was accomplished with the underlying principle that the basic information was centered in the results of research and academic work by the college with only a small fraction allocated to publicity or promotion. Evidence of the soundness of this approach was that the "products" produced by the press service under Professor Knapp's leadership won a majority of the awards of excellence in national competition with other land-grant universities.

At a special affair commemorating 25 years of service, his colleagues presented him with a citation that read in part:

“Your knowledge of the newspaper and magazine fields in New York State, your excellent working relationships with editors, your willingness to try out new ideas and make them work, and your reputation as a newsman and not a publicity man are the major reasons why we have a press service second to none.”

Professor Knapp was a Life Member and Director of the American Agricultural College Editors Association, the New York Society of Newspaper Editors, and the Public Relations Council of the State University of New York. He also was Honorary President of the Tompkins County Horticultural Society. He was a member of the Cornell Club of Ithaca, the Kiwanis, and Elks Clubs.

During his membership in Sigma Delta Chi, a national professional journalism fraternity, Jim helped stage the famous “Delicate Brown” dinner that attracted hundreds of leading citizens. In his youth he was a golfer and horseshoe pitcher, and during most of his lifetime maintained an active interest in Cornell athletics.

He is survived by two nephews, John P. Knapp III, of Fair Haven, New Jersey and Alan Bubier, of Annapolis, Maryland; and a niece, Mrs. George P. Wood, of Mountain Lakes, New Jersey.

Robert J. Ames, William B. Ward, Elmer S. Phillips

Frank V. Kosikowski

January 10, 1916 — April 6, 1995

Frank Kosikowski was a major force in the field of Dairy/ Food Science for over a half-century. During this time, he contributed abundantly to the scientific literature and touched many, many lives with elegance and grace. He instilled a new meaning to life-long learning and provided a standard of excellence and integrity for us all.

Born in Torrington, Connecticut, Frank Kosikowski received his B.S. degree (1939) from the University of Connecticut and his M.S. (1941) and Ph.D. (1944) degrees from Cornell University. In 1945, he was appointed to the Cornell faculty as Assistant Professor and rose through the ranks to become full Professor in 1952. He was Professor Emeritus since his June 30, 1986 retirement.

Frank Kosikowski came naturally into the academic profession. During his legendary career, he steadfastly nurtured in himself and in his sixty graduate students and thirty postdoctorates the ability to think critically and creatively. Many of his former students and postdoctorates occupy commanding positions in research, education and international food development. Just as his teaching was characterized by an interest in good education, his research was directed toward new concepts, products, and processes that brought him national and international prominence. Under his authorship or co-authorship, approximately 450 scientific papers, three books, and technical articles and reviews were published—including 12 patents. One of his books, *Cheese and Fermented Milk Foods*, has become a classic in its field for educators, processors, and regulatory agencies around the globe and has been translated into a number of languages. Working diligently with one of his former students during the last days of his life, he kept himself busy revising and updating this masterpiece of the cheese world.

Frank Kosikowski was regarded as a scientist whose influential work in the areas of chemistry of cheese flavors, development of foods from microorganisms and microbial enzymes, whey utilization, low-lactose milk, pasteurization and antibiotic tests for milk, and molecular membrane separations such as ultrafiltration led to the development of many novel products and new processes. The impact of his work was recognized and honored in the form of many awards bestowed upon him, such as the Dairy Industry Fellowship for Advanced Study, Fulbright Research Scholar Award, Borden Award and Gold Medal for Research, ACDPI-Nordica International Award, Pfizer Award, Albert Pollio Memorial Award, Marschall Award, and the National Cheese Institute Award. He was also elected a Fellow of the AAAS and was a member of the Scientific Advisory Council for The Refrigeration

Research Foundation. A co-founder of the American Cultured Dairy Products Institute and the founder of the American Cheese Society, he set high standards in professional dedication and leadership.

Frank Kosikowski's interest in the international arena came from a personal crusade aimed at stressing the profound importance of food and agriculture in international affairs generally and in developing countries particularly. Delivering an invitational address at a UN Conference in France; advising the government of Puerto Rico and the Food Industry of Ireland; providing technical assistance at the FAO Headquarters in Italy; participating in extended visits to Iran, Afghanistan, India, Australia, New Zealand, Thailand, and Japan; serving on the faculties of Monterrey Institute of Technology, Mexico, and Simon Bolivar University, Venezuela; participating in technical meetings and lecturing in Finland, Russia, Argentina, and Chile; serving on the Expert Advisory Committee on Food Hygiene of WHO for 16 years; cooperating with scientists in Yugoslavia, France, England, and Germany; holding repeated editorial board appointments on national and international scientific journals; establishing and teaching a course on International Food Development for 20 years and initiating a graduate major in International Food Science at Cornell—all of these actions contributed in part toward a life-long service to the international community. To honor his efforts, he was decorated with the Officer Merite d'Agricole Award by the government of France, selected as the First Fellow in the Irish-USA Exchange Research Program, elected an honorary member of the Italian Veterinary Society, and named the recipient of the Institute of Food Technologists' International Award.

The Department of Food Science organized a symposium on Cheese Biotechnology and International Food Development on October 18-20, 1987, to honor Frank Kosikowski and to pay tribute to his distinguished service to Cornell University and the profession at large. His students, colleagues and friends came from around the world to express their gratitude and affection for The Professor. In December 1990, Captain Leo Berger of New York City, a former student of Frank Kosikowski, pledged a major monetary gift to the Department of Food Science at Cornell to support the international food development program to honor him as a teacher and scientist.

Frank V. Kosikowski died Thursday, April 6, 1995, at the Tompkins Community Hospital. Besides his wife, Anne Hudak Kosikowski, he is survived by his daughter and son-in-law Frances and Mario Vecchi of Denver, Colorado; and three grandchildren, Gabriel, Daniel and Eva Vecchi. To those of us who knew him well, the memory of his intellect, spirit and avid affection for humanity will live on, across international boundaries.

D.K. Bandler, R.A. Ledford, S.J. Mulvaney, S.S.H. Rizvi

Norman Kretzmann

November 4, 1928 — August 1, 1998

Norman Kretzmann, Susan Linn Sage Professor of Philosophy, Emeritus at Cornell University, died on August 1, 1998, in Ithaca, New York. Although he had been under treatment since August 1991 for an incurable cancer, he remained philosophically active until a few weeks before his death.

Norman was born in Chicago on November 4, 1928, the son of Adalbert Raphael Kretzmann, a Lutheran pastor, and Josephine Heidelberg Kretzmann. He received his secondary education at Concordia in Bronxville, New York, his B.A. degree from Valparaiso University in 1949, and his Ph.D. degree from Johns Hopkins University in 1953. Before joining the Cornell faculty as an Associate Professor in 1966, he taught at Bryn Mawr College (1953-54), Ohio State University (1954-61), and the University of Illinois at Champaign-Urbana (1961-66). He was promoted to Professor at Cornell in 1968, and was appointed Susan Linn Sage Professor of Philosophy in 1977. He retired from Cornell in 1995.

Norman's years at Cornell were full of service to the university, and to his college and department. He was Chair of the Sage School of Philosophy from 1970-75, Director of the Religious Studies Program from 1981-90, Acting Director of the Society for the Humanities in 1982, and Acting Director of the Field of Medieval Studies in 1987.

His record of exemplary service to Cornell was matched by a record of exemplary service to the philosophical profession. The two were combined in his service to *The Philosophical Review*, of which he was Co-editor (1967-68), Managing Editor (1968-69, 1970-75), and Editor-in-chief (1985-87). He was Editor of the New Synthese Historical Library (1989-92).

He served the American Philosophical Association as a member of its Eastern Division Executive Committee (1981-84), as a member of the Committee on Lectures, Publications and Research (1986-89), and as an advisor to the Eastern Division Program Committee (1985-88). In addition, he served on the Executive Committees of the Society for Medieval and Renaissance Philosophy and the Society for Christian Philosophers.

Norman's curriculum vita lists fourteen books, a pamphlet, sixty-nine articles, and twenty-one reviews. He wrote on a variety of topics. Several of his early papers were on ethics, including a provocative defense of Mill in "Desire as Proof of Desirability." His early articles include a long and influential "History of Semantics" for the Edwards (ed.) *Encyclopedia of Philosophy*, and influential papers on Locke's semantic theory and Plato on the correctness of names.

However, increasingly the focus of his work was on Medieval Philosophy and the Philosophy of Religion. Norman's work on Medieval Philosophy falls into two phases. The outlook of his first phase, up to the early 1980s, informs his editing of the landmark, *Cambridge History of Later Medieval Philosophy*. Norman wanted to show that Medieval philosophers were engaged in such central philosophical pursuits as logic, philosophy of language, and philosophy of science.

In emphasizing these features of Medieval Philosophy, Norman was trying to introduce the richness and variety of Medieval Philosophy into the mainstream of twentieth-century philosophical discussion. He thought it important to show that Medieval Philosophy was not confined to major figures like Aquinas, and that it was not confined to rational theology, metaphysics, and ethics. Thus, the *Cambridge History* deliberately emphasizes the philosophical significance of philosophers previously ignored, and gives special weight to the Medieval contribution to logic, philosophy of language, and the foundations of natural philosophy. This approach to Medieval Philosophy also resulted in a series of papers on semantics and natural philosophy, on the "Oxford Calculators", and in an edition and translation, published by Norman and Barbara Ensign Kretzmann, of the *Sophismata of Richard Kilvington*.

In the early 1980s, the focus of Norman's work in Medieval Philosophy began to shift. He began to concentrate on Aquinas, especially his philosophical theology, metaphysics and ethics. Having done what he could to show that Medieval philosophers were genuine philosophers who ought to interest their twentieth-century successors, he approached a central figure and his central concerns as one would approach a philosopher whose views deserve to be taken seriously and evaluated both critically and sympathetically. Norman's work displays a striking growth of sympathy with Aquinas and with his philosophical aspirations, but no diminution of the critical and argumentative spirit of all Norman's engagement with Medieval Philosophy. Aquinas' natural theology was the subject of his Wilde Lectures at Oxford University in 1994, which started him on a series of three books, each dealing with one of the three volumes of Aquinas' *Contra Gentiles*. The first of these, *The Metaphysics of Theism*, was published in 1997, and the second, *The Metaphysics of Creation*, is forthcoming. He was in the middle of writing the third, *Metaphysics of Providence*, at the time of his death.

One way in which Norman sought to overcome the neglect of Medieval Philosophy was through his own teaching. He was an enormously dedicated and effective teacher, and the leading scholars in Medieval Philosophy include several of his students. The excellence of his teaching was recognized in 1992 when he was the first recipient of the Northeast Association of Graduate Schools Award for Outstanding Graduate Teaching.

Norman's concern to disseminate knowledge and appreciation of Medieval Philosophy manifested itself in other ways. He was translator or joint translator of four volumes, and Principal Editor of the Yale Library of Medieval Philosophy. He was a founder and Chair of the Editorial Board of the journal, *Medieval Philosophy and Theology*. He was Advisor Editor of *Faith and Philosophy* 9 (1992) No. 4: Medieval Philosophical Theology and its Contemporary Extensions; and Advisor Editor of *Revue Internationale de Philosophie* 52 (1998) No. 2: Saint Thomas Aquinas. Most recently, he was Subject Editor for Medieval and Patristic Philosophy for the *Routledge Encyclopaedia of Philosophy*.

Norman also made important contributions to the philosophy of religion. In an early article, "Omniscience and Immutability" (1966), he questioned the coherence of perfect-being theism. However, in later articles, most notably "Eternity" (1981) and "Absolute Simplicity" (1985) (both co-authored with Eleanore Stump), he developed and defended it.

Norman's excellence as a teacher and scholar was recognized in many ways. He was awarded a Guggenheim Fellowship in 1969, which he declined in order to take an NEH fellowship and a visiting Fellowship at Balliol College, Oxford. He was twice awarded NEH Research Fellowships (1969-70, and 1977-78). He held a faculty fellowship at the Cornell Society for the Humanities (1974). In addition, he held a Senior Fellowship at the National Humanities Center (1992-93).

Norman's intellect and learning, and his extraordinary wit and personal warmth, won him the respect and deep affection of colleagues and students alike. He counted himself, even after he knew he had a fatal illness, as a very lucky man. This was partly because he was able to make his living doing what he loved — for he did love the teaching and philosophical scholarship into which he poured his energy. He enjoyed playing and listening to music, reading novels and history, canoeing, and many other activities. In addition, he derived enormous pleasure and comfort from his family. He is survived by his wife of forty-one years, Barbara Ensign Kretzmann; his daughters, Anita Kretzmann, Maria Sañudo, and Julia Kretzmann; and his two grandchildren.

Carl Ginet, Scott MacDonald, Sydney Shoemaker

Robert C. Lamb

May 11, 1919 — March 31, 1997

Dr. Robert C. Lamb, Emeritus Professor in Cornell University's Department of Horticultural Sciences at the New York State Agricultural Experiment Station in Geneva, New York, died at his home following a serious illness due to a breathing disorder.

Dr. Lamb was born in Saskatoon, Saskatchewan. He was awarded a B.S. degree from the University of Saskatchewan in 1941. After serving in Europe as a Captain in the Royal Canadian Army Service Corps from 1941-45, he received his M.S. and Ph.D. degrees from the University of Minnesota in 1947 and 1954, respectively. He became a naturalized citizen of the U.S.A. in June 1952.

Bob joined the New York State Agricultural Experiment Station in 1948. A description of his duties at the onset of his career reads: "Leader of projects to produce improved varieties of peaches, nectarines, apricots, cherries, and pears for New York State conditions. He also directs the work of breeding new varieties of apples and pears resistant to fire blight, scab, and other destructive diseases. He will be expected to continue and expand this work in the future"— which he did with international award winning success.

In 1988, Bob received the Wilder Medal from the American Pomological Society for his fruit breeding research and in recognition of his two-term presidency of this professional society (1981 and 1982). The award recognized his work in variety development and highlighted the development of the scab resistant apple cultivars 'Liberty' and 'Freedom'; his introduction of two hardy peaches, 'Brighton' and 'Eden'; the nectarine varieties 'New Yorker' and 'Morton'; the high quality pears 'Aurora' and 'Highland'; and the apricot varieties 'Farmingdale' and 'Alfred'.

Bob joined plant collection expeditions to Nepal and Romania seeking peach, apricot, and plum cultivars for use in breeding. He lectured at international fruit breeding conferences in Eastern Europe and was principal advisor to fruit breeding graduate students who are now leading their country's apple breeding. The 'Liberty' apple that Dr. Lamb collaboratively developed with his Station pathologist colleagues has steadily progressed to a place of commercial merit, especially for orchardists seeking new options for reduced pesticide production.

Bob retired from Cornell University in 1988 but continued to devote considerable time to the Geneva Experiment Station activities. He kept office hours where he assisted with fruit breeding research such as fresh and processed fruit quality evaluations. He was a member of the Board of Directors of the New York State Fruit Testing Cooperative

Association, a Geneva Experiment Station based fruit nursery for variety testing of new and noteworthy fruit introductions from the Geneva programs. He assisted in creating trials throughout New York orchards to evaluate the potential of advanced selections and new varieties to meet the commercial needs of New York growers.

Bob was a member of the Sigma Xi Scientific Society, the American Society for Horticultural Science, the Canadian Horticultural Society, and the American Pomological Society. In addition to his work at the Geneva Station, Dr. Lamb was active in community affairs. He was a member of the Seneca Lake Yacht Club, the Geneva Historical Society, and diligently served on the Troop Committee of Boy Scout Troop #4, sponsored by the Presbyterian Church in Geneva, where he was a Ruling Elder and headed many church committees.

Bob is survived by his wife, Barbara; three children: David S. Lamb, of Spokane, Washington, Elizabeth M. Lamb, of Fayetteville, Arkansas, and William A. Lamb, of Newark, New York; two grandsons, Christopher Robert, of Spokane, and Robert John, of Newark; and his brother, Thomas W. Lamb, of Saskatoon, Saskatchewan.

Dr. Lamb's legacy of breeding disease resistant varieties of apples, cold hardy apricots and peaches, and delicious pears has benefited the New York fruit industry and consumers. This year a national review of Cornell's plant breeding program acknowledged Dr. Lamb's research and the contributions he has made to breeding pears that are resistant to the pear psylla, a pest of pear orchards in New York and world-wide. He left a wealth of germplasm in his breeding collections, many of which have the potential to be released as improved cultivars. He pursued challenging long term research such as examining resistance in apple to powdery mildew and fire blight. This work required close cooperation with plant pathologists and the patience and persistence to use wild species in strategies that required several generations of breeding and rigorous selection for multigenic traits.

Bob Lamb's legacy extends far beyond his professional career. He was dedicated to his research, and had an enthusiasm that was contagious to students, visiting scientists and to his colleagues. His kindness was one attribute that benefited all that interacted with him. Students and faculty were made to feel like family within a short time of visiting the Lamb household, and Bob and Barbara were considered "local" grandparents by several children of the Geneva Experiment Station faculty. His positive attitude and good humor never wavered, even in illness. Bob's hearty laugh, warm smile, and the twinkle in his eye will long be remembered by all who were fortunate enough to know him.

Robert Andersen, Michael Dickson, Susan Brown

Peggy Lawler

June 24, 1929 — November 21, 1996

Peggy Lawler was born and raised in New Orleans, the daughter of Mark R. and Katharine Lawler. She studied dance as a girl while attending the Country Day School. After receiving a B.A. degree in English in 1950 from Texas Women's University, she went on to a career in dance, teaching at the Putney School in Vermont for the next two years. From 1947-54, she spent her summers studying and teaching dance at the Perry-Mansfield School of the Theater in Steamboat Springs, Colorado. There she met Harriette Ann Gray, with whose dance company she toured the United States from 1951-55. After teaching in her own studio in Redondo Beach, California for two years, she taught dance at San José State University from 1958-64, where she became an Assistant Professor after earning her M.A. degree in Dance in 1961.

Peggy Lawler was the head of the Dance Program at Cornell University from 1965 to her retirement in 1988 as Professor Emeritus. During that time, she succeeded in turning dance from an extracurricular activity into a recognized field of study, moving dance into the Department of Theatre Arts, and creating the dance major. Her vision inspired many students to pursue a life of dance, and to live all aspects of their life with commitment and spirit. She was a founding member, choreographer, dancer, and teacher with the Ithaca Dancemakers from 1972-82. After her retirement, she taught dance at Deep Springs College for two semesters.

In 1981, she made a barnstorming tour of the United States with her "Solo Cycle" of dances, often performing in small towns for people who would otherwise not have seen dance. Her choreography was characterized by musicality, elegant craftsmanship, subtlety, and humor. Some of her larger works include two productions of Stravinsky's, *Renard*, performed with live orchestra and vocalists and choreography of Karel Husa's, *Trojan Women*, for a cast of eighteen women and children with the composer conducting.

A lover of music, for many years she hosted weekly gatherings of friends for singing. Most recently she sang with the Ithaca Community Chorus and Chamber Singers. She shared many wonderful evenings of recorder playing with a small group and took pleasure in playing piano. In recent years, she dedicated herself to writing, producing short autobiographical pieces, and a journal of her 1981 dance tour.

She was an avid traveler, frequently taking off on cross country trips to the Western mountain ranges, where she renewed her spirit with wilderness hikes. She also liked to spend time at the cabin she and a few friends hand-built in the coastal Maine town of her father's origin. She traveled in Europe, South Asia, Mexico, Canada, and Great

Britain, always with great curiosity and an extraordinary talent for engaging with the people and life of any place she visited. Her generosity, love of nature, and artistry were gifts to the entire Ithaca community.

She is survived by her mother, Katharine Lawler; her brother, Robert Lawler and wife Penny, of Port Angeles, Washington, and their children, Betsy, Jenny, and Kenneth; as well as many devoted friends.

Don Fredericksen, Lamar Herrin, Joyce Morgenroth

Frank Andrew Lee

August 14, 1901 — September 25, 1999

Professor Emeritus Frank Lee was born in Seattle, Washington, on August 14, 1901, the only child of Frank and Amelia Staengel Lee. He died on September 25, 1999, at the age of 98, in Waterloo, New York.

He received his B.S. degree in 1923, and M.S. degree in 1926 from the University of Washington, where he also received the Ph.D. degree. For a brief time, he worked as a chemist for the State of Washington, and then he joined Duquesne University as an Assistant Professor of Pharmacology, attaining the rank of Associate Professor. An increasing interest in food chemistry led him to Leland Stanford University as a Research Associate in the Food Research Institute. Prior to his joining Cornell University, he was a chemist at Hunt Brothers Packing Company in San Francisco. In 1936, he was appointed Assistant Professor of Chemistry in the Division of Chemistry at the New York State Agricultural Experiment Station. This division merged with Bacteriology to become the Department of Food Science and Technology, and it was from this department that Frank retired in 1967.

He was a member of the American Chemical Society, and was very active in the Institute of Food Technologists, especially the Western New York Section where he was a founding member, and served as Secretary, Treasurer, Chairman, and Councilor over a period of years. Lee was on the editorial boards of the Institute's two major publications, *Food Technology* and the *Journal of Food Research*. Additionally, he was a member of Phi Lambda Upsilon and Sigma Xi. Professor Lee traveled extensively in Europe, presenting lectures at international symposia on food and biological chemistry.

As Professor of Chemistry, Lee conducted research on the blanching and freezing of fruits and vegetables when that industry was in its infancy. In addition to his work on vitamin retention and changes, he was best known for his studies on the oxidation of lipids in vegetables and in explaining the role of oxidation and changes in the deterioration of frozen fruits and vegetables, particularly peas, snap beans, soybeans and carrots. His work on lipids extended to studies on red meats and poultry. Professor Lee had more than 65 peer-reviewed scientific articles published during his career plus numerous review articles and bulletins. He wrote the textbook, *Basic Food Chemistry*. A second edition was published in 1983.

Throughout his career, he carried out a good deal of laboratory work himself. He had little regard for time of day. New night watchmen were always alerted about the food chemistry professor who would often work in his laboratory at all hours of the night.

He was a hunter and a fisherman. The Adirondacks was his favorite area for hunting, since during his hunting years, there were relatively few deer in the Finger Lakes region. He often got small hunting parties together to try their luck in the mountains. A passion for fishing was satisfied by taking advantage of Geneva's location on Seneca Lake. His hunting was complemented by an interest in conservation, shown by his long-term support of the Sierra Club.

Another of Frank's interests was in cooking, specializing in pastries. He claimed it was the artistic side of food chemistry. One particular pastry that he liked to make was Kaiser Zahne Torte, a very nice Viennese type cake with lots of whipped cream and fruit. He had a good sweet tooth.

A long interest in antiques resulted in a fine collection that eventually made up about half the furnishings of his apartment. He was particularly proud of a Chippendale sofa he had acquired in Pennsylvania. A love of books led to the creation of a private library containing many items relating to ancient Egypt.

Frank made a lot of trips after he retired. The most extensive of those were to Egypt, Iran, China, Russia and Germany. Many people at the Experiment Station were treated to a gourmet dinner made by Frank, followed by slides of his travels.

He was a real bookworm. If he was not in his office or laboratory, the place to look for him was a back table in the library surrounded by books and journals. Aiding him in his insistence on keeping current with the literature was his fluency in reading French and German. Later in his career, he taught himself Russian. Frank would become quite upset when journals were canceled, as during periods of budget cuts, particularly since the first to go were often German or French chemical journals of special interest to workers in food science.

After he retired, he spent a good part of his time in the Experiment Station Library. It became his main contact with his colleagues and friends. It was a place where he felt comfortable, where he could see people without having to make prior arrangements. His regard for the library was reflected in his generous bequest to the Experiment Station Library for the express purpose of bolstering the journal collection. The library has since been named the Frank A. Lee Library.

While Frank Lee was a very private person, he was a familiar, friendly, and well-regarded fixture at the Experiment Station and in Geneva. He has left a legacy of classic good manners and generosity that will keep him in our minds for many years to come.

Louis Leibovitz

May 29, 1921 — August 22, 1998

Professor Louis Leibovitz, 77, died Saturday, August 22, 1998, in Falmouth, Massachusetts.

He was born on May 29, 1921, in Philadelphia, Pennsylvania, where he lived until he finished high school. He attended Pennsylvania State University from 1939-42 and then spent the next four years in the U.S. Army. From 1946-50, he was a student in the Veterinary College at the University of Pennsylvania and received his V.M.D. degree in 1950. He was a Doctoral candidate at Rutgers University but withdrew prior to receiving the Ph.D. degree due to the death of his major professor, Frederick Beaudette.

In 1963, after several years in private practice, and ten years as a Professor of Poultry Pathology and Director of the Poultry Diagnostic Laboratory at the Delaware Valley College in Doylestown, Pennsylvania, Lou began an association with Cornell University that placed him in three different locations. The first years were spent in Eastport, L.I., where he was a Field Veterinarian at the Cornell University Duck Research Laboratory. During his stay in that laboratory, Dr. Leibovitz made many contributions to avian parasitology and various diseases of ducks. His foremost contribution in this area was the first diagnosis of duck plague (duck virus enteritis) in North America coupled with extensive studies on the biology of this disease in domestic and wild waterfowl. He also described a new coccidial species in ducks.

In 1973, he was appointed Associate Professor in the College of Veterinary Medicine and moved his family to Ithaca. He was promoted to Professor in 1982. His major activity during his stay in Ithaca was the development and implementation of a comprehensive program of teaching, research and service in the area of aquatic animal medicine. Lou established a fish diagnostic laboratory and quietly carved a niche for his work and a clientele for his services, which were supported by the New York State Sea Grant Institute. The multimillion-dollar shellfish industry was having serious problems with disease and welcomed his help with clam and oyster propagation. He guided the graduate studies of several students who went on to serve the fish and shellfish industries. The tropical fish industry also used his services.

In 1981, after eight years in Ithaca, he undertook a “temporary” assignment in Woods Hole, Massachusetts. It came about as a result of a cooperative program between Cornell University and the University of Pennsylvania with support from the National Institutes of Health and the agreement of Professor Calnek who “loaned” Dr. Leibovitz to the program for one year to get it started. The intent was to establish an aquatic animal diagnostic

laboratory that could monitor the health of marine animals used by scientists conducting research at the Marine Biology Laboratory. Another goal was to develop disease-free and genetically defined stocks of marine animals for research purposes. This entirely new initiative was so successful that it was considered important for him to remain there and he thus continued his career as Director of the Marine Animal Health Laboratory until his retirement in 1989. During this period, he remained a member of the Cornell faculty.

Dr. Leibovitz took a sabbatic leave in France during the 1980-81 academic year, while serving as a Research Consultant to the French Government Shellfishing Agency. During the same year, he served as a Consultant to the U.S. Fish and Wildlife Service. In 1985, he was honored by receiving the 1985 Centennial Award of the School of Veterinary Medicine at the University of Pennsylvania, and the 1985 Special Achievement Award from the Alumni Association of the same institution. He was an editorial board member for three scientific journals and belonged to seven professional associations. Over his career, he published nearly fifty scientific papers.

Lou was a scientist with insatiable curiosity and contagious enthusiasm for whatever he undertook. As problems presented themselves, he often opened totally new areas of research. He even became interested in starfish diseases, much to the dismay of the scallop and clam hatcheries that saw little need for studying the diseases of a major predator. In a community as diverse and knowledgeable as Woods Hole, many national and international disease problems were presented for solution. Some of these were: shell deformity in hard clams; a new disease of captive squid; a new disease of Pacific oysters; diseases of the horseshoe crab; and diseases of elasmobranchs. The best tribute to the success of his program is the fact that upon his retirement, it was deemed essential by both the Marine Biology Laboratory and the National Institutes of Health, who funded his work, that the project be continued.

Each year in May, when veterinary students arrived for the summer Aquavet Program, Lou would beam with excitement anticipating his interaction with them in the laboratory and classroom. His classes were infused with puzzling real problems requiring real solutions. Lou gave freely of his time while managing an increasing diagnostic load in a busy laboratory. His greeting of visitors was genuine and his enthusiasm for the work at the lab continued until the day he retired.

Work was all consuming for him, but he still found time for some woodcarving. He had considerable artistic talent and he used it effectively in preparing his own drawings of parasites and other objects for his publications.

When he retired on December 31, 1988, he was promoted to Professor Emeritus of Aquatic Animal Medicine in recognition of his many and varied accomplishments and contributions to the mission of Cornell University.

Lou was married to his loving wife, Anne, for 46 years. She predeceased him by less than three weeks. They are survived by two sons: Daniel Leibovitz, of Hilliard, Ohio, and Henry Leibovitz, of North Kingston, Rhode Island. Both Lou and Anne always became part of the community in which they lived and Woods Hole was no exception. Visitors to their home were always welcome and they enjoyed hearing about the success of others.

Howard E. Evans, Julius Fabricant, Bruce W. Calnek

Ellis Pierson Leonard

April 6, 1904 — February 7, 1991

Dr. Ellis Pierson Leonard's long distinguished career will forever leave deep impressions in the Veterinary College and throughout the veterinary profession. His early years began in Pleasant Plains, New Jersey. After obtaining a Bachelor of Science degree from Rutgers University in 1924, he entered Cornell University and completed a Doctor of Veterinary Medicine degree in 1934. Following graduation, he joined the Small Animal Clinic staff at Kansas State University for two years. He then entered private practice in Summit, New Jersey, with Dr. Joseph B. Engle and served until 1948 when Dean William A. Hagan of Cornell University recruited him as department chairman and director of the Veterinary Medical Teaching Hospital's Small Animal Clinic. He held this position until his retirement on July 1, 1969 when he was elected Professor Emeritus of Small Animal Surgery.

As director of the Small Animal Clinic, Dr. Leonard made extensive recommendations for the new construction of college facilities, including countless innovations in design which were later adopted by veterinary hospitals throughout the world. These included glass cages, heated outdoor runs, special drains, sterile surgical suites, as well as one of the first intensive care units for the critical care of animals. Visitors entering the small animal hospital were always impressed with the scrupulous cleanliness of the clinic and the meticulous care of patients his high standards required.

Dr. Leonard is credited with introducing and promoting aseptic surgical techniques to veterinary medicine. He was a pioneer in the surgical treatment of intervertebral disc diseases as well as a designer of orthopedic carts for patient rehabilitation. He developed innovative techniques for the internal fixation of fractures, especially repairs of the elbow, knee, and jaw. He pioneered the development of canine hip prostheses. He was also a superb soft tissue surgeon noted for his cardiac and intestinal surgery. Dr. Leonard was among the first to use oxygen for the management of animal patients under anesthesia. In 1955, he arranged for the first color television demonstration of surgical techniques at a veterinary college conference.

As author of two surgical textbooks, *Fundamentals of Small Animal Surgery* which was translated into five languages, and *Orthopedic Surgery of the Dog and Cat*, he influenced his whole profession. He was also a contributor to the first edition of *Canine Medicine and Artificial Insemination of Farm Animals*. Canine obstetrics was also a special interest, and in cooperation with A.E. Harrop of London, England, he conducted the first successful transatlantic artificial insemination in a dog.

Dr. Leonard remained professionally active in his retirement. He authored two historical books on the College of Veterinary Medicine at Cornell University, *A Cornell Heritage 1868-1908*, published in 1979, and *In the James Law Tradition 1908-1948*, published in 1982. In more recent years, he completed a history of the New York State Veterinary Medical Society entitled, *A Veterinary Centennial in New York State*.

Dr. Leonard received many professional honors. During his student days, he was awarded the Jane Miller Prize in Physiology in 1932, and the Ann Besse Prize in Medicine in 1934. He was cited in *Who's Who in America*. He received the American Animal Hospital Association Mark Morris Award in 1953. In 1986, he was given the prestigious Daniel E. Salmon Award by the Alumni Association of the College of Veterinary Medicine at Cornell University. He was a member of the American Veterinary Medical Association with Gold Star Status, American Animal Hospital Association, and a New York State Veterinary Medical Society Distinguished member. He served as secretary/treasurer and president of the Southern Tier Veterinary Medical Association, and as secretary/treasurer of the Alumni Association of the New York State College of Veterinary Medicine.

Professionally, he took great pride in being a founding Diplomate of the American College of Veterinary Surgeons. He loved life, family, veterinary medicine, and Cornell.

In leisure time at home, he made use of his fine motor skills, and his artistic talents allowed him to make elegant miniature furniture for a special doll house prepared for his granddaughter. Months before the holiday season, he began work on wooden children's puzzles which he designed, made, and carefully painted with nontoxic paint.

During his twenty-one years as a professor emeritus, Dr. Leonard appeared weekly at the college in the morning, always dressed in a three-piece suit. He enjoyed sharing memories of past events as he made his rounds. In his suit coat pocket was a seemingly endless supply of hard candy known as "silver mints" which he presented to all he met. His devotion and commitment to Mrs. Leonard was particularly special.

During his life, "E.P." enjoyed other vastly different experiences from moving houses with a team of horses to working in a bank. Listening to Dr. Leonard's experiences was always intriguing and made one wonder how any one person could have such a diversity of talents. He gave a great deal during his life during which he had a positive influence on the lives of hundreds of young men and women. His legacy of honesty, fairness, and the work ethic is treasured by many. Indeed, he was a Cornellian of outstanding professional and personal attributes who will long be remembered fondly by his colleagues and by the students who benefitted wonderfully from his guidance and skills.

Dr. Leonard is survived by his wife, Alice Adele; and son, Jay Leeson.

Robert W. Kirk, George C. Poppensiek, Ronald C. Riis

Harry Levin

March 3, 1925 — May 30, 1993

After taking only two and one-half years to earn a Ph.D. degree in psychology at the University of Michigan, Harry Levin became immediately involved in a landmark research project. In collaboration with Robert Sears and Eleanor Maccoby, he co-authored what is perhaps the best known single book in developmental psychology: *Patterns of Child Rearing*, a book that debunked both popular and scientific myths about the effects of different patterns of child rearing. This book is also remarkable for its graceful and thoughtful treatment of the relations between Freudian theory and classical learning theory.

Harry moved to Cornell in 1955. He became quickly involved in activities across several departments, eventually settling into the Department of Psychology, where he was the first William R. Kenan Jr. Professor of Psychology. He developed and directed Project Literacy, a large scale project that led to a revolution of psychological and educational views of the nature of reading. One of the outcomes of this work was a marvelous collaboration with Eleanor Gibson that led to their highly influential book, *The Psychology of Reading*. This book had a major impact not only on academic researchers but also on parents and elementary school teachers and it still stands as the single most influential work on the subject. A related line of work culminated in Harry's book on the eye-voice span, that seemingly innocuous difference between what you are currently reading out loud and what you have visually encoded. Harry demonstrated that this span was deeply involved in understanding both the nature of all reading and in understanding many of the difficulties confronting slow readers.

Harry's later work focused on the social psychology of language. A highly creative and fascinating series of studies ensued showing how individuals adjust their style of speech in different social contexts, whether they be those of the lecture hall, the doctor's office, or the day care center. He uncovered an extraordinary range of ways in which these differences are manifested in speech, ranging from changes in syntactic structure to shifts towards an increased use of the latinate lexicon in more formal settings. He helped all of us see for the first time the dynamic and complex systems of subtle codes that are used in language in real social situations, codes that can have profound impacts on how we understand what others really mean.

Harry's research achievements only touch upon his extraordinary contributions to Cornell. As chair of the Department of Psychology he attracted and retained some of the most eminent faculty in that department's history, including several members of the National Academy of Sciences and one of the very few psychologists

to ever receive the National Science Medal. He successfully challenged the university's nepotism rule when he saw it working against the career developments of women doing research at Cornell. He instilled a new vigor and enthusiasm in the department that continues to grow and expand almost twenty years after his chairmanship.

As dean of the college, Harry drew heavily on his ability to embrace and take a genuine interest in all forms of understanding and scholarly achievement. He advocated unfailingly the centrality of the liberal arts and sciences to intellectual and creative life and to the university itself. He helped departments develop extraordinary faculties and worked hard to obtain resources to support an outstanding faculty and outstanding curricula. He also cared deeply about undergraduate education. While he knew that strong teaching and advising were products of inquisitive, intelligent, caring minds rather than clever schemes, he also knew that undergraduate education needs direct attention. He appointed a series of faculty committees to study and recommend to the faculty ways to improve general education, advising, and the quality of instruction. The Undergraduate Research Program, the College Scholar Program as it is now, and a firm commitment to T.A. training are all legacies of Harry's deanship.

Harry took great pride in his students. Indeed his students glowed with pleasure when they were around him as they gained enormous passion from his pride and nurturance. Harry was the sort of teacher who wanted to give his students a lifelong gift of learning and how to think, and he did so on countless occasions. They would respond with a passion and enthusiasm that we all dream of kindling in our own students. He was always trying to find ways to support students and help them succeed and they clearly understood and appreciated such an interest.

Harry's life was characterized by a deep joy of discovery, a great pleasure and enthusiasm in sharing his work with others, and profound integrity. For those reasons he was the ideal colleague. Dropping by Harry's office was invariably an opportunity to learn something new. He would almost always have a new book or article that he wanted to share and would have a special perspective he wanted to explore with any visitor. Harry was also always good in a crisis, when a tough decision needed to be made, or when action needed to be taken quickly. Whether that crisis was at a personal or college level, it was immensely reassuring to know that Harry was there to make sure it was resolved.

One cannot write or remember Harry without remembering his full enjoyment of the good things of life: music, science, language and languages, literature, art, food, and conversation. But most all, one remembers his interest in people—in their backgrounds, their perceptions and orderings of the world, and in their personal lives.

Much of Harry's own great dignity rose from his clear conviction that everyone else had great dignity as well and deserved to be treated as such.

Together with his wife of 47 years, Debby, Harry has made an enormous difference to all members of his department, the university as a whole and the broader community. Their three children, David, Lynn, and Rebecca, are glowing examples of their ability to create passion and values in others; and the process continues in their wonderful grandchildren.

Lynne Abel, Bruce Halpern, Frank Keil

Charles S. Levy

August 15, 1931 — November 5, 1998

Charles S. Levy died unexpectedly at the Cayuga Medical Center in Ithaca on November 5, 1998, following heart surgery. He was born on August 15, 1931, in New York City.

Charles was Valedictorian of his class at Hamilton College, from which he received the A.B. degree with high honors in English and Classics in 1953. As an undergraduate, he excelled in mathematics as well as the humanities, and following scientific study at M.I.T., served as meteorologist in the U.S. Air Force. He studied at Oxford University as a Fulbright Fellow from 1957-59 and then at Cornell, where he earned the Ph.D. degree in English in 1962. He was Assistant Professor of English at the University of Minnesota from 1962-67, when he returned to Cornell as Associate Professor. He became Professor of English in 1975. Having been inducted into Phi Beta Kappa in 1952, he later served as member and chair of that organization's selection committee. He also held a fellowship from the American Council of Learned Societies. He was a member of the Modern Language Association, the American Philological Association, and the Renaissance Society of America. An active member of the American Association of University Professors throughout his career, he served a term as chairman of its Cornell chapter.

Professor Levy was recognized as a leading authority on the life and times of Sir Philip Sidney, Elizabethan England's premier courtier and man of letters, whose correspondence he was editing for the Oxford University Press at the time of his death. The project involved the transcription, translation, and annotation of hundreds of printed and manuscript letters, both from and to Sidney, scattered in dozens of repositories in Europe and North America. Few scholars of our time possessed the prodigious philological learning required for such a vast and complex undertaking. The Oxford University Press has agreed to sustain the project under the direction of Professor Victor Skretkowicz, former Fellow of Cornell's Society for the Humanities, who has been granted custody of Professor Levy's papers by his widow.

Professor Levy was among the most dedicated members of Cornell's College of Arts and Sciences and Department of English, serving on numerous committees over the years, where his sure command of parliamentary procedure was frequently put to good use, and as Director of Graduate Studies in English from 1968-71. From 1968-70, he participated in the Hampton-Cornell Cooperative teaching program.

At Cornell, he taught Shakespeare and other major literary figures of the English Renaissance to students at all levels, from freshmen to Ph.D. candidates, as well as advanced courses in the English sonnet tradition and in expository

writing. He was known as a demanding but highly organized, scrupulously fair, and utterly conscientious teacher. While he never courted popularity, he inspired strong loyalty from more discerning students. As Brandon Bigelow ('94) put it in his letter to the editor of *The Cornell Daily Sun*, both as classroom teacher and academic advisor, Professor Levy was

“a mentor and a friend. Beneath the formal demeanor lay the heart of a man deeply committed to his students. His advice was always thoughtful and well received, and extended far beyond my undergraduate years at Cornell...I was not the only one; he maintained contact with many of his advisees, and all of us benefited from his continued interest and help.”

As a scholar, Professor Levy was not only demanding but exacting. For him, “close enough” was never good enough: his motto was “let’s get it right.” A tireless advocate for academic causes in which he believed, he was also, when necessary, a tenacious as well as an eloquent disputant, especially in defense of traditional humanistic values.

Charles is survived by his wife of 42 years, Andrée Grandjean Levy, who was instrumental in developing his deep and abiding love of France, the French people, and French culture. Other survivors include his two daughters, Marian Wilson and Claudia Manganello; his sister, Ann Lathrop; his stepmother, Dr. Ernestine Friedl Harmel; and his four grandchildren, Blake and Sean Wilson, Isabella and Cecilia Manganello.

Donald D. Eddy, Carol V. Kaske, Barry B. Adams

Franklin Asbury Long

July 27, 1910 — February 8, 1999

Frank Long's research made fundamental, unique contributions to a surprising variety of important scientific subjects by applying his extensive background and deep intuition in physical chemistry to organic reactions, in combination with his creative instrumentation skills and keen awareness of new experimental techniques. These emerging research areas included basic reaction mechanisms of organic molecules in solution and unimolecular dissociation of gaseous ions. He was elected to the National Academy of Sciences in 1962. However, these broad interests also led him into leadership positions in academe, government, industry, and public affairs, especially his advocacy of international arms reductions. He served on the President's Science Advisory Committee for Presidents Eisenhower, Kennedy, and Johnson. Probably his most publicized appointment was the one that he did not receive as Director of the U.S. National Science Foundation when President Nixon learned at the last minute of Long's criticisms of the antiballistic missile system.

Professor Long, born in Great Falls, Montana, received B.A. and M.A. degrees from the University of Montana in 1931 and 1932. He did graduate work in physical chemistry at the University of California, Berkeley. After receiving his Ph.D. degree in Chemistry in 1935, he was an Instructor there, and at the University of Chicago, becoming an Instructor in the Chemistry Department at Cornell in 1937. He served as a research supervisor for the Explosive Research Laboratory of the National Defense Research Committee from 1942-45. He returned to Cornell as an Associate Professor and was promoted to full Professor in 1946. When Peter J.W. Debye stepped down as Department Chair in 1950, Long took over and served a record ten years. He was Faculty Trustee, 1956-57, and he served as Vice President of Research and Advanced Studies at Cornell, 1963-69. In 1969, he began a four-year tenure as Director of the new Cornell academic program, Science, Technology and Society, designed to study the impact of science and technology on the problems facing U.S. society. Between 1969-79, he was Henry R. Luce Professor of Science and Society, and between 1976-79, he was Director of the Peace Studies Program. He was a member of the corporate Board of Directors for the Carrier Corporation, United Technologies Corporation, and the Exxon Corporation, for which he was also a member of the Executive Committee. In 1985, he "retired" to serve as Adjunct Professor of Chemistry and Social Sciences at the University of California, Irvine, continuing to be active on national and international committees.

Frank Long was one of the pioneers who showed organic chemists that they had to think carefully about such physical chemistry concepts as nonideality, activity coefficients, and ion pairing if they were interested in the

mechanisms of aqueous reactions. These concepts formed the foundation of the worldwide interest in mechanisms of solvolysis reactions that began in the late 1940s and continued for nearly three decades. Because many aqueous organic reactions occur in media of high acidity, it soon became clear to mechanistic chemists that a supplement to the pH scale of dilute solutions would be necessary. When Louis Hammett proposed the H_0 acidity function to accomplish this end, Frank immediately saw the power of the approach, and put it to good use in his studies of the hydrolyses of lactones, esters, and acetals. He extended the concept to mixed and nonaqueous solvents, and proposed alternative acidity functions for use under specialized conditions.

Many of the mechanistic descriptions that we teach our undergraduates can be traced back to Frank Long's work. Long and his coworkers used the then little-known technique of nonradioactive isotopic labeling to tackle these problems. Early isotope labeling studies relied on the use of radioactive tracers, with chemical degradation of reaction products being used to locate the labels. Avoiding the problems of radioactive labeling, Long was an early user of mass spectrometric techniques with stable isotopes to get the same information faster by degradation of the labeled molecule within the instrument.

Long also studied the change in kinetics that could accompany the introduction of such stable isotopes either into the molecule of interest or the solvent in which it was undergoing reaction. His work on H_2O/D_2O solvent isotope effects showed the way to generations of researchers studying the mechanisms of biologically relevant aqueous reactions. The important "proton inventory" techniques that have elucidated some essential enzymatic mechanisms can trace a good part of their ancestry to Long's work.

Mass spectrometry was previously used largely for the determination of accurate atomic weights and for quantitative analysis of hydrocarbons. Characterizing the products of Long's organic reactions involved vaporizing these into the mass spectrometer to form gaseous organic ions; Long was one of the early pioneers studying the unimolecular decompositions of these ions, particularly for lactones, alcohols, and esters. In a first for spectrometry, he and Friedman used this chemistry in 1953 to help define the molecular structure of ketene dimer, a highly publicized controversy of the time. His pioneering physical chemistry studies of these ions included appearance potentials, heats of formation, and the statistical theory of their dissociation. Notable was his classical example of the nonergodic dissociation of ionized fluoroethylene that occurs before the input energy can be statistically randomized.

Frank Long's interests in arms control and other public issues began early, focused by his World War II research for which he was awarded the U.S. Medal of Merit. In 1949-52, he was member and Chairman, Advisory Committee for Chemistry, Office of Naval Research; and Trustee of Associate Universities that oversaw Brookhaven National

Laboratory. In 1953-59, he was Consultant, Ballistics Research Laboratory, Department of the Army, Aberdeen, Maryland. In 1956-60, he was a member, Science Advisory Board, Department of the Air Force. In 1957-60, he was a member, Ballistic Missiles Advisory Committee, Office of the Secretary of Defense; and in 1959-63, Chairman, Chemistry Advisory Committee, Air Force Office of Scientific Research.

He was a member of the President's Science Advisory Committee under Presidents Eisenhower, Kennedy, and Johnson. When the U.S. Arms Control and Disarmament Agency was formed in 1962, he was its first Assistant Director for science and technology. As a member of the U.S. group that went with Averell Harriman to the Soviet Union in 1963, he took a leading role in the effort of the U.S., the UK, and the Soviet Union to negotiate a comprehensive nuclear test ban treaty. Intense negotiations over an extended period resulted in agreements on almost everything except the number of on-site inspections; the Soviets insisted on three per year versus the U.S. demand of seven. The historical compromise, the Limited Test Ban Treaty, prohibited testing in the atmosphere, the oceans, and in space, but permitted underground testing. He was a Director of the Arms Control Association, 1971-77, and Co-Chair of the U.S. Pugwash Steering Committee, 1974-79. The 1995 Nobel Peace Prize was awarded to the Pugwash Conferences. He was a member of the Board of Directors of the Albert Einstein Peace Prize Foundation and a member of the Board of Trustees of the Fund for Peace.

His aggressiveness in arms control efforts is best illustrated in his opposition to the antiballistic missile project, as delineated in a 1968 publication stating that the ABM missile development would create "strong pressure toward acceleration of the arms race." In 1969, he was nominated by a board of scientists to be Director of the National Science Foundation. He went to Washington, D.C. one morning, presumably to receive the appointment from President Nixon in the White House Rose Garden that afternoon. However, upon arrival, he was told that the ceremony was cancelled. International publicity of the event produced an immediate outcry from a variety of concerned citizens as well as scientists. Later the White House relented but Long declined the President's offer.

Long also played a major role in science and technology transfer to underdeveloped nations, including India, South Korea, Latin America, Malaysia, and Indonesia, in part as a member of the National Academy of Sciences Board on Science and Technology for International Development. He was U.S. Co-Chairman for the Indo-U.S. Subcommittee on Education and Culture; a member of the U.S. Overview Committee for Indo-U.S. Science and Technology Initiative of the U.S. National Research Council started in 1983 by Prime Minister Indira Gandhi and President Ronald Reagan; a member of the Council on Foreign Relations of the American Association for the Advancement of Science, 1964-89; and Co-Chairman, 1972-76, of the Joint U.S.-Korea Advisory Committee for

Science. In 1975, he received the Order of Civil Merit and Dongbaeg Medal from the President of the Republic of Korea for contributions toward the development of science and technology in Korea.

Only a few prizes are available to scientists for outstanding public service. Two of the most prestigious are the Charles Lathrop Parson Award from the American Chemical Society that Long received in 1985, and the Philip Haug Abelson Prize of the American Association for the Advancement of Science that he received in 1990. His wife, Marion Thomas Long, died in 1992. He is survived by a son, Franklin, a chemist, of Claremont, California; a daughter, Elizabeth, a Professor of Sociology at Rice University; a brother, George, of Portland, Oregon; and a grandson.

Barry K. Carpenter, Jerrold Meinwald, Fred W. McLafferty

Karla Longrée

September 7, 1905 — September 26, 1996

Karla Longrée was born in the Rhineland area of Germany and received college training there leading to the degree of Doctor of Agriculture. She served as a research associate in the Biological Reichsinstitute at Berlin-Dahlem before immigrating to the United States in 1933. She received a Ph.D. degree from Cornell in 1938 and became a United States citizen in 1939.

Beginning in 1941, Dr. Longrée taught in the area of food science at the Hampton Institute in Hampton, Virginia. She returned to Cornell in 1950 as a research professor in the Department of Institution Management (New York State College of Human Ecology). Her research efforts were directed at the microbial quality of food prepared in quantity and she studied conditions under which potentially hazardous menu items might lead to food poisoning outbreaks. She devised methods that would assure microbiological safety of food items prepared under conditions of large quantity food service and developed quick cooling devices which cut the time required to cool cooked foods to a point where they could be refrigerated. She also discovered that high acid ingredients such as citrus juice and salad dressing inhibited bacterial growth and on this basis developed procedures for quantity cooking that minimized the dangers of food poisoning.

Results of Dr. Longrée's research were published in professional journals such as *The Journal of the American Dietetic Association*, *The Journal of Food Protection*, *Food Technology* and others. She also was a consultant in the development of a film on food sanitation.

She developed and taught courses in food sanitation and served as a major professor for many graduate students who were preparing to work in that area. These students have filled leadership roles in this country and abroad.

She is the author of two books, one a college text entitled *Quantity Food Sanitation*; now in its fifth edition in collaboration with Gertrude Armbruster. This book provides basic information for the understanding of the factors which contribute to foodborne illnesses and shows ways to reduce or eliminate this threat by suggesting appropriate methods of storage, preparation, heating and hot-holding, cooling and cold-holding of foods with emphasis on institutional applications. Pertinent literature is cited and discussed. Emphasis is given to time-temperature control, an area that was the focus in much of Dr. Longrée's research. *Sanitary Techniques in Food Service*, a second book was written in cooperation with Professor G. Blaker of Colorado State University and is written for the vocational level of teaching.

Dr. Longrée had many interests and was a talented craftsman using silver and enameling techniques to design jewelry. She also enjoyed the outdoors, hiking and gardening. She had a great love for music, in particular the classics. After retirement, she traveled widely including Europe and Central America.

In 1986, Dr. Longrée moved to the Highland Farms Retirement Community in Black Mountain, North Carolina, where she continued to reside.

Raymond Fox, Bernice Hopkins, Gertrude Armbruster

Clifton W. Loomis

January 28, 1914 — December 2, 1994

Clifton W. Loomis, Professor Emeritus of Farm Management, died December 2, 1994, at the age of 80. He was born and raised in the rural New York community of Burlington Flats. Much of his professional life was spent in educational work with farm families in Upstate New York communities similar to the one where he grew up.

Clif received his Bachelor's degree from the College of Agriculture at Cornell in 1937. His first employment was as an Assistant County Agriculture Agent in Delaware County, New York. He was called to active military service in 1940 and returned to Agricultural Extension work in 1946, serving five years as County Agriculture Agent in Schenectady County, New York.

Returning to Cornell for graduate study, he received his M.S. degree in 1951 and Ph.D. degree in 1953. Part of the degree requirements were fulfilled at the University of Illinois. From 1953-55, he was a member of the faculty of Agricultural Economics at the University of Missouri. Clif was appointed Assistant Professor of Farm Management at Cornell in 1955, was promoted to Associate Professor in 1957, and became Professor in 1964. He served as Department Extension Leader in Agricultural Economics from 1971-75.

In 1964-65, while on sabbatical leave, Professor Loomis taught and conducted research at The American University of Beirut in Lebanon. In 1970-71, while on leave, he served as Advisor to the President of The Agricultural Development Fund of Iran.

Work in Cooperative Extension was at the center of Clif's professional career. He spent most of a decade as a County Extension Agent. From the time he joined the faculty at Cornell in 1955 to his retirement in 1975, the bulk of his time was spent teaching and counseling with County Extension Agents and farm families. He was extremely effective in helping farmers recognize business problems and improving their management skills.

Professor Loomis provided the leadership in developing the electronic farm accounting system known as CAMIS (Cornell Agricultural Management Information System), used by the New York State Extension Agents in their work with farmers and agribusiness persons. CAMIS proved to be an efficient computerized accounting system and management tool. He shared his experiences with CAMIS with other professionals who were developing similar computerized systems for farmers and agribusiness persons in the Northeast and throughout the United States.

Clif had a long and deep rooted commitment to the military. When he graduated from Cornell in 1937, he was commissioned an R.O.T.C. officer and was called to active duty in 1940. From 1940-42, he served as an Instructor in Military Science at Cornell. During World War II, he was an operations officer with a field artillery battalion in France and Germany, receiving decorations including The Purple Heart and The Bronze Star and rising to the rank of Colonel. Following World War II, he remained active in the Army Reserve. As late as 1969 and 1970, he spent leave time with the New York State Headquarters of the Selective Service System. With an ongoing commitment of his own time, he backed his belief that a strong military is essential to the well being of the Country.

Professor Loomis, a bachelor, is survived by a brother, two sisters, nieces, and nephews.

C. Arthur Bratton, James C. Pratt, Robert S. Smith

Ruby M. Loper

January 12, 1901 — January 17, 1990

Ruby M. Loper was born in rural Douglas, Nebraska, where she developed a positive work ethic and a strong and sympathetic understanding of her fellowman. A dedication to teach others in ways to improve their lives was formally begun in 1925 when she became a student and draftsman in the College of Engineering and Architecture at the University of Nebraska, Lincoln, Nebraska. It is believed she is the first woman to be graduated from that college, and in 1934 was appointed assistant agricultural engineer, a position she held until 1946. She was a member of the Nebraska extension staff for 21 years. She owned Nebraska farmland all of her adult life and identified with the problems of farm ownership and management. One part of her early Nebraska extension career was to survey farms for contours and terraces, a new practice at that time, to prevent soil erosion.

In 1946 Professor Loper joined the Cornell faculty as extension architect with a dual appointment in the Department of Housing and Design in the New York State College of Home Economics, and the Department of Agricultural Engineering in the New York State College of Agriculture. She was the first woman to hold this position in New York State.

Although a person of short stature, she was a predecessor of Women's Liberation. Professor Loper was a true pioneer in being able to present realistically her subject matter to all-male audiences in the building-trades. She spoke and wrote with conviction and authority, winning the respect of her audiences. Her efforts assisted many farm families in attaining housing to meet their living requirements. She conducted building technology seminars for building-trades people; assisted county extension associations in planning extension headquarters; and in collaboration with the Department of Institution Management, provided plans for community food-service facilities.

She served on numerous national housing committees and was the author of housing extension bulletins, as well as articles in architectural, engineering, home economics and commercial magazines. In 1955 the Lambda chapter of Epsilon Sigma Phi awarded her a certificate for highest achievement in written material for advancing the work of the Cornell Extension Service. Her many accomplishments were due to her endless energy and dedication to education.

Professor Loper was held in high esteem nationally and statewide for her leadership roles in providing quality housing information and housing programs. She was a charter member of the American Association of Housing

Educators and served on its board of directors. Additionally, she served as a chairman and member of the House Plans and Planning Committee of the Northeast Land-Grant Universities.

After retirement in 1967 Miss Loper remained in Ithaca and resided at the Ramada Inn, where the entire staff became “her family.” She became a benefactor of the College of Human Ecology, formerly Home Economics; and established two department loan-funds for students in financial need and also contributed generously to various college funds and community causes.

She nurtured many continuing and rewarding friendships during her retirement years and continued her love of reading. She surrounded herself with books of many subjects and interests in keeping with the many facets and interests of her personality. Ruby M. Loper, a true friend, a colleague, a person of integrity, humor and protocol, a scholar truly missed.

Bernice Hopkins, Clark E. Garner

Carl Clifford Lowe

January 1, 1919 — November 29, 1999

Carl C. Lowe, 80, Professor Emeritus, widely known breeder of forage crops, and long-time member of Cornell's Department of Plant Breeding, died suddenly on November 29, 1999. Lowe specialized in breeding forage grasses and legumes. He participated in the development of popular varieties of alfalfa, timothy and birdsfoot trefoil. He also developed refined applications of statistics in experimental design and in plant breeding research.

For 28 years, Lowe taught a popular course in experimental methods for graduate students in the Plant Sciences. He served as advisor for numerous undergraduates and for 14 graduate students. Dr. Lowe's office door was always open to students. Many of his advisees have gone on to distinguished careers of their own.

Lowe worked with seed growers and seed industry leaders in developing programs to bring to farmers the benefits of varieties developed in Cornell plant breeding research. He served as secretary of the NY Seed Improvement Cooperative for 25 years. In this role, he encouraged the adoption of superior varieties by seed growers and farmers.

Lowe was born January 1, 1919, in West Salem, Ohio, the oldest son of Carl and Grace Keener Lowe. His father was an agronomist specializing in sugar beets. The Lowe family soon moved to Twin Falls, Idaho where Carl spent his youth. He attended the University of Idaho in 1938. The family relocated to Fort Collins, Colorado, where his father unexpectedly died. Carl left school and worked for the USDA Agricultural Adjustment Administration from 1940-42.

Carl entered the United States Army in 1942 and served in North Africa, France and Germany as a member of the 899th Tank Destroyer Battalion and the 9th Infantry Division. His unit landed at Utah Beach, Normandy, on D-Day, June 6, 1944, then fought its way across France, and was among the first to cross the Rhine in the invasion of Germany.

After release from active duty he attended Colorado A&M, earning his B.S. degree in 1948. He followed with graduate studies at Cornell, earning his M.S. degree in 1950 and his Ph.D. degree in 1952 in Plant Breeding, under the tutelage of Professors Royse P. Murphy and Walter T. Federer.

Lowe was appointed Assistant Professor of Plant Breeding, at Cornell University in 1952, Associate Professor in 1955, and Professor in 1964. He was named Professor Emeritus in 1983.

Lowe was a member of the American Society of Agronomy, the Crop Science Society of America, Phi Kappa Phi and Sigma Xi. In recognition of his contributions to seed growers and to the seed industry, he was elected an honorary member of the New York State Seed Association.

Dr. Lowe was a pivotal leader in the initiation and development of the Northeast Regional Forage Improvement Project, which continues to coordinate leadership in forage crop breeding and improvement, originally in the Northeast and now nationally. Dr. Lowe also participated in the development and activities of the Northern New York Economic Development Project. He also served as a long-term Consultant to the New York State Fish and Wildlife Service on trout fish breeding and management.

Survivors include his wife and companion of 57 years, Cleo Crane Lowe; one daughter, Ellen Jane Potash, of Franklin, Tennessee; two sons, Donald Lowe, of Ithaca and Cass Lowe, of Seattle, Washington; and two granddaughters, Dru and Carey Potash. Three brothers, three sisters and several nieces and nephews also survive him.

Lowe was an avid outdoorsman, who loved to fish, hunt and garden. The morning sun often found Carl in his boat on Cayuga Lake, luring a lake trout to his line. He died in the woods, suddenly, of natural causes, while hunting deer.

Robert F. Lucey, Royse P. Murphy, William D. Pardee

Harry Alexander MacDonald

June 21, 1910 — November 14, 1993

“Our friend and colleague” as Harry MacDonald was introduced at a dinner honoring his career service to seedgrowers, was an agriculturist of the classical kind. In him were combined scientist, naturalist, historian and philosopher. His was a life of service to constituents spread across New York State, northeastern North America, and overseas.

His early years in rural Nova Scotia inculcated in him the virtues of industry, thrift, and loyalty. As education and experience conducted him into a larger setting, he became known professionally for scholarship, scientific integrity, and insight.

After service with the Canada Department of Agriculture at Nappan, Nova Scotia, he entered McGill University, from which he received a B.S. degree in 1937, and then came to Cornell for graduate study in agronomy under D.B. Johnstone-Wallace, who had been brought from Great Britain to develop a program in pasture management for New York. Harry MacDonald was assigned to investigate an immigrant forage plant called birdsfoot trefoil (*Lotus corniculatus*) that had started to colonize the eastern Catskills. His doctoral dissertation, based on detailed studies both on farms and at the experiment station in Ithaca, became one of the most famous publications of the Cornell University Experiment Station. Memoir 261, “Birdsfoot Trefoil: Its Characteristics and Potentialities as a Forage Legume” stands some half century post-publication as a primary reference source.

The usefulness of trefoil demonstrated in these studies spurred interest in widespread adoption, and MacDonald, after he received the doctorate in 1943, was appointed Assistant Professor of Agronomy in 1944 with duties in both research and extension. His objective was to raise the productivity and nutritive value of pastures on New York farms by introducing trefoil, and by other means.

Enthusiasm for trefoil was tempered by the discovery that the seedling stage of the plant did not compete vigorously, and also by the fact that, because in Europe whence it came, it was an unsown volunteer, there was no source for the quantities of seed that were needed. MacDonald set about selecting better plant types, eventually releasing the first two named varieties in North America, “Empire” and “Viking”. Meanwhile he and his graduate students created a laboratory at Ithaca for the study of the formation, maturation, processing and germination of seeds. With extension agents he undertook to organize growers, land and equipment for commercial-scale production of the new varieties. The production of trefoil seed proved, over the following decades, to be a nearly intractable

problem because the pods, arranged like a bird's foot, fly open spontaneously when fully dry and ready for harvest. At a time when seed production problems were routinely being handed off to specialists in the irrigated West, birdsfoot trefoil was actually rejected by those specialists and the problem was sent back to the area where the seed was needed. Under these difficult circumstances, Harry MacDonald retained the respect and affection of the growers by dedicated effort.

He was promoted to Associate Professor in 1947, and Professor in 1950. Meanwhile he had taken on teaching duties. He taught a course called "Grasslands" for over twenty years. In the mid-1960s he began two new courses, the first (Economic Crops) paralleling a shift in his research and extension duties toward oilseed crops and the second (Tropical Agriculture) responding to student demand for more information about crop production in the tropics. He also offered Special Topics courses from time to time at Cornell, and simultaneously held an appointment at Syracuse University where he taught a course in Range Management to forestry students.

His broad interests made him a natural participant in the program in International Agriculture at Cornell, where he was chosen by more than a dozen graduate students to serve as chair of their special committee. Many others nominated him as a minor member. His hospitality and wisdom made him a popular consultant. There was a year as a member of the Cornell team that assisted the University of the Philippines to establish a graduate studies program at Los Banos, and consultations in several other countries.

Above and beyond the demeanor of its occupant, Mac's office had atmosphere. Its wooded desk and cabinets had sentimental value, but also served as a silent reproach to the administrators for the extravagance of purchasing all new furniture when the Department moved to Bradfield and Emerson Halls in 1968. Photographs of friends and mementoes of many kinds adorned the walls, and the bookshelves displayed an eclectic array of source materials.

Harry MacDonald made and kept friendships by his genuine interest in individuals, by his unselfishness, and by his unfailing courtesy. He would have topped the faculty list if ranked by secretaries and other staff members, and he was gratified at the establishment of an annual Harry A. MacDonald Award for excellence in agronomy. Robust and energetic for most of his career (he was reputed to have used a needle and thread, but no anaesthetic, to sew up a severe cut sustained in the field), he became less so toward the end because of diabetes; typically, he did not complain. He left a period of depression behind him, downplayed his role as critic, basked in the support of family and friends, and left us with the half smile he so often wore himself. And he left us a summer landscape illuminated by the bright yellow blossoms of birdsfoot trefoil.

Guilford L. Mack

August 18, 1905 — July 14, 1991

Guilford Leroy Mack, professor emeritus of chemistry died Sunday, July 14, 1991, at Good Samaritan Hospital in Corvallis, Oregon, just a few miles from his birthplace in Bellefountain, Oregon. He received his B.S. degree in chemistry at Oregon State College in 1927, his M.A. degree from Rice Institute in 1929 and his Ph.D. degree at the University of Michigan in 1931. That same year he became an associate in research in chemistry at the New York State Agricultural Experiment Station. Then, except for one year when he returned to the University of Michigan as a Rackham Research Assistant, he has been on the staff of the New York State Agricultural Experiment Station. He became assistant professor of chemistry in 1938 and associate professor in 1952.

Professor Mack was the author or co-author of more than 60 publications covering the results of his research not only on methods of analyzing insecticides and fungicides but also analyzing food products for various components including vitamins, particularly ascorbic acid, and minerals. His publications also include translations from the Alma Alta Research Station in the Soviet Union for the American Chemical Society. His specialty was the field of Analytical Chemistry, especially the development of methods for the analysis of environmental contaminants and agricultural pesticides, particularly soil insecticides and the application of these methods. He was an excellent chemist who was held in high esteem by his colleagues and was a recognized authority in his field. This was demonstrated during his sabbatical leaves when he served as agricultural chemist in the Brazilian Ministry of Agriculture (1949-50), and also when he served as a FAO pesticide consultant to Yugoslavia and India (December 1, 1966-May 31, 1967).

Professor Mack was a member of the American Chemical Society and the Phytopathology Society. He was also a member of two honorary scientific fraternities — Phi Lambda Upsilon and Sigma Xi.

He consistently maintained his career as a bench-chemist. Although he was deeply immersed in his research, he has always been willing and able to collaborate with other members of the faculty and staff and to assist them with solutions for analytical problems. He directed the New York State laboratory for the analysis of official samples of economic poisons, which was a cooperative effort with the New York State Department of Agriculture and Markets.

Although Professor Mack had retired on June 30, 1971, after 40 years of service with the New York State College of Agriculture, New York State Agricultural Experiment Station (Geneva), he maintained an office at the Experiment

Station and continued to improve the Pesticide Register which he had developed. Effective July 1, 1971, he was awarded the title of Professor of Chemistry Emeritus by the Board of Trustees of Cornell University.

Dr. Mack traveled extensively in Central America and Europe, including Bach country in what was then East Germany. He loved classical music, playing violin as a youth and later the viola in the Seneca Symphony in Geneva. He loved hiking and walked the New Hampshire Appalachian Trail while in his seventies and the Canadian Rockies in his eighties. His interest in agriculture followed him in retirement where he continued as Master Gardener raising irises.

Dr. Mack was predeceased by his wife, Dorothy A. Lee, a former bacteriologist for the New York State Agricultural Experiment Station who died in 1974. In 1977 he married Jane Connelly and moved to Ann Arbor, Michigan. She died in 1980 and in 1982 he retired to Samaritan Village in Corvallis, Oregon. He is survived by two children, a daughter, Dorothy Lee, currently of Corvallis, Oregon and a son, Guilford Leroy, Jr. of Geneva, New York; a sister Gladys Hunt of Eugene, Oregon; six grandchildren and four great-grandchildren.

Willard Robinson, Haruo Tashiro, John B. Bourke

Ronald D. Mack

January 30, 1940 — November 26, 1993

Ron Mack was a man of great creative energy, an inspired teacher and storyteller, and a counselor-in-residence for his colleagues in the Department of Psychology during his twenty-two years at Cornell. Before his untimely death after a long fight with cancer, he was taking on the role of departmental patriarch and historian. He leaves in the community his son, Joshua Mack, of his first marriage to Linda Mack, and his wife, Joanne Taormina and their two children, Hannah and Ari. His ebullient personality is missed by everyone whose lives he touched.

He was born in 1940 in Portland, Maine. He attended Brandeis University, where he combined psychology and Near Eastern and Judaic studies, financed in part, he claimed, by summer jobs as a standup comedian. For a time, he explored a career as a rabbi, but later took his Ph.D. in clinical psychology at Columbia University. Proud of his Jewish identity, he explicitly took the role of minority representative and cultural translator, first in Portland, later in Tunisia where he did the research for his thesis, and then in the South where he did his internship. He continued as a different kind of cultural translator in his role as a teacher of clinical psychology to policemen, and finally, to experimental psychologists at Cornell.

Many students who major in psychology are interested in eventual clinical work and wish to take courses that will prepare them for careers in that area. It is difficult to find “real” clinicians who can advise students on possible careers, open doors to clinical practice to them, and yet provide enough academic structure to teach challenging courses. Cornell was looking for such a person, and found Ron Mack in 1971. His extraordinary teaching and organizational skill enabled him not only to develop the academic program in abnormal and clinical psychology, but also to develop fieldwork opportunities for undergraduates. He carried this load, which was not without its intrinsic strains, with great success throughout his career.

His courses were extraordinary, and he won the Clark Distinguished Teaching award in 1988. From a constant stream of testimonials, one will suffice. In 1986, junior and senior psychology majors were asked, “Which psychology courses do you think were most valuable to you and why?”, and more than a third mentioned a course taught by Ron Mack (out of a faculty numbering about 25). His largest, most popular course, “Introductory Psychopathology,” took a developmental, personal and psychodynamic approach to the subject. When Ron began his training, psychodynamic and pharmacological approaches to psychopathology were on an equal footing, but the field progressively medicalized its understanding of both the causes and treatment of mental illness. Ron

insisted on showing his students the person rather than the disorder. Similarly, as a therapist, he asked clients to find the health amidst their symptoms, effectively fighting a progressive depersonalization of this most personal of subjects. He also taught seminars on methods in psychotherapy, an intense experience which students often called “the most influential course in my life”, and he organized a number of fieldwork opportunities which gave students one-on-one experience in helping relationships in the community.

The fieldwork experiences were valuable for both Cornell students and the community. In 1973, he founded Evergreen, a student-run halfway house for mental patients, now a part of Community Living Services of H.O.M.E.S. Inc. They honored him in 1993 with the first presentation of Lifetime Service Award, named for him. Fieldwork placements were also available in the local elementary schools with emotionally disturbed or learning disabled children, in psychiatric centers and in juvenile correction centers. In addition to his ongoing practice in psychotherapy, Ron Mack also served as a consultant for a large number of these community institutions, and was a leader in mental health issues in this region of New York.

For his colleagues, his role in the department is the greatest loss. Particularly in his first years here, he constantly organized legendary social events—the ongoing Assistant Professors’ Banquets, Polyester Day, the Ron Mack Look-Alike Contest. The last Assistant Professor Banquet, held for Ron a month before his death, brought back former colleagues now spread across the country. Not many academic departments have their own therapist, but the Psychology Department had one. When a major dispute arose in the Department, he was able to counsel every side, help people understand the structure of their points of view and show how differences could be resolved. As a result, a style of problem solving emerged based on openness and directness and consensus, which we hope will be able to survive.

Howard Feinstein, Bruce Halpern, Richard Polenberg, Barbara L. Finlay

Norman Malcolm

June 11, 1911 — August 4, 1990

Norman Malcolm was a member of the Sage School of Philosophy for thirty-one years. His intellect, his personality and his character set the tone of philosophical life at Cornell for much of this time, while his writing and inspirational teaching led the Sage School into the ranks of the most distinguished philosophy departments.

Malcolm's wide-ranging work in epistemology and the philosophy of mind consisted, in large part, of the clear and vivid interpretation and ambitious application of the thought of Ludwig Wittgenstein. His association with Wittgenstein (vividly described in his *Ludwig Wittgenstein: A Memoir* (1958)) began when he was a student at Cambridge, on a travelling fellowship from Harvard, from 1938 to 1940. When Wittgenstein visited Malcolm in Ithaca in 1949, their extensive discussions of knowledge and certainty stimulated thinking of Wittgenstein's that led to his last major work, *On Certainty*, and prompted Malcolm's important exploration of knowledge, certainty and justification in *Knowledge and Belief* (1952). When Malcolm's famous review of Wittgenstein's *Philosophical Investigations* appeared in 1954, the book was the subject of much discussion but widespread bafflement. Malcolm's trenchant interpretations of Wittgenstein's remarks on mind, language and the self set the stage for decades of important controversy. In his many articles and several books, Malcolm employed Wittgensteinian strategies to combat the confusions and mystifications that he saw as pervasive in philosophy and psychology.

Malcolm's retirement from Cornell in 1978 was not at all a retirement from philosophical work. He moved to London where he continued to teach at King's College in the University of London, and to write both articles and books. He was vigorously engaged in philosophical work until his final brief hospitalization.

Throughout Norman Malcolm's long and productive life both students and colleagues found him a paradigm of philosophical integrity and commitment. He could seem gruff and bearish, but those who began by fearing him soon found that he was very warm and kind. He lived his life and conducted his intellectual projects with full, guileless and fearless commitment, earning the respect of all who knew him.

Norman Kretzmann, Sydney Shoemaker, Richard Miller

Deane Waldo Malott

July 10, 1898 — September 11, 1996

Cornell's sixth President was born on July 10, 1898 in Abilene, Kansas. He died on September 11, 1996 at his home in Ithaca, survived by a son and two daughters. His father was President of the Abilene Citizen's Bank, founded by his grandfather in 1885. Dwight and Milton Eisenhower, also from Abilene, were family friends.

Mr. Malott graduated from the University of Kansas in 1921, then attended the Harvard Business School. After receiving the M.B.A. degree in 1923, he stayed on as an Assistant Dean and Assistant Professor. In 1925, he married Eleanor Thrum, the daughter of a Hawaiian sugar refinery engineer, whom he had met in 1918 when his father sent him to Hawaii to recover from influenza. Mrs. Malott's death in 1994 ended a marriage they had enjoyed for 68 years.

Mr. Malott left Harvard in 1929 to become a vice president of the Hawaiian Pineapple Company and a personal assistant to James D. Dole, president and founder of the company.

He returned to Harvard in 1934, where he developed courses on agricultural and other western business problems which supplemented the Wall Street concentration characteristic of the school at that time. While becoming an expert on agricultural economic matters, he became friends with influential business leaders, an association that benefited the institutions he later led. His rapid rise to prominence among agricultural business people attracted the attention of the University of Kansas Board of Regents when they were seeking a new Chancellor in 1939. Mr. Malott returned to his home state and to his alma mater as its Chancellor at age 41.

Following 12 years as Chancellor of the University of Kansas, Malott served as Cornell's President for another 12 years, from 1951-63. For American universities, this was a period of reorientation into new areas of study and expansion of facilities following the disruption of World War II.

At Cornell, Hotel Administration, a Department in the College of Home Economics founded by Professor Howard Meek became the School of Hotel Administration early in the Malott era. Education courses in the College of Arts and Sciences, Agriculture and Home Economics were combined into the School of Education. The Engineering College completed its move, begun during the presidency of Edmund Ezra Day, from the north end of the campus to the south end under the combined leadership of Dean S.C. Hollister and President Malott. Construction of Phillips, Upson, Grumman, Carpenter and Hollister Halls provided new facilities for the college.

When the Veterinary College moved from the present site of the School of Industrial and Labor Relations to the east end of the upper campus, ILR moved from temporary buildings at the south end of the campus to the just-vacated location of the old Veterinary College. A new Ives Hall supplemented the ILR facilities.

Alice Statler Auditorium was added to Statler Hall. The School of Business and Public Administration moved from McGraw Hall into a new building, subsequently named for President Malott. The Gannett Clinic was added. The West Campus dormitory group and Donlon Hall expanded student housing. Looking to the future, Mr. Malott purchased the former Ithaca Country Club land, providing space for the later construction of the new North Campus dormitory complex, student union, and playing fields. He moved Cornell to the forefront in quality athletic facilities for women by supporting the construction of Helen Newman Hall.

During this period of major change at Cornell, the enrollment remained relatively stable at about 10,000 students.

The consolidation of the University Library system under the leadership of Stephen McCarthy and the construction of Olin Library were noteworthy Malott accomplishments, as was recataloging the Cornell library collection from the old Harris to the Library of Congress system. Among the academic initiatives of the Malott period, turning an inadequate and outmoded library system into one of the best may have been the most significant.

In this extraordinary reshaping of academic programs and expansion of facilities, Mr. Malott's business experience, his service as a director of major corporations and his membership on the Business Council served Cornell University well. His long-standing friendship with corporate leaders such as Ellis Phillips, Max Upson, Leroy Grumman, John and Spencer Olin, Floyd Newman, Alfred P. Sloan, Mrs. Ellis Statler, Walter Teagle, Frank Gannett, John Collyer, J. Carlton Ward and Herbert Johnson, many of whom were Cornell alumni, gave him ready access to the financial resources he required.

His relations with the Cornell faculty, traditionally difficult for any president, were sometimes strained and seldom easy. An unfortunate passage in his inaugural address contributed to the unease. When the *New Yorker Magazine* identified a statement he had used from a source unknown to him, as a nearly verbatim quote from a speech by the President of Sarah Lawrence College, he apologized to the faculty and offered his resignation to the Cornell Board of Trustees, who promptly refused it.

Further stress between the faculty and the President arose from the shared administrative responsibility for campus affairs. Malott believed that the faculty had not maintained order in student affairs in a way that conformed with

his idea of a university. He arranged to have what had been faculty authority over student affairs transferred to the administration but the tension remained.

To know the faculty better and to understand faculty problems, he presided at most faculty meetings in every college, including the Medical and Nursing faculties in New York City. He interviewed nearly every faculty member proposed for promotion to tenure.

Malott understood academic freedom and the importance of defending it on a university campus. During his presidency, Senator Joseph McCarthy and his political allies sought to rid the government and other American institutions of communists and communist-sympathizers. Faculty members from many universities were called before congressional committees to explain alleged leftist activities. President Malott stepped forward to counter the McCarthy attacks in a guest column in the *New York Herald Tribune* in 1953, under the heading, "Is Professor X Red?" At 1954 class reunions, he called the McCarthy era "a time of widespread hysteria and intolerance of thought, speech and action." Although he had little sympathy for the views expressed by many of those under investigation, he permitted avowed communists, banned on some campuses, to speak at Cornell. In taking this stand, the President set himself apart from most academic leaders and created tensions within his own Board of Trustees; but he remained a staunch defender of freedom of expression.

When Professors Philip Morrison of Physics and Marcus Singer of Zoology were called to testify before congressional committees, Morrison answered the committee's questions and received no sanction from it but Singer was cited for contempt for refusing to testify about his colleagues and friends. President Malott suspended Singer from his teaching duties, but with full salary, until the contempt charge was resolved. When Singer appealed his contempt citation and won his case, after more than three years of suspension from his teaching duties, he was returned to full faculty status.

Professor Morrison, among the first to visit Hiroshima after the use of the atomic bomb and deeply moved by the experience, continued to speak widely on peace issues, often taking stands considered radical by many. When he was recommended for promotion to full professor in 1955, President Malott did not approve the recommendation. He conducted his own investigation of Morrison's activities and when the recommendation was renewed a year later he approved it and forwarded it to the Trustees, where it provoked a long debate. In the end, Morrison was promoted but a Trustee committee investigated his activities. When the committee filed its report, the President refused to read it, stating that he had satisfied himself, that his judgment about the candidate's credentials should

be final and threatened to resign over the affair. Many years after Morrison left Cornell to accept an Institute Professorship at MIT, he wrote President Emeritus Malott:

"I have never made clear to you how much I admire and how often I comment on your fairness and integrity in the bad years of the McCarthy era...your adherence to the fundamentals of human rights and honesty in dispute...was an example of the right conduct for men of responsibility, in a time when too many of them sought the quick expedient."

President Malott sought effective ways to meet students and learn their concerns. He and Mrs. Malott accepted every opportunity possible to dine in dormitories and fraternity and sorority houses. He read the Scriptures at Sage Chapel services nearly every Sunday. He welcomed students in his office. He was disappointed when students threw eggs at his house to protest maintenance of parietal rules specifying curfew hours for women in university dormitories. He attributed this incident to his failure to communicate adequately with students.

After retiring from the Presidency, Mr. Malott traveled widely, including visits to both the north and south polar regions. He joined the International Executive Service Board as a management consultant on higher educational problems, with some assignments lasting several months. On these tasks, he traveled to Iran, Taiwan, Saudi Arabia and Jamaica as well as to other countries. Papers reporting travels with Mrs. Malott reflect clear observation and concise reporting. *Growing Up In Abilene, Kansas*, a small, handsomely published book, records his early years.

Malott was in great demand as a public speaker during and after his presidency. His notable physical presence and direct speaking style complemented a scholarly content based on wide ranging reading that encompassed social, political, economic and scientific matters. Listeners enjoyed the sense of humor in skillfully composed doggerel that was signed, "T. Tolans Enaed." He was up front about his attachment to conservative politics and the Republican Party. "Unless we make known our needs and desires," he declared, "We will have abdicated our position." Yet to the last day of a long life, he enjoyed ideas that challenged his opinions.

Mr. Malott remained a frequent presence at campus events. When Hunter Rawlings was inaugurated in October 1995 as the 10th President of Cornell, half of Cornell's Presidents were on the platform. None enjoyed it more than Mr. Malott.

Deane Waldo Malott's extensive business experience distinguished him from earlier and more recent Cornell presidents. Yet, while he elaborated upon the land grant university idea of service in the public interest by encouraging profit-making businesses to participate in university affairs, President Malott insisted that the university itself is not a business. He remained true to his vision of what a university should be, "a place where all points of view are freely expressed and courteously debated."

Frederick George Marcham

November 2, 1898 — December 16, 1992

Marcham, born in a “Dickensian” quarter of Reading, England, and, in 1987, the first on whom Cornell bestowed its Award of Honor for exceptional service, broke free from his childhood environment when he won a rare scholarship to Christ’s Hospital, followed his father into the Army in the first World War and was awarded an Exhibition in Modern History at St. Edmund Hall, Oxford University, where he met the historian A.B. Emden, a teacher whom he always mentioned with gratitude and affection. After graduating in 1923, he was encouraged to work for a doctorate at Cornell under Wallace Notestein. His thesis, completed in 1926, was on *Sir Edwin Sandys and the growth of opposition in the House of Commons, 1604-1610*. Not long afterwards he was appointed to the Cornell History Department. He specialized in British constitutional history but was happy to lecture in many fields of history. He wrote three textbooks: *A History of England* (1937), *Sources of English Constitutional History; a selection of documents from A.D. 600 to the present* (1937), and *A Constitutional History of Modern England: 1485 to the present* (1960). His *Sources of English Constitutional History* has made his name universally known in the field of English history. The second edition was published in 1972.

In 1941 he became a Goldwin Smith Professor of History. He was a University Trustee from 1946 to 1950 and served twice as department chairman in the disturbed 1960s. At this time his loyalty to the University was especially conspicuous; he played a significant role in quietly helping to mediate and resolve the 1969 crisis on the campus.

Marcham had an extraordinary devotion to his department. The model he set for it seemed to resemble a combination of the Oxford tutorial system and the academic equivalence of smoke-filled-room politics, but politics based on consensus and without needless controversy. His dedication to the department and university also led him to give great emphasis to the central importance of teaching. Nearly all of his scholarly work was stimulated by his teaching interests and his conviction that history should be taught from documents. He preached the obligation of extended office hours and made known his admiration for an earlier generation of teachers, who, as he recalled, chose to remain on the campus during sabbaticals to talk to colleagues and students.

He declared in 1987 that “my religion is the service of the University; my life is to help other persons to learn” Fittingly, a “Marcham Seminar” in the Society for the Humanities was established in his honour and also the Marcham Scholarship for an outstanding senior history major whose other activities and service to the community reflected Marcham’s life-style. When, at the age of seventy, he retired officially, to his immense pride his department

paid him the unprecedented compliment of inviting him to continue in harness. The result was that nearly one third of his teaching career still lay ahead. After his wife's death in 1977, students helped him fill the void in his life, and he increased the time he spent on his tutorials to thirteen hours a week and, during weekends, often invited students to his house for lunch that he himself cooked. As soon as he had recovered from a stroke in 1987, he returned to his students. He was usefully active to the end and became the most venerable figure on the Cornell campus.

Not surprising, during this remarkably long teaching career he developed his own style of teaching and could put to good effect what he probably loved more passionately than anything else, which was the English language. Every reviewer of his *A History of England* praised the felicitous and balanced manner in which he blended literature and history. The very sound of English words moved him, and this affection increasingly influenced his approach to teaching the past. He was always experimenting with literature as a means of kindling his students' interest. He attached the greatest educational value to studying and, he would insist, enjoying the meaning and force of good writing. It has been said that his ideal assignment was a poem's single stanza, to be minutely dissected for its meanings and historical context.

Marcham's range of activities was capacious and rich. For thirty two years he served as the elected mayor of Cayuga Heights Village and is remembered for his ability to guide group discussion to a fruitful and amicable end but also for refusing to shirk tough decisions. When zoning considerations were involved, he never allowed his loyalty to the University to override his loyalty to the Village. He resigned at the age of ninety, and the Village Office was named Marcham Hall. Uniformed veteran officers of the Cayuga Heights Police Department served as ushers at his Memorial service; they called to mind a guard of honour for an old soldier. He sponsored and taught boxing at Cornell. He was the first chairman of the Ivy League athletic eligibility committee. Yet he remained a reserved person and chose to live modestly. Those who knew him well will remember his courtesy, gentle smile, noiseless gait, a teapot in his hand, and how he paid earnest attention to anyone who spoke to him. As he once said of Carl Becker, he could look through you and still like you. He was a mild man but of inflexible integrity. He could be angry with those whom he regarded as "worthless louts".

He was an avid angler and bird watcher. His *Louis Agassiz Fuertes and the Singular Beauty of Birds: paintings, drawings, letters* (1971) is a magnificently illustrated volume. He also published *Thoughts After Reading Izaak Walton's Compleat Angler*. He cultivated vegetables. But the classroom was where he was most at home. He gave his

last class as recently as October, 1992. As his son put it, “when Dad was no longer strong enough to meet students, he was ready to leave us”.

Marcham is survived by a daughter and two sons in the United States and a sister and four nephews in Reading, England. He had five grandchildren and two great-grandchildren.

Paul W. Gates, Walter LaFeber, O.W. Wolters

John George Matthyse

July 30, 1918 — November 8, 1996

Dr. John George Matthyse, 78, Cornell University Professor Emeritus, Department of Entomology, well known for his research in controlling insect and mite pests of livestock and of woody ornamentals and shade trees, died in Kirkland, Washington on November 8, 1996.

George grew up in New York City. Early in his life he showed a love for nature and science. He collected and studied plants and insects in the city and his family still has his journal recording his home chemistry experiments.

He entered the City College of New York, then transferred to Iowa State University where he earned a Bachelor's degree in 1940. He then came to Cornell as a research assistant in the livestock insect project. His doctoral thesis was based on the biology and control of the four species of cattle lice infesting cattle in New York State. His research also included other livestock insect pests such as sheep ticks, cattle grubs and house and stable flies. He received his doctorate in 1943 and was appointed research instructor by Cornell. In 1945, he married Elizabeth Grau, his beloved "Libby", and accepted a position with Geigy Chemical Company where he set up and supervised their lab in Bayonne, New Jersey, then later moved to Baker Chemical Company in Phillipsburg, New Jersey.

In 1947, a new project was established by Cornell's Department of Entomology to investigate and modernize the control of insect pests on woody ornamentals and shade trees. George returned to Cornell as an Assistant Professor in charge of this project and developed good control measures for many pests including very substantial contributions to the control of the insect vectors of Dutch Elm Disease. Several of his graduate students received their advanced degrees during this time. He also was one of the founders of the New York State Arborists' Association bringing together and further educating practicing arborists in identification, life history and control of woody ornamental and shade tree pests.

The untimely death of George's revered major professor, Dr. Herbert H. Schwardt, left the leadership of the livestock insect project vacant and George moved back to the work in which he was the most interested, now called veterinary entomology. He remained in this position, being appointed to Associate Professor then full Professor, until his retirement in 1974. He directed many graduate students who are now located in prestigious universities and other institutions nationally and abroad.

George had a close personal relationship with his graduate students. They were frequently invited to his home where he was a most informal, at times unconventional, host. One of his many graduate students wrote the following statement:

“George Matthyse was an intellectual of the highest order in the age-old tradition of academics. He involved himself in many interests of science and the humanities. Yet, he always had time to patiently guide, instruct, and counsel in order to improve the abilities of those with whom he interacted. He made friends for life, and as a major professor he was instrumental in the training of some of the best qualified scientists who have taken their skills throughout the United States and abroad. He always stayed in contact with his former associates. He was unfailing in his concerned support of others, and I consider myself most fortunate to have been among his friends. I shall forever remember him for his warm mannerisms, exuberant laugh, boundless energy, keen wit, and critical perception.”

Another former graduate student wrote that “All of us loved or hated him at one time or another in varying degrees.” George could be a critical taskmaster.

Throughout his Cornell career, George served on numerous foreign assignments. In 1952, he took a leave of absence to go to Africa to the nation then called Northern Rhodesia, focusing on the control of ticks and tick-borne diseases of livestock. He traveled to many remote villages to set up and demonstrate methods and insecticides used to alleviate the tick and disease problem. He used materials at hand, for example digging a large hole and lining it with a waterproof tarpaulin to substitute for the usual sprayer tank which would have been difficult to transport in the small aircraft often needed to reach the more remote native villages. He and his associates built their sprayers with locally available pumps and small engines, or units which could be powered with Jeep power takeoffs.

On one trip to Africa, George became infected with schistosomiasis—“snail fever”—an often-fatal disease that troubled him for several years. Nevertheless, George and Libby fell in love with Africa and with their family returned several times, working not only on cattle ticks but other pests such as the tsetse fly which transmits “sleeping sickness” making large areas of Africa unfit for human usage.

George was appointed to the University of the Philippines, Los Banos, to advise their Entomology Department on research and teaching methods, and worked with the United Fruit Company in Honduras, Costa Rica and Panama to deal with insect problems on bananas. He was also a member of the USDA-AID (Agency for International Development) team and visited Africa on various projects during the sixties and early seventies.

Among his more than 80 published scientific journal articles, George wrote a book with Murray H. Colbo, *The Ixodid Ticks of Uganda*, published in 1987 by the Entomological Society of America. The book is of great use to tick specialists (acarologists).

John George Matthyse was predeceased by his wife, Elizabeth; and their daughter, Kathryn (Katie).

He is survived by his son, Michael, and daughter-in-law, Margaret and their two children; and his son, John, daughter-in-law, Paula and their four children.

Dr. Matthyse made tremendous contributions to the study of life history and control of insect and mite pests of domestic animals and those of ornamentals and shade trees.

James E. Dewey, Francis H. Fox, Richard F. Pendleton

Philip J. McCarthy

February 9, 1918 — October 10, 1994

Phil McCarthy was born and raised in Friendship, New York, a small village in western New York known for its dairy products. His father was a rural postman and dairy farmer and one of Phil's tasks was to help out on the family milk route. His mother was the teacher in a local one-room school.

He won a Regent's Scholarship from the state, then a distinct honor for a high school student, which made it possible for him to attend Cornell during the late Depression era. He was an excellent mathematics student. Like many of the brightest undergraduate mathematics students of that time, he prepared for the actuarial exams as well as the possibility that he might become a high school mathematics teacher. An important portion of the actuarial training was conventional probability, mostly counting theorems.

Upon graduation from Cornell in 1939, he was accepted as a student in the Mathematics Department at Princeton. There was little graduate statistical training in the United States or elsewhere at that time and even less in mathematical statistics, which was then nascent. Fortunately, Professor Samuel Wilks, one of its few early distinguished scholars, was in the Princeton department and took the young McCarthy under his wing. Phil studied the standard mathematical subjects, but once free of the requirements, he became one of a number of Wilks' students of that period who went on to make substantial contributions to statistics.

He worked very closely with Wilks when the latter was editor of the *Annals of Mathematical Statistics*. Then, with the outbreak of the Second World War, major concentrations of statisticians developed in Princeton and New York—and Phil was in both. Among the figures at Columbia were Harold Hotelling, Milton Friedman, Abraham Wald, and Jack Wolfowitz. In the Statistical Research Group at Princeton, there were William Cochran, Theodore Anderson, Fred Mosteller, Fred Stephan, and John Tukey. Other scientists McCarthy met at that time included John von Neumann and Dale Corson. It was a rich experience.

At the end of the war, Fred Stephan recruited Phil to come back to Cornell. Sample surveys had become a major tool as sociologists sought to put their work on a firm empirical base. But the then current designs for most of these studies had major weaknesses, and modern sampling methods were needed. Phil was hired on a Social Science Council Research grant to clarify design and related issues. When Stephan went to Princeton the following year and the quantitative sociologist Louis Guttman took an opportunity to go to Israel, Phil took over the sampling course in their department. He left for a permanent position on the faculty of the new School of Industrial and

Labor Relations at Cornell where he remained from 1948-88, continuing part-time for some years thereafter. His last published paper was in February 1994.

Before the War, statistics played only a minor role at Cornell, although Walter Wilcox held the first professorship in the subject in the United States and Professor Edmund Ezra Day, who was to become our fifth University President, was president of the American Statistical Association a generation earlier. But by the late 1940s, an extraordinary group of probabilists was present at Cornell, rivaled in the world perhaps only by Moscow. The development of mathematical and applied statistics came then and shortly thereafter, with major appointments in mathematics, plant breeding and biometry, engineering, and Industrial and Labor Relations. Phil was one of the founders of the Statistics Center and did backbreaking work in directing it, without compensation, for many very difficult early years.

His research in sampling continued, of course, and he was constantly sought as a consultant by government agencies. Whether one thinks of price statistics and index numbers or of the measurement of employment and unemployment, his mark is there. He played a considerable role when criminal justice statistics were moved from a collation of police blotter reports to the modern surveys designed to elicit information on the frequency of crimes actually experienced by the public. He played a similar role when medical reporting moved from a collation of cases which the states required physicians to report to measurement of actual disease incidence and related matters.

When the Social Security Administration sought out researchers to analyze their one percent sample of enrollees, he and a colleague used the opportunity to develop a probability model new to the social studies. The resulting ILR Press publication on labor mobility was more widely cited in the social studies than the totality of all other ILR faculty published research.

One anecdote reflects how Phil's life connected with significant statistical developments. In 1946, he, John Tukey, and Ted Anderson, published a report based on their wartime research. The military was dropping bombs from different heights to estimate the response and sensitivity of detonating mechanisms. From a statistician's point of view, this is equivalent to estimating the level of insulin which is necessary to obtain an appropriate frequency of reactions. The new approach had some use. Then a graduate student and his teacher at another university published an innovative modification which later came to be called the "stochastic approximation" method. The idea was to improve efficiency as one built up experience by making ever small changes in one's test level to approximate median dosage. The steps had to be small improvements but ones large enough so that you were sure

you were going to get to the correct value eventually. It involved some delicacy in the face of the uncertainty with which statisticians must deal.

There was a journal club run within the Mathematics Department, and Phil naturally offered to report on the paper. The report excited Wolfowitz, who had earlier been brought from Columbia to lead Cornell's group of theoretical statisticians. His paper and those which followed from a number of Mathematics Department faculty led to an extraordinary number of variations of the problem, to new theory, and to significant developments in probability. Phil was a quiet and essential link.

In 1942, Phil married Mary Ann Aselin. Phil was a fond husband and father, spending almost all of his free time with his family. He loved to walk with them in the state park near which they lived in the children's early years. And he thoroughly enjoyed ballroom dancing.

He was a competent pianist and had great skill in tennis and squash. It was a source of considerable dismay to him that joint problems made playing these sports difficult, and eventually impossible, in his later years.

In 1967, Mary Ann died in an automobile accident which also seriously injured a daughter, Nancy. Two years later he married Jane A. Lisberger, the widow of an ILR graduate student who was a former General Electric executive.

In his later years, Phil's affection for sports continued and he was an avid Cornell sports fan. He was also able to continue his extraordinary reading of mystery novels, which led to frequent consultation with literary scholars.

He was a teacher of great clarity in the classroom, in his books, and in the monographs he wrote both for statisticians and other professionals. His colleagues valued his fairness, his intelligence, and his diligence. His family, the faculty, and his students will miss this modest, gentle man.

Ronald G. Ehrenberg, Paul Velleman, Isadore Blumen

John W. McConnell

October 18, 1907 — February 19, 1997

John W. McConnell will always be remembered at Cornell as a Professor of Industrial and Labor Relations from 1946, just a year after the establishment of the School. He was a former Dean of the Graduate School (1955-59) and was Dean of the School of Industrial and Labor Relations (1959-63). He was highly regarded in both roles.

The first member of his family to receive a higher education, he received a Bachelor's degree from Dickinson College in 1929 and a Ph.D. degree in Sociology from Yale University in 1937. Years later, he received honorary degrees from his alma mater and from the University of Rhode Island.

In 1943, he published *The Basic Teachings of the Great Economists*, New York: Garden City Publications (reissued in 1947 and 1956). In the School of Industrial and Labor Relations, he was a member of the Department of Labor Economics and Income Security, a perfect combination for his broad ranging interests in the sociology and economics for America's social classes and their needs and interests.

From 1946 until his death, he lived in Trumansburg. There he and his wife, Harriet Barlow McConnell, raised their four daughters and one son in their formative years. Active as he was with his university duties, John always found time to spend with the children at home or away on camping trips.

When the Whytes came to Cornell in 1948 and the McConnells were away for a camping trip, they offered their home for a few days until the mover's truck arrived with their belongings. That was typical of the McConnell's generosity with friends and neighbors.

The McConnells were actively involved in the life of the village, especially in the Methodist Church. John was also a member of Rotary International in Trumansburg. John served on the Trumansburg Board of Education from 1958-61. He was also a member of the Board of Directors of the Tompkins Community Hospital from 1980-94.

In addition to his university duties, John was highly regarded as an arbitrator and much sought after by both parties in disputes for his probing questions and fair minded decisions.

In addition to his book on the great economists, he published a study on *The Evolution of Social Classes* (1942) Washington, D.C., American Council on Public Affairs.

In his many years at Cornell, John focused his research interests on the social and economic needs of our older citizens. He was an outstanding contributor to the academic literature on gerontology at an early stage when scholars were just beginning to give attention to this field. As co-author with John J. Corson, he published *Economic Needs of Older People* (1956) New York, Twentieth Century Fund.

John McConnell left Cornell in 1963 to become President of the University of New Hampshire, where he served until 1971. During his tenure, the state university added a School of Business and Economics and a School of Health Studies, and constructed a modern complex to house the New England Center for Continuing Education. The university carried on a 40-million-dollar expansion of its facilities to accommodate an 80 percent increase in student enrollment. McConnell Hall, which houses offices and classrooms of the School of Business, serves as a permanent tribute to his endeavors.

The McConnells returned to retire in their Trumansburg home. John continued to be active in scholarly work and in arbitration cases until his health began to fail.

Duncan M. MacIntyre, Lawrence K. Williams, William Foote Whyte

Jean T. McKelvey

February 9, 1908 — January 5, 1998

Jean McKelvey was a superb teacher, arbitrator of labor disputes, mentor to many, and one of the ILR School's founding faculty in 1945. As "Founding Mother," Jean and now Professor Emeritus Maurice Neufeld, established the fields of study, created a curriculum, interviewed the first student applicants, and taught five courses each. Professor Neufeld remembers Jean as "the best teacher we ever had."

Jean's first love was teaching. She brought to her classroom discussion and scholarly investigations the zest for excellence that had marked her academic and athletic accomplishments at Wellesley College and as a graduate student at Radcliffe College. There she earned her Ph.D. degree with her study, "AFL Attitudes Toward Production." Before coming to Cornell, she served as a superb teacher at Sarah Lawrence College. At Cornell, ILR students cherished the privilege of enrolling in her renowned course in Arbitration. When she and Bertram Willcox, the keen-minded and gently spoken Professor of Law, joined forces, they squared the circle. Students in the Law School and ILR deemed admission to the Red and Blue Pencil Course—red for McKelvey's comments, blue for Willcox's—the entrance to the Supreme Stoa itself.

As one of Professor McKelvey's former students recalled:

"She was revered by her students. She drove her students relentlessly, but always with compassion [and] had an infectious enthusiasm about her work that inspired her students. She 'embraced' you when she evaluated your work, so you felt challenged, not put-down, when she offered criticism."

The hallmark of Jean McKelvey's distinguished career in industrial and labor relations was the linkage she forged between classroom teaching and the practitioner world. Her career reflected this dual commitment. During World War II Jean entered the field of labor dispute settlement as a hearing officer with the War Labor Board while teaching economics at Sarah Lawrence College. As Professor at Cornell's ILR School, she shared her experiences and insights from labor relations practice with her students, invited leading practitioners to campus and arranged field trips where students had an opportunity to observe collective bargaining and arbitration in action.

A pioneer for women, in 1947, Jean McKelvey was the first woman to be admitted to the prestigious National Academy of Arbitrators and in 1970 became its first woman president. She was among the most sought after and admired leaders in dispute resolution. New York's Governors appointed her to the State Board of Mediation (1955-66); United States Presidents sought her out to serve on Emergency Boards to settle disputes in the railroad

industry and appointed her a founding member of the Federal Service Impasses Panel (1970-90) to resolve employment conflicts for federal workers. She arbitrated hundreds of disputes in industries ranging from public sector to airlines and manufacturing. In addition, both the American Federation of Teachers and the United Auto Workers appointed her to their Public Review Boards to resolve internal union disputes.

Her outstanding achievements in labor arbitration were even more remarkable because it was, and to a great extent still is, dominated by men. Jean loved telling the story of her first arbitration when she “walked into the room and there was nothing but men there; one looked up and said, ‘Oh, you’re the secretary’ and I said, ‘No, I’m the arbitrator.’” When Jean’s term as President of the National Academy of Arbitrators ended, she was presented with a gavel inscribed, “To Jean T. McKelvey, President, 1970, With the Affection and Esteem of His Colleagues.” As another former student recalled, “Jean, who liked to suggest that she was sometimes mistaken as the male offspring of French-Scottish parents when selected from a list of arbitrators by parties who did not know her, chose not to have the inscription changed.”

Much of Professor McKelvey’s finest work was dedicated to opening the arbitration profession to women and minorities. She developed and directed special arbitration training programs intended to integrate the profession. These programs, in fact, trained a new and more inclusive generation of arbitrators. Many of Jean’s former students went on to fill influential positions as union leaders, arbitrators and jurists. She also helped found, chair and financially support the Saul Wallen Fund for Minority students which provides scholarships for practitioners, particularly women and minorities, to enroll in college credit and certificate courses. In her own strong and persistent way, Jean worked against injustice.

Professor McKelvey also produced important scholarly works including books and monographs such as *The Duty of Fair Representation* (1977) and *Cleared for Takeoff: Airline Labor Relations Since Deregulation* (1988). Her articles appeared in the *Journal of Negro History*, the *Journal of Political Economy*, the *Arbitration Journal*, the *Cornell Law Quarterly*, *ILR Research*, and the *Industrial and Labor Relations Review*.

During her career, Jean was the recipient of many honors including distinguished service awards from the Federal Mediation and Conciliation Service (1973), the Society of Professionals in Dispute Resolution (1989), and the Society of Federal Labor Relations Professionals (1990). Her alma mater, Wellesley College, bestowed the Distinguished Alumnae Award for Public Service in 1975 and the American Arbitration Association gave her its Arbitrator of the Year Award in 1983. In her hometown, East Orange, New Jersey, the United Automobile Workers Union (UAW) honored Jean by naming a housing project after her. In 1998, after her death, she received the UAW convention’s

prestigious award for contributions to Social Justice (an award given to such international figures as Martin Luther King and Nelson Mandela.)

At age 65, when Professor McKelvey took her official retirement from Cornell resident teaching, she began a new career in ILR extension where she conducted conferences on key labor relations issues and directed a statewide program of off-campus graduate credit programs in industrial relations. When Jean's dear friend Alice Grant died in 1988, Jean helped endow the Jean McKelvey-Alice Grant Professorship of Labor-Management Relations – the ILR School's first fully endowed chair.

One final note. Professor McKelvey's kindness and generosity extended to colleagues as well. When Professor Gross was a new, untenured assistant professor, for example, Jean invited him to teach a section of her beloved arbitration course and shared her reading lists, outlines and notes with him, all the while encouraging him to present the course in his own way. This most distinguished professor and nationally respected arbitrator was concerned about the welfare and progress of a young, untenured colleague. Her humanity and compassion were at the core of who she was and what she did.

Professor McKelvey was teacher, professional, scholar, friend, colleague, mentor to so many, and inspiration to all. As one of her colleagues said, Jean “will always bring happy recollections whenever I hear or read her name.”

Professor McKelvey is survived by her husband of 63 years, Blake McKelvey, Rochester's city historian.

Lois Gray, Maurice Neufeld, James Gross

True McLean

January 22, 1899 — June 10, 1994

True McLean was born in Richmond County, New York on January 22, 1899. Following his graduation from Staten Island Academy in 1916, he entered Cornell University that year as a student in the Department of Electrical Engineering, which at the time was part of the Sibley College of Mechanical Engineering, but his studies were interrupted by service in the Navy during World War I. When the war was over he returned to Cornell and received the degree of Electrical Engineer in 1922 from the newly established School of Electrical Engineering. Upon graduation, True went to work in New York City for the Western Electric Company in their development and engineering-research department that eventually became the Bell Telephone Laboratories. In 1923, he was persuaded by Professor William C. Ballard to return to Cornell to take an instructorship in the School, a decision that marked the beginning of a forty-three year academic career at Cornell. True was an Instructor for seven years, was appointed as an Assistant Professor in 1930, became an Associate Professor in 1944, and attained full professorial rank in 1946. He retired as Professor Emeritus in 1966.

Throughout his teaching and industrial career, Professor McLean's principal interests were in the electromagnetic communications field and associated electronic circuitry. He taught courses in communications engineering theory, advanced communications laboratory, and elements of acoustical and radio engineering. He was particularly effective in the classroom because of his extensive practical engineering background and developmental experience in these fields. During World War II years, True was deeply involved in the College of Engineering instructional program for service personnel, but in this same period he found time to assist Professor Elmer S. Phillips, of the Department of Communication in the College of Agriculture and Life Sciences, in the production of high-quality long-playing audio disks and instructional motion-picture films for the War Department. Throughout his career he was a consultant on radio-engineering problems for a variety of companies and organizations. In 1949-51, he had a particularly exciting task at Brookhaven National Laboratory where he made important contributions to the design of a high-power radio-frequency power amplifier that was to be used as the electric drive for their large proton synchrotron.

In the field of audio engineering, True had a very interesting assignment as a technical consultant to the Cornell Ornithology Laboratory when he assisted Professors Paul Kellogg and Arthur Allen in the recording of bird songs. True, together with Elmer Phillips, Bill Ballard, and Arthur Stallman of the well-remembered downtown-Ithaca audio electronics establishment, converted an abandoned Greyhound bus into a portable audio-control studio

that was invaluable in recording the popular long-running WHCU program “Know Your Birds.” That bus also did double duty as the audio power source for the early public-address system for football games in Schoellkopf Stadium.

In 1923, Professors Bill Ballard and B.K. Northrop obtained a standard broadcast license for Ithaca’s first radio station, then called WEAI (“We Educate And Instruct”). On his return to the campus that year, True joined the station and began a long association with the radio broadcasting field. From 1928 to 1955, he was Engineer, and then Chief Engineer of the Cornell Radio Station WHCU (and its predecessors WEAY and WESG) with responsibilities for the design and supervision of the construction of all its AM and FM transmitters. In that period he also was a consultant in the establishment of an FM relay network that brought the New York City classical radio station WQXR broadcasts into Ithaca.

On his last sabbatic leave in 1963-64, True pursued one of his major interests, precision in instrumentation. He had all of the standard instruments of the School calibrating room rechecked at the Bureau of Standards, and visited the Bureau at Washington, D.C. and at Boulder, Colorado to confirm his operation. For many years after his retirement, True would return to Phillips Hall in the summer and recheck all of the instruments in the standards room. A familiar sight in the laboratory was to see him looking over the shoulder of a student (or a professor!) who would be about to connect an instrument in an experiment. Invariably, True would take out a small screwdriver and proceed to adjust the instrument!

True enjoyed soaring sail planes and flying his small private airplane, a single-engine Lascombe 8-F. He was an official of the National Soaring Championship in Elmira, New York in 1963, and together with his long-time friend and fellow aviation enthusiast, Professor Arthur Muka of the Department of Entomology, he worked on the barograph certification for regional and national sailplane competitions in Elmira. He flew his plane in New York State for many years and would frequently surprise an invited guest in Ithaca by taking him to lunch in Syracuse! After retiring and moving to Florida, True joined the Naples Squadron of the Civil Air Patrol and participated in their twilight flights (the Sundown Patrol) along the Gulf Coast looking for pleasure boats in trouble. He engaged in this activity until he was forced by age (at 87!) to give it up, which he did reluctantly. True often said that his hobbies of astronomy, flying, and music had profound impacts on his professional and teaching careers. Astronomy and flying combined with radio engineering led him to develop a popular course in radio aids to navigation. Astronomy and radio engineering inspired him to take a deep interest in the absolute determination of time. His appreciation of music helped him in acoustics and radio broadcasting.

True was a member of the American Institute of Electrical Engineers and the Institute of Radio Engineers before the two organizations were combined into the Institute of Electrical and Electronic Engineers (IEEE). In 1965, True was named a Fellow in IEEE “for contributions to engineering education and research in acoustics, communication, and electrical measurements.” He was a licensed professional engineer in New York State, and served two successive terms as president of the Ithaca Chapter of the New York State Society of Professional Engineers. From 1959 until his retirement, he was a member of the Board of Directors of the Cornell Research Foundation, the organization responsible for university patent activities. He was a member of the honorary societies Eta Kappa Nu and Sigma Xi, and of the American Association for the Advancement of Science, and the Civil Air Patrol.

When True was an engineering undergraduate, he met Katherine Blanche Brooks, a student in the Cornell School of Home Economics. They were married on July 30, 1921 in Ithaca, New York, where they spent the majority of their seventy-three years of life together. When True retired they took up residence in Florida. He is survived by his wife who lives in Naples, Florida; a daughter, Lorna L. Craig and her husband David R. Craig of Naples, Florida; a son, Douglas B. McLean and his wife Jean of Marco Island, Florida; and two grandsons, David R. Craig, Jr. and his wife Jodi of New Boston, New Hampshire; and Douglas W. Craig of Locust Valley, New York.

True McLean will be long remembered as a conscientious teacher, a dedicated engineer, a respected colleague, and a devoted friend.

Paul D. Ankrum, Simpson Linke, William H. Erickson

Leo Meltzer

March 1, 1927 — June 4, 1994

Our respected and longtime colleague, Leo Meltzer, died of a heart attack on June 4, 1994, after an evening devoted to one of his favorite activities, serious bridge. He had been with us for twenty-six years since he arrived in 1958 from his post as Study Director for the University of Michigan Survey Research Center. He was a natural appointment for our fledgling Social Psychology program which, in those expansive and open days, was explicitly not only interdisciplinary but also interdepartmental. He came having worked with Abraham Maslow, one of the most effective undergraduate teachers of his time, and the very different but very important mentor, Floyd Allport, under whom Leo had received an M.A. degree at Syracuse University. He became the major architect of our Lambert Laboratory of Social Psychology.

Leo came to Cornell imbued with a sense of the need for a dual approach to the field—an approach that was embodied in his recent Ph.D. thesis at Michigan, entitled “Consequences of the joint consideration of individual and aggregate data in social research” (U. of Michigan, 1958). This dual approach was certainly one of the desired outcomes of the interdepartmental graduate program at Michigan, which was headed in Lee’s case by Theodore Newcomb and Guy Swanson. The “individual” aspects led Lee to welcome responsibilities in Cornell’s Psychology Department where he attended all meetings and planning sessions, served as Graduate Field Representative for Psychology and had two terms as Assistant Chairman of the Psychology Department. But the “aggregate” side of Leo’s interests led him to also attend all Sociology meetings, maintain membership in the American Sociological Association (in which he was a Fellow), review papers for sociological journals and, when the time came, to become a very energetic Executive Officer of the Eastern Sociological Society, helping to expand its scope and membership.

Leo was happier, however, when he was working in both Psychology and Sociology. He helped hold together an interdepartmental program at both the graduate and the undergraduate levels, despite growing threats from other perspectives, from other administrative plans, and from the general decline in University money for ambitious social science programs. During the expansive years of 1968 to 1978, he was particularly active in the administration of large and very successfully utilized grants for graduate training in Social Psychology, funded by the National Institute of General Medical Science; he served as the local Director in the later years of the grant. This role called for fierce dedication and concentrated joint planning during some turbulent years. He also spent two years during this period as the vigorous early Chairman of the interdepartmental faculty committee to plan a Social Science building, which is now called Uris Hall.

Leo was a pioneer in the use of scientific apparatus and computers in social psychology and had a major part in establishing the high-technical laboratory facilities which we still have in Social Psychology. Using this laboratory in its early form, he (with William Morris) found, with multiple regression analyses, that one could predict which person continues to talk after an episode of dual speaking by focussing on the behavior of the person whose speech had been interrupted. Continuation or willingness to relinquish the floor involves raising or sustaining voice level during interruptions. He used computer controlled manipulations of speaker's sound pressure to test this conclusion. Using op-amps and real-time computer control, he manipulated speakers' voice levels as they spoke and listened to one another through headphones. By comparing control and experimental passages, he could predict the outcomes of these dual speech episodes from these data, without reference to content, establishing that some mechanisms which control the stream of interaction are nonverbal.

In his published papers, Lee made several other original contributions. One was a new contribution to cognitive balance theories; indeed, he maintained an active interest in balance theories throughout his career, discussing new ideas only the week before his death. Another focussed on the role of information and its distribution among group members in shaping the evolving structure of groups. Another interest was in personality. In one experiment, Lee recruited six sets of best-friends triads. These students met five times, once with the best friends, four times with persons who were total strangers. Their speech was logged on digital tape and analyzed by special software he had devised. This design assessed the stability of each student's behavior in the presence of a changing set of others. There was great similarity in behavior while interacting with the different sets of strangers, but profound differences in how the students acted with their best friends—a finding that emphasized the eliciting nature of relationships.

Lee was well known in Europe for this kind of approach to social interaction. He enjoyed sabbaticals in England, and he served as a NATO visiting lecturer, speaking at twelve universities in Holland, Italy, and West Germany.

Over the years, Lee became increasingly effective and dedicated to undergraduate teaching. His course on social relationships (similar to work done at Harvard by Freed Bales) was popular: some students waited years to get into it. Aside from extensive readings, students kept personal logs and interacted with uncommon frankness. In keeping with his respect for research and his affection for undergraduates, a memorial fund has been established to reward the best Cornell undergraduate social psychology research paper, each year. Contributions to the "Meltzer Memorial Fund" should be sent to the Department of Sociology.

Leo grew up in Brooklyn and was a graduate of the Townsend Harris Special High School there. He received his A.B. degree from the University of California, Berkeley in 1949 (where he worked with Abraham Maslow) and an M.A. degree from Syracuse University in 1951. He loved opera, and over the years came to know much about it, particularly the work of Wagner.

He is survived by his ex-wife, Nancy of Ithaca; his wife, Anne, also of Ithaca; his five children, Jonathan, Joel, Sarah, Walter, and Elizabeth; and a brother, Ezra of White Plains.

Leo asked that no memorial service be held. Instead, we now express how much we will miss our busy, creative and wise colleague, with his talent and taste for administration, his dedication to good teaching and research and his warm, lively and supportive manner.

William W. Lambert, Robin Williams, Jr., Donald Hayes

Robert P. Merrill

November 17, 1934 — September 20, 1996

Robert Perkins Merrill, the Herbert Fisk Johnson Professor of Industrial Chemistry since January 1977, died quietly just two months before his 62nd birthday at his home in Ithaca, New York. Merrill was an active member of the Cornell Faculty for 19 years (1977-96). He was an outstanding academic colleague in chemical engineering and physical chemistry and a distinguished religious leader. He was deeply committed to excellence in his profession, in his religious commitments and in his family life.

The record of his experiences honors a great person and a man of many talents. He pioneered in the development of undergraduate and graduate instruction in both chemical engineering and applied surface science, was an outstanding mentor of graduate students, participated strongly in industrial consultation and made vital contributions to the scientific research literature.

Robert Merrill was also a product of his pioneer Mormon heritage. As a member of the Church of Jesus Christ of Latter-day Saints (Mormons), he served during his life as a teacher, High Priest, Bishop of the Ithaca Ward and President of the Owego Stake. He was a builder of his community, unswervingly devoted to emulating his Mormon beliefs in his daily living. It was said by a colleague that he lived life with an eternal perspective.

His concern for his family was a dominant part of his life. He loved them deeply and foremost but also respected every person he met, not esteeming one above another. He was a devoted husband, a caring father, a committed grandfather and, all-in-all, a caring human being to every individual with whom he came in contact.

Merrill was born November 17, 1934 in Salt Lake City, Utah of the late Olonzo David and Ruth Perkins Merrill. He attended public school there until they moved to Richland, Washington. His family subsequently moved to Wilmington, Delaware in 1946 where he attended the P.S. DuPont High School and worked summers at the DuPont Company, where his father was employed as a mechanical engineer. In 1953, Bob entered the mechanical engineering program at Cornell but soon transferred to the School of Chemical Engineering. He completed his B.ChE degree in Chemical Engineering at Cornell in 1960 and his Sc.D degree in Chemical Engineering at the Massachusetts Institute of Technology in 1964. As a new graduate student at MIT, Bob joined some like-minded fellow students to meet together each day over lunch to read and discuss holy scripture. In addition to his spiritual commitments, after completing his degree studying the surface chemistry and physics of gas-solid interactions,

he taught there. Subsequently, he moved on to the University of California at Berkeley, where he served as vice-chairman of the Department of Chemical Engineering from 1974-77.

He was brought back to Cornell in 1977 through the insight of Professor Emeritus of Chemical Engineering, Julian C. Smith, to strengthen the research base of the Chemical Engineering Department. In this, he succeeded admirably, playing important roles in recruiting sixteen new faculty members in the department and serving as a trusted and impartial advisor to departmental chairs. One of whom commented, "Right away I could count on him to provide insight into complex issues free of biases from any personal stakes". Another colleague stated that, "Chemical Engineering is today quite a different department than it would have been if he had not been there. He never pushed his own agenda". A third colleague observed that, "Merrill would never receive the recognition he deserved, because he was never selfish".

He taught graduate courses in fundamental chemical kinetics, undergraduate courses with an emphasis on reactor design and the unit operations laboratory, and he coordinated the capstone design course in chemical engineering for many years. His industrial experience was a great asset in the last-named effort. He was an outstanding mentor of graduate students. Many of his Ph.D. students have gone on to spectacularly successful careers in academia and industry.

He had a great zest for scientific inquiry and incubation of new ideas. He liked to think about new concepts and to impart his own enthusiasm to the students under his supervision. He stood for quality and integrity in many ways both intellectual and spiritual. Even when slowed down by failing health in latter years, he never compromised his standards of quality and integrity in his scientific and personal relationships. He was particularly effective in bridging professional gaps not only in the field of chemical engineering but in interdisciplinary interactions with colleagues in physics, chemistry, applied physics and engineering, with whom he had substantial scientific collaborations and cooperations.

At Cornell, he pursued a broad program of research centered on studies of the structure and chemistry of solid surfaces and the interactions of surfaces with gas molecules. A unique aspect of this research was the use of atomic and molecular beam scattering techniques to probe the structure and reactivity of atoms at surfaces and to study gas-solid collision dynamics. He also pioneered in the use of synchrotron radiation beams to study oxidation of metals, properties of oxides and heterogeneous catalytic processes on surfaces as well as the unique properties of aluminas and related materials. He realized that understanding these interactions and materials had important

practical implications in such processes as catalysis, corrosion, corrosion inhibition and the aerodynamics of flight in rarefied atmospheres.

As an academician and an engineer, Bob loved not only to pursue new knowledge but to apply it with useful impact on human life. In addition to conducting his university-based research and serving as co-director of the Cornell-Sandia synchrotron radiation beamline facility at the Brookhaven National Laboratories, Merrill was active as an industrial consultant. This was in keeping with his commitment in relating fundamental understanding to practical application, admirably fulfilling his responsibility as holder of the Johnson Chair of Industrial Chemistry. Companies he worked with included Universal Oil Products, Gulf General Atomics, Stauffer Chemical, Lockheed Missile and Space Corporation, Abcor Corporation, Raytheon Corporation, and Mobil Research and Development Laboratories.

The Herbert Fisk Johnson Professorship of Industrial Chemistry was established by Mr. Johnson, a petroleum industrialist, and head of one of the nation's largest privately owned companies at the time. The Johnson Chair was previously held by Fred H. Rhodes and by Charles C. Winding, both former directors of the School of Chemical Engineering.

Bishop of the Ithaca Ward of the Church of Jesus Christ of Latter-day Saints, Robert Merrill had a strong spiritual side to his life. He lived his life with an eternal perspective and believed that living is finite and temporary, a trial period whose duration is insignificant when compared to the eternal existence extending infinitely both into the past and on to the future. As he became a leader in the knowledge profession of the university, his teachings gained eminence through reinforcement from his personal qualities and spiritual integrity. The following from, "Ode on Intimations of Immortality" by William Wordsworth, epitomizes the spirit underlying Bob's life:

Our birth is but a sleep and a forgetting;
The soul that rises with us, our life's star
hath had elsewhere its setting
And cometh from afar;
Not in entire forgetfulness,
But, trailing clouds of glory do we come
From God, who is our home.
The homely nurse doth all she can
To make her foster-child, her inmate, man,
Forget the glories he hath known,
And that imperial palace whence he came.

Robert Merrill is survived by his wife, Jeanne Cluff Merrill; his sister, LuAnn Merrill Sorensen; his five children, Ellen Merrill Fluckiger, Laurie Merrill Grimsman, Lydelle Merrill Rumsey, David Keith Merrill and Paul Robert Merrill; and eleven grandchildren, Vanessa, Gordon, Breanna and Eleesa Fluckiger, David, Brian and Leisel Grimsman, Gregory and Christopher Rumsey and Isabeau and Hannah Merrill.

Joseph Ballantyne, Paul Houston, William Olbricht, Thor Rhodin

Emil A. Mesics

March 25, 1907 — April 15, 1991

Emil A. Mesics had an unusually varied career, ranging from driving a beer truck, teaching and coaching in high school, working as a training director for RCA, R.H. Macy and the Otis Elevator Corporation, to serving as a university professor. To put it differently, he was ideally prepared to be a member of the faculty of the New York State School of Industrial and Labor Relations, where his combination of theoretical knowledge and practical experience were invaluable in developing both undergraduate and graduate education and extension work.

Life for many years was anything but simple for Emil Mesics. For economic reasons, as a son of immigrants from Hungary, he was unable to complete his high school education on schedule, but after driving a beer truck for a while he returned to school and later earned a Bachelor's degree from Muhlenberg College and a Master's degree from Bucknell University. He was a public school teacher in West Pittston, Pennsylvania from 1928-42 where he also coached football, basketball, and track on his own time and eventually became principal at the high school. In addition, he did graduate study toward a Doctor of Education at Pennsylvania State University and studied Personnel Administration at New York University. While he was at West Pittston, he spent two years as Administrative Head of the State College of Pennsylvania State College.

In 1942 he turned to work in corporations in the fields of training and personnel. From 1942-47 he was with the RCA Victor Division in Harrison, New Jersey as Training Director and Assistant Personnel Manager of Electron Tube Manufacturing Plant. In 1947 he moved to R.H. Macy & Company in New York as a Staff Training Director and from 1948 to 1953 he was with the Otis Elevator Company, also in New York, as a Director of Training and Management Development. While there, he taught a course in Extension at the City College of New York, and also taught at New York University and Columbia. By this time, he had achieved considerable recognition in the fields of personnel and training, and was invited in 1953 to become Training and Personnel Director of the RCA International Division in East Orange, New Jersey. While there he travelled extensively, including to Brazil and Chile. Corporate life turned out to be rather a "rat race" for Emil, and was partly the reason he decided to enter academe. Cornell invited him to come to Ithaca in 1956 as a Visiting Professor. He became an Associate Professor in 1958 and remained at Cornell until his retirement in January, 1971.

His experience and personality made him an invaluable member of the ILR faculty at a time when the School was finding its way into its special role of relating academic teaching and research to the realities of the work

place. Emil Mesics was outstanding in his capacity to contribute to this goal, and taught courses in training and personnel administration to both undergraduates and graduates. He was particularly valuable in extension work, where he was skillful in helping corporate and union personnel adjust to the rapidly changing labor-management relationship.

During his first years at Cornell, in those famous and leaky Quonset huts, he worked with Korean War veterans, and also established close working relationships with the former Secretary of Labor, Frances Perkins. He considered these associations, and his work with Dean Catherwood, as one of the main highlights of his life and these days as the most wonderful time in his teaching career.

Emil was admired and cherished by his colleagues and by students for his unfailing willingness—even eagerness—to be helpful in any way possible. Although he was constantly busy, he never failed to find time for students and younger colleagues who needed his help. An attractive ILR “institution” was the Sunday gathering arranged by Emil and his wife, Margaret, at their lovely home in Varna. In pleasantly wooded surroundings, Emil ran the grill for a long time, and invited colleagues and students to come whenever they wished. There was genuine human concern and affection there for all who came, including the children, many of whom still remember hiding to escape Emil’s “For Free” Marine Corps-close haircuts.

While at Cornell, he also found time to engage in valuable extension activities, at such places as Westinghouse in Horseheads, U.S Soil Conservationists – Syracuse, Howard Johnson Management Development, the Labor Department, the Personnel Managers Conference in New York State, and many others. He also worked for the Brookhaven National Laboratories and the New York Telephone Company in the development of corporate training programs for supervisors and managers. His contribution to the School of Industrial and Labor Relations was, therefore, very impressive. His capacity to relate theory and practice was crucial while he was at Cornell.

Even after his retirement, he was indefatigable. He organized book clubs in Colorado, and subsequently in Arizona, which turned out to be very attractive to the participants. His tireless energy and devotion to learning remained until his death.

He is survived by his wife, Margaret; one son, Joseph; and two daughters, Margaret and Sally.

James A. Gross, Vernon H. Jensen, George W. Brooks

James Gormly Miller

January 5, 1914 — September 12, 1995

In the founding and development of almost every institution, there are always a few individuals who play a critical role in its success. J. Gormly Miller was such a person. There is no question that without the vision, energy and talent for organization that Gormly brought to his task as its first Librarian, the School of Industrial and Labor Relations would have taken much longer to achieve its place as a major center of teaching and research in its field of study. In Gormly's case, "a man of many parts" was the reality, not the cliché so often attributed to the departed. Scholar, innovator and leader in the field of library management, institution builder and planner, but also a strong contributor to the political life of the Ithaca community, a devoted family man, all supported by a gracious personality describe the person whose life and accomplishments we attempt here to memorialize.

Gormly came to Cornell in Fall 1946 from Rochester, New York, his place of birth. Only recently discharged from military service, which included participation in the Normandy landings albeit in a non-combat status, Gormly was recruited by Dean Ives to build a working collection of industrial relations materials as quickly as possible. Although Gormly had had nearly five years of experience in the Rochester Public Library prior to his military service, he had no special knowledge and background in the social sciences let alone the unique field of industrial relations. On that account, it is all the more remarkable that in a few brief years the ILR library, under his leadership, not only was serving the teaching and research interests of the School's faculty and students, but was widely used by others at Cornell. Moreover, visitors and others familiar with longer-established collections at other academic institutions almost invariably remarked that the ILR collection was at least the equal of its peers in the field of industrial and labor relations.

In large part, given his initial unfamiliarity with the field and with the requirements of a virtually unique academic institution, the stature of the ILR Library must be credited to two significant aspects of Gormly's approach to his task. First, as everyone has reported to this committee, he insisted that the overarching responsibility of the library staff was service to the students and faculty. Whatever books and other printed materials might be needed, every effort would be made to add them to the collection and to make them readily accessible to users. The other was Gormly's early recognition and understanding of the unique character of a library devoted to instruction and research in its field. As Professor Emeritus Walter Galenson, an eminent labor historian told us, the materials for research, such as union publications and documents, are extremely difficult to acquire. The collection of such material under Gormly's direction Galenson describes as "pure gold."

Gormly's preparation for his career began after high school with the A.B. degree from the University of Rochester in 1936, where he majored in English. From there he went on to Columbia University where, in 1938, he received the B.S. degree in Library Service. With that background, he returned to Rochester to join its public library staff, remaining there until inducted into military service in 1943. Before leaving Europe under a special program for American servicemen, he spent Fall 1945 at the University of Paris in its bibliographic program in the Ecole des Chartes. Discharged in 1946, he returned to his hometown and its public library. His career at Cornell began with his appointment in 1946 as Librarian of the School of Industrial and Labor Relations. His talent and approach to that responsibility were soon accorded the unusual (for librarians of the day) recognition of academic rank. In 1949, he was appointed Associate Professor with tenure. In 1956, he earned promotion to full Professor.

Contemporaries of Gormly recall two facets that epitomize his career as librarian. Dean Martin Catherwood, once somewhat facetiously but with genuine appreciation, referred to him as the "Empire Builder." For Gormly, development, improvement and expansion of the ILR Library as a service institution received his continuing and unremitting attention. He was never satisfied with the status quo, but continually sought more funds to improve and expand the library's services. At the same time, he actively involved himself as a teacher in the School's academic and extension programs, and encouraged others on the library's staff to do so.

The other facet of his career, to the mild amusement of his friends and colleagues, was an apparent inability to retire once and for all. The record shows at least four such episodes. They reflect Gormly's commitment to serving his communities, both the academic and the civic, so long as his talents were useful.

Building and developing the ILR Library may have been Gormly's original intention and goal, but a series of fortuitous events combined with his immense talent for planning and management led his career well beyond that initial stage. In 1956, Dean Martin P. Catherwood, recognizing Gormly's organizational and management skills, asked him to take on the task of planning and coordinating the ILR School's move from its war-surplus buildings to its present location on the old site of the College of Veterinary Medicine. For six years, until the transfer to that site in 1962, Gormly managed to keep both the process of transition and the management of the ILR Library going like a well-oiled machine. At that point, his announced intention was to devote himself exclusively to being a librarian. Stephen McCarthy, then Director of Cornell libraries, had other ideas; and Gormly, in 1962, became Assistant Director of Libraries for Personnel and Budget. For the second time, in 1970, he retired, was named Professor Emeritus, and then skipped off to Geneva, Switzerland to serve for almost four years as Deputy Chief of the Central Library and Documentation Branch of the International Labour Office. In February 1974, he "retired"

from that position to take on once again for a year the job of ILR Librarian. In February 1975, he became Cornell's Director of Libraries, a position he held until another retirement in July 1979. For a while, Gormly continued to work on special projects and as a consultant on computerization of the Cornell library system. In September 1985, he held the office of Acting University Librarian until retiring in December 1986. Gormly remained professionally active as a consultant until his death, at which time he was engaged with former Dean Robert B. McKersie and others in the preparation of a volume commemorating the 50th anniversary of the ILR School.

His profession was not Gormly's only interest. Although his parents were staunchly Republican, probably the experience of the 1930 Depression turned him, like so many others of his generation, to the appeal of the Democratic Party. For Gormly, however, this was more than just dutiful registration and voting for the party's candidates.

He took a much more active role, initially at a time in Ithaca when a Democrat in any elected public office was a rarity. Gormly served twice, first in 1959-63 and for one year in 1968, as alderman on the Ithaca City Council. He twice served on bipartisan commissions to revise the City's charter, though in both cases the commission failed to persuade the electorate to support its proposals. Gormly also served as commissioner of the Ithaca Civil Service Commission, and Chairman of the City's Democratic Committee.

Gormly's strong sense of community extended to other areas as well, including the Boy Scouts and to St. John's Episcopal Church where he served as vestryman and as teacher in its Sunday school program. As one of our colleagues put it, with Gormly "voluntary public service was integral with his faith."

The foregoing account of Gormly's professional and public life would be incomplete, possibly even misleading, without taking notice of his personal life. Indeed the quality of his personality doubtless contributed to the success of his professional and social enterprises. Gormly was first of all a devoted family man. He and Mildred, who passed away shortly after Gormly, were a devoted couple who lived and worked together as equal partners in raising their family of three children. They apparently believed in the "invisible hand" approach to child rearing, leaving the children, each in their own way, to discover and develop their talents. In moments of leisure, Gormly liked to garden and occasionally to sketch. He had little interest in sports, organized or otherwise, preferring reading fiction, history, etc.

Without exception Gormly's colleagues have commented on his modesty, warmth and genuine affability. Gormly was that rare individual who is instantly likable. Gracious and friendly, honorable and generous in his relations

with everyone, clear-headed, unflappable in the face of the unexpected or unplanned, open to the ideas of others, and with a fine sense of humor; all of these describe our friend and colleague whose presence so enriched our lives in manifold ways.

Gordon T. Law, Jr., Jean T. McKelvey, Robert L. Aronson

William T. Miller

August 24, 1911 — November 15, 1998

Professor Miller was born in Winston-Salem, North Carolina, educated in the schools of the area, and graduated from Duke University with a Bachelor's degree in 1932. He did graduate work with Lucius A. Bigelow at Duke, one of the first to use elemental fluorine in organic synthesis, receiving his Ph.D. degree in 1935. He was then a Lilly Fellow at Stanford University, and in 1936, he came to Cornell as an Instructor in the Department of Chemistry. He then initiated a vigorous research program in fluorine chemistry to show that the uniquely high chemical reactivity of this element could be used to form an unusual variety of compounds with uniquely high chemical stability.

World War II broke out soon after Miller came to Cornell, and at the age of 30, he was recruited for the supersecret Manhattan Project, supposedly to synthesize "special materials that would lubricate bullets". Actually, a major objective of this project was to separate the fissionable U-235 from the stable isotope U-238 using "gaseous diffusion". In this process, the different isotopes make their way through the torturous paths of a porous barrier at slightly different rates so that the U-235 can be enriched sufficiently to undergo a nuclear explosion. However, the only convenient gaseous form of the unusually heavy element uranium is UF₆, which is nearly as reactive and corrosive as elemental fluorine itself. Worse yet, any fluorination with UF₆ produces UF₄, a solid that clogged the diffusion membrane. Although stainless steel could be used for many parts of the diffusion plant, UF₆ resistant materials with other physical properties, such as oils, greases, and gaskets, were also critically needed.

The resistance of the new polymer Teflon that contains only carbon and fluorine initially appeared to be very promising, but at that time, it turned out to be very hard to fabricate, was impure, and could only be produced as an intractable solid. Teflon gaskets leaked because the polymer exhibited "cold flow" under pressure. With Manhattan Project encouragement, other fluorine chemists tried to convert hydrocarbon oils, greases, etc. to fluorocarbons by replacing the hydrogen atoms with fluorine atoms; however complete replacement was nearly impossible, and a single remaining hydrogen atom was a fatal link in the chain of chemical stability.

Miller devised a brilliant alternative approach to this problem. He emulated the synthesis of Teflon, in which molecules are built up by polymerizing tetrafluoroethylene, C₂F₄. To achieve modified physical properties, he used C₂F₃Cl rather than C₂F₄. By 1943, the Miller approach appeared to be the only promising route, and his research group was moved to the Manhattan Project at Columbia University, "inside" the secret project where they could

interact directly with the diffusion plant designers on their specific material requirements. In an intensive day-and-night research effort, they synthesized a wide variety of UF_6 -resistant products: liquids for vacuum pump oils (the diffusion process was carried out entirely under vacuum), heat exchange fluids, greases and waxes for lubricants, and solids for gaskets, valve seats, and windows (UF_6 attacks glass). Critical to this was their basic research that determined how such physical properties depend on composition and molecular weight.

Polymer chemistry in the 1940s was an infant field; nylon and polystyrene had just been invented. The Miller group pioneered in solving polymer chemistry problems involving these unique new materials, such as separation, purification, and characterization. For these critical research contributions, Miller received the personal commendation of Major General Leslie Groves, the Manhattan Project military commander: “these materials were essential to our success”.

Miller’s research constituted an important part of Cornell’s early and continuing leadership in polymer science. Peter Debye, who received the Nobel Prize before coming to Cornell, developed during WWII, the method of light scattering to determine the molecular weight of polymers, a method that had a very important impact on the synthetic rubber program. Paul Flory, who joined the Cornell chemistry faculty in the late 1940s, received the Nobel Prize for his basic polymer research. These were the first of many world class polymer research programs at Cornell.

On his return to Cornell as a full Professor in 1946, Miller embarked on a broad scale basic research program that established his laboratory as a world center in organofluorine chemistry. He pioneered and illustrated the broad applicability of elemental fluorine syntheses; the extension of these basic concepts developed by his research group showed that an unlimited number of highly fluorinated carbon compounds could exist, and that such compounds exhibited a diverse and exciting chemistry. They demonstrated that fluoroolefins were also unusual in the great ease with which they suffer nucleophilic attack on the unsaturated carbon, with even halide anions showing useful reactivity. Contrary to the mechanistic expectations of the time, fluoride ion was shown by far the most reactive, with addition and rearrangement reactions analogous to those of a proton as an electrophile for unsaturated hydrocarbons. His research made possible elegant syntheses of a variety of interesting fluorohalo compounds. In later research, he discovered and exploited fluoroorganometallic compounds involving metals such as copper, mercury, and silver that showed unusual chemical reactivity.

For the Cornell Department of Chemistry, Miller played a key role in our only building project since 1923, overseeing the construction of the S.T. Olin Laboratory in the mid 1960s and the subsequent renovation of

Baker Lab. Miller visited recently constructed chemistry buildings around the country and recommended the architectural firm that had also designed the chemistry building at Brookhaven National Laboratory. Convincing the Cornell administration of this choice was a first, as the architect was not a Cornell alumnus. A unique part of Professor Miller's plan for the building was a new style of small teaching laboratory, optimized for the interaction of a small group of students with a single teaching assistant. Miller also took a very active role in construction oversight and in obtaining construction materials of far greater quality and at far lower cost, such as acid-resistant stainless steel ductwork for the chemical exhaust hoods, at nearly the cost of much inferior galvanized material through his industrial contacts. Twice, Miller was a Chemistry delegate to the Faculty Council of Representatives.

The uniquely reactive element fluorine was discovered by the French chemist Henri Moissan in 1886, for which he received the Nobel Prize. In 1986, Professor Miller received the Moissan Centenary Medal, as Moissan's worthy successor in fluorine chemistry. Miller also received the American Chemical Society Award for Creative Work in Fluorine Chemistry in 1976, the year of his retirement, and a special Festschrift issue of the *Journal of Fluorine Chemistry* was dedicated to him on his 70th birthday in 1981. He was a member of the American Chemical Society and the Royal Society of Chemistry of Britain.

The home that the Millers built next to Sunset Park in Cayuga Heights with its spectacular view of the Cayuga Lake valley was a tribute to their unusually good taste and to their passionate attention to detail. Here, Miller's love of the most challenging problems was also shown by his outstanding success with prized varieties of grapes, walnut trees, persimmons, and espaliered pears.

He is survived by his wife of 47 years, Betty Robb Miller; his brother, Robert L. Miller, of Panama City, Florida; his nephew, Robert Miller, of Belfast, Northern Ireland; and his niece, Katherine Johnston, of Opelika, Alabama.

Jerrold Meinwald, Charles F. Wilcox, Fred W. McLafferty

Jason Millman

September 6, 1933 — February 22, 1998

On February 22, 1998 the faculty of the Department of Education, the College of Agriculture and Life Sciences, and Cornell University lost a valued and honored colleague. Following a long illness, Jason Millman, Professor of Educational Research Methodology, died from the effects of Shy-Drager Syndrome while with his family in Lake Oswego, Oregon.

Jay joined the Cornell faculty in 1960, immediately after completing his doctoral work in psychometrics at the University of Michigan. In the ensuing years, he rose to prominence in the field of educational tests and measurement. His professional accomplishments are too numerous to detail here. Suffice it to say that he was the author or co-author of a very large number of books, book chapters, journal articles and research reports. He frequently served as a consultant to agencies of the federal government, to the governments of a number of states, and to a host of school districts around the country. He advised Boards of Law Examiners of several states regarding their bar examinations. He was elected president of the National Council of Measurement in Education, which recognized his achievements with its Distinguished Career Award in 1996. He served as a vice president of the American Educational Research Association. He was a member of the Executive Committee of the National Assessment Governing Board, the policy making body for the National Assessment of Educational Progress. Despite such professional accomplishments, it is telling of Jay's character that many of his closest friends and colleagues at Cornell had little idea of his stature in his field. He was a thoroughly modest man, ungiven to boasting in any form.

If Jay's modesty sometimes hid his professional accomplishments from the Cornell community, other aspects of his nature made him a recognized and valued member of it. The power of his intellect and insight, his willingness to help others, and his ability to be an encouraging and reflective critic were obvious to everyone with whom he worked. Despite the demands on his time, he was always willing to spend hours carefully reading and perceptively commenting on manuscripts written by students or colleagues. He was especially generous in this way when helping junior colleagues launch their research careers. A paper given to Jay for comment might come back with everything from several pages of closely reasoned analysis of its argument to the correction of a misplaced semicolon. Indeed, a fellow member of the faculty once remarked that Jay's comments on one of his papers were more extensive, more thoughtful, and more deserving of publication than the paper itself.

Jay's willingness to help others went well beyond his profession and the university. It was also reflected in his contributions to the Ithaca community. From 1987 until the very end of his life, he gave thousands of hours of his time to the Suicide Prevention and Crisis Service. He was a phone counselor who frequently volunteered to spend entire nights manning the Service's telephones in order to be available to troubled residents of Ithaca. He contributed his expertise in program evaluation to helping that agency improve its services to the city. He served on its board of directors. Out of this experience he was instrumental in preparing a book, *Talking with the Caller: Guidelines for Crisisline and Other Volunteer Counselors* (Sage Publications, in press) that will serve as a resource manual for similar crisis intervention centers around the country. It is a testament to his character that he contributed his share of the royalties from this book to the local agency.

The paragraphs above might leave the impression that our colleague had a superb intellect, that he made numerous contributions to his profession and to Cornell, and that he gave freely of his time to help others. All of that is true, but it would miss important aspects of Jay's character. Perhaps what everyone noticed first about him was his wit, his *joie de vivre*, his sense of humor, and his playfulness. He was always ready to laugh, perhaps most quickly at himself. He loved to dance and was active in pop and contra dancing organizations in Ithaca. He was an avid poker player and a founding member of what must be one of the longest running poker games in Cornell's history. He excelled in virtually all racquet sports, from tennis to ping-pong.

In 1995, the Department of Education recognized Jay's contributions by establishing the Jason Millman Promising Scholar Program. After a comprehensive, national search, the department annually selects a person who has earned a Ph.D. degree within the previous five years, whose work promises to make a major contribution to educational research and practice. Winners are invited to the Cornell campus where they make a presentation open to the entire community, lead a seminar for faculty and students of the department, and meet with individuals with similar research interests. It is particularly appropriate to honor Jay in this manner. Certainly he freely gave his time to help his junior colleagues establish their research careers. But just as certainly, as a recent Ph.D. in the early 1960s, he was himself a promising scholar--one who went on to amply fulfill that promise.

The last years of Jay's life were difficult ones. Shy-Drager Syndrome is a rare and incurable neurological disorder characterized by the slow, progressive failure of the autonomic nervous system. This vigorous, fun-loving, vivacious, and joyful man ended life confined to a wheelchair and able to speak only with great difficulty. Yet, to the end his mind was as sharp as ever, and he was actively writing, consulting, and working with national professional

associations. And to the end, he was as warm, as quick to laugh, and as compassionate as ever. Jason met death with courage, with grace, and with dignity, an inspiration to all who knew him.

Richard E. Ripple, Kenneth A. Strike, Emil J. Haller

Norman Slawson Moore

April 17, 1901 — April 3, 1995

Norman Slawson Moore was born in Ithaca, the son of Veranus A. Moore, M.D., a pathologist who became the second Dean of the Cornell Veterinary College. Norm was an Ithacan and Cornellian all the way. As his steadfast friend Deane Malott pointed out, he lived in only two houses for his entire life: the one he was born in and the gracious home on Pleasant Grove Road where he died.

He was graduated, *cum laude*, from Cornell in 1923 and from its Medical College in 1926. He served as House Physician at Bellevue Hospital in New York City 1926-28 and as a Research Fellow at the Rockefeller Institute for the following two years.

Norm then returned to Ithaca and opened a practice in internal medicine, the first internist in the area. He also brought with him the first electrocardiograph instrument in Ithaca. He quickly developed a busy practice here; he became a Fellow of the American College of Physicians in 1938 and one of the early Diplomates of the American Board of Internal Medicine in 1947.

Very active in the medical and general community, Norm was one of the founders and the first chairman of the Tompkins County Board of Health and in 1952 the founder of the County Mental Health Clinic. In his role with the Board of Health and with the connections he had developed with the State Health Department, he was instrumental in converting the New York State Biggs Tuberculosis Hospital to the Tompkins County Hospital in 1960, thus replacing the antiquated community hospital on South Quarry Street.

In 1939, there was increasing uneasiness about the arrangements for health care provided to the Cornell students. The system was poorly organized, quite dependent on the local practitioners, and not oriented to the needs of the student population. Several cases of serious and even fatal illness in the previous year aroused concern in the campus community. President Day expressed his concerns to Dr. Moore, his personal physician; more than that, he implored and finally convinced Norm to give up his practice and to reorganize the University Health Services and become the department's full time Director. A new Department of Clinical and Preventive Medicine, later called the Department of University Health Services, was established with Norm as Professor and Chairman.

Almost immediately, Cornell became one of the larger training sites for the instruction of cadets of the Army and Navy, which also entailed the provision of medical care for the cadets on a contractual arrangement with the

armed services. This was integrated quite successfully with the care provided to the civilian students, a process which would have been very difficult without the reorganization of the Health Services which Norm had already initiated and supervised.

After the busy days of the wartime period with its shortages of staff and resources, Norm's department began to mature in the immediate post-war years. The idea of a comprehensive service oriented to the special needs of university students was conceived and implemented. Included were not only direct medical care of high quality but preventive medicine, health education, sports medicine, and psychiatric and psychological care. In addition, the department was made responsible for monitoring occupational and environmental health on campus. A new and expanded staff was assembled; the reliance on local practitioners was reduced to consultation for surgical and certain subspecialty problems. The need for a modern and convenient facility was defined, and Dr. Moore was instrumental in persuading the Gannett Foundation to fund the Clinic building. Always interested in teaching, he also developed a medical residency program which made use not only of the Clinic for outpatients but of both the old Sage Infirmary and the Tompkins County Hospital for hospitalized students.

The development of the University Health Services served as a model for other universities, and Norm was recognized for his leadership by his appointment as editor of *Student Medicine* (later *Journal of the American College Health Association*) and his election as president of ACHA in 1954.

Dr. Moore's involvement with the University was not confined to clinical care or even the usual kinds of clinical research. Early in his tenure, he became interested in research in clinical nutrition, which was not a prominent area of study at that time. He worked with Leonard A. Maynard, Ph.D., to persuade President Day and Mr. Howard E. Babcock, Chairman of the Cornell Board of Trustees, to support the establishment of the School of Nutrition in 1941. Furthermore, he took a very active role in research programs related to medical nutrition. Indeed, the first grants to the new school were given in part to support such studies, with Norm as the principal investigator, and his involvement with research in clinical nutrition continued for the following fifteen years. During this period, Norm was an important resource for counsel and support for the School, which was having difficulties in making its way financially and organizationally. His influence with administrators in both the University and the State was most helpful.

Dr. Moore had a broad range of interests outside the University. He was active in the local community, serving on numerous philanthropic boards. He was elected President of the Tompkins County Medical Society in 1956;

he went on to be elected President of the New York State Medical Society in 1960. Norm was one of the editors of the *New York State Journal of Medicine* and for many years wrote or edited a monthly editorial column on clinical nutrition for the *Journal*.

In 1954, he was appointed to the New York State Public Health Council, the most important health policy group in the State Government, by Governor Dewey, who had come to know him during discussions in regard to the School of Nutrition. He remained as a member during the Harriman administration, and in 1968, was appointed Chairman by Governor Rockefeller. He became an insider during the Rockefeller years; he and the Governor were on a first name relationship. "Nelson" appointed him to several other advisory committees and councils, and he continued to be active and influential for a decade or more after his retirement from Cornell in 1967.

Norm was an accomplished clinician and researcher. He was an effective organizer and administrator and a perceptive long-range planner. Despite his extensive commitments to the University and to the county and the state, Norm was an outstanding leader of his professional staff. He was always available and interested in providing consultation about difficult clinical problems, and in all situations, he dealt with his staff as true colleagues.

But beyond all that, Norm was a charming and generous man. He had a forthright way about him and a twinkling humorous manner that delighted everyone he encountered. He was devoted to our University and our community. Norm and Bernice, who predeceased him in 1993, had no children, and they thought it fitting to leave the bulk of his estate to the University, including his beautiful home, which will become the premier home for the Faculty-in-Residence program.

Dearie Malott, Leroy K. Young, Allyn B. Ley

Fred Bishop Morris

October 25, 1896 — July 2, 1989

Fred B. Morris, Emeritus Professor of Extension, died in Ithaca, July 2, 1989, at the age of 92. He had served the Cornell Faculty and Ithaca community for sixty years and was known for his expertise in organizational techniques, leadership development, and effective program building. He pursued these areas of expertise with vigor and enthusiasm in both his professional duties and as a participant in the community groups with which he was affiliated.

In 1928 Professor Morris joined the College of Agriculture Faculty at Cornell as an assistant state leader of agricultural agents. In 1943 he became the state leader and in 1958 he retired as an emeritus professor of extension. After retirement he worked part-time hosting foreign visitors to Cornell, and became actively involved as a volunteer in community organizations. He served in key volunteer roles until shortly before his death. He was truly “active to the end”.

Fred Morris was a native of Shelbyville, Indiana. His father and grandfather were merchants. As a high school student he worked in his Uncle Orville’s drugstore. It was here he first became acquainted with farm families, liked them, and decided he would make a career of working with farm people. After graduation from Shelbyville High School he enrolled at Purdue University to study agriculture.

World War I interrupted his studies at Purdue. He served in the Quartermaster Corps in Virginia training pack mules for service. Upon release from the Army he decided to locate in New York State where farm land prices were lower than in Indiana and he was fascinated by the beauty of the countryside.

At Cornell, Professor Walter Tailby hired and trained Morris to be a “milk tester” for the Dairy Herd Improvement Association. He was assigned to Erie County. The milk testers at that time stayed with the farm families where they were testing. Through this experience Fred learned much about farming and family life. After a year and a half he decided to move to Ithaca where he was hired by Dr. G.F. Warren to work on his dairy farm.

In 1920 Fred Morris enrolled in the College of Agriculture at Cornell and in 1922 received a B.S. degree with a major in general agriculture. By working his way through college he had little time for outside activities but did manage to be a member of the dairy cattle judging team and to participate in the Eastman Stage Public Speaking Contest.

Following graduation from Cornell, Morris was employed as a 4-H Club agent in Erie County, a position he held for two years. In 1924 he moved to Oswego County where he became an agricultural agent and served until 1928 when he was invited to become a member of the Cornell faculty.

Agricultural extension was in the early stages of development when Fred Morris started. The work was of an experimental nature. It was a time for creative ideas and courageous leadership. These traits Fred Morris had and used well over the thirty-six years he served the New York State Extension Service. Also during these years there were emergencies to cope with including the great depression, World War II, labor shortages, and the introduction of numerous improved practices. These called for flexibility and changes in extension procedures which the state leader team was helpful in providing.

The concept of an informal educational program that used research to help farmers solve problems and improve their quality of life was relatively new when Professor Morris embarked upon his career in extension. There were many questions about how to organize and conduct this new kind of educational work. Fred Morris was challenged by these questions, was willing to experiment, and soon developed an expertise in these matters. He became a firm believer in the importance of strong leadership and the development of programs by the local people. This led to his lifelong emphasis on leadership development and grassroots program planning as key factors for success. In 1936 while attending the Graduate School in the United States Department of Agriculture, he wrote a bulletin on program planning which was used by agricultural extension agents throughout the United States.

Other points which Fred Morris strongly promoted were the importance of mental stimulation and growth, maintaining a sense of humor, and being flexible. He stressed these in his work with colleagues, agents, farmers, and rural leaders. Continuing education through regular study and in-service training, he believed, were essential in the building of effective programs. In his own career he practiced these points by reading widely, enjoying good humor, and by spending two of his sabbatical leaves studying at the USDA Graduate School and at the University of Chicago.

New knowledge from research and the development of better teaching methods gives rise to the need for changes in extension programs. Professor Morris as an extension administrator was unusually skillful in bringing about needed changes in the agricultural extension programs. Over time, the agents were encouraged to shift from generalists to specialists and to be ever alert for new and better ways of bringing about improvements. Agents were urged to improve themselves as teachers and leaders. To promote this concept, in 1955 Fred Morris provided

a starter gift for establishing a county agricultural agents professional improvement fund which is administered by Cornell University.

Dean W. I. Myers, at the time of Professor Morris' retirement, pointed out the important part that his enthusiastic leadership had played in broadening the scope of the college's extension programs, in the development of effective farm leaders, in the introduction of new and improved farm production and marketing methods, and in bringing about better living conditions for the farm people in New York State.

Professor Morris' professional concerns extended beyond New York State. In 1948 he went to Greece to assist in establishing extension work in that war torn country. From 1959 to 1964 he worked part-time for the University hosting foreign visitors to Cornell. He also was instrumental in developing an orientation program for new international students in the College of Agriculture. The Morris family served as hosts and entertained many foreign students in their home and from these experiences they developed friendships which continued long after the students had returned to their home countries.

The things Fred Morris stressed in his professional work he practiced in his personal life. He was a strong proponent of group action as a way to solve personal and community problems. His interests were broad as was reflected in the range of organizations in which he was an active participant. Among these were: Epsilon Sigma Phi (honorary extension fraternity), County Agricultural Agents Association, Acacia Fraternity, Cornell Westminster Foundation, Rural Church Institute, Tompkins County Horticultural Society, Cayuga Student Lodge, Cornell Federal Credit Union, Ithaca Consumers Society, Tompkins County Senior Citizens Council, Rotary International, Town and Gown Investment Club, Ithacare Board of Directors, and First Presbyterian Church of Ithaca. In all of these he was more than just a passive member, he usually was in a leadership role. In his later years he often assumed the role of a "Constructive Critic" for the organization submitting written comments on their programs.

Family life and home ranked high in Fred's value system. His wife of more than sixty years, Lillian Rafferty Morris, was a teammate and loyal supporter of his work. Whiffle Tree Farm, their home for many years, was not only a place of beauty and charm but also was a place of warmth and hospitality to the many who visited there.

Fred Morris' wife, Lillian, preceded him in death in April 1987. He is survived by two daughters, Mary M. Kelsy and Margaret M. Fletcher, both Cornellians; a son-in-law, George Fletcher; seven grandchildren; seven great grandchildren; and a host of friends. Fred Morris will long be remembered for his meticulous and humorous manner, and as a caring person, dedicated to helping people, and making the world a better place in which to live.

James C. Moyer

February 24, 1914 — December 12, 1996

James Moyer, Professor Emeritus of Chemistry in the Department of Food Science and Technology at Geneva died of Alzheimer's disease at the Huntington Nursing Home, Waterloo, New York.

A native of Canada, Dr. Moyer obtained a B.S. degree in Agriculture from the University of Guelph in 1936, a M.S. degree in Agronomy from the University of Toronto in 1938, and a Ph.D. degree in Biochemistry from Cornell in 1942. He joined the Cornell faculty at Geneva as an Instructor in 1942. He retired in 1982 as Professor of Chemistry.

Although his training was in chemistry, Jim had strong interests and skills in food processing technology. The effect of different equipment and processing conditions on the quality of fruit and vegetable products was a particular concern throughout his professional career. The pilot plant was as much his professional home as was his laboratory, and he often jokingly referred to himself as a "bucket" chemist. His research included studies on the dehydration of fruit and vegetable products using various methods, electronic and steam blanching of vegetables, improved methods for the pressing and clarification of apple and grape juices, concentration and essence recovery of fruit juices, the flor sherry fermentation, and improved analytic procedures for measuring fruit constituents.

Moyer was a part of the team of agricultural engineers, viticulturists and food scientists who developed the equipment and procedures needed for the mechanical harvesting of the grapes that were to be used by New York's Concord juice and wine grape industry. Jim's studies in the Pilot plant defined the conditions that would produce juices and wines of a quality comparable to that obtained with hand picked fruit. As a result of this project, most of the grapes currently processed in the Northeast are harvested by machines.

Over 100 technical publications resulted from his different studies.

Jim's broad knowledge of fruit and vegetable processing technology made him an important asset for New York's canning and freezing industry. Although he had no formal extension assignment, he spent many hours in New York's processing plants and often consulted with food industry management regarding problems large and small. On at least several occasions, he played a major role in the design of new food processing facilities. He also worked with equipment fabricators regarding modifications that would improve the quality of fruits and vegetables

Dr. Moyer's skills resulted in valuable contributions to Cornell's Geneva campus. He was a major planner of the Food Research Laboratory, completed in 1960, which houses the Department of Food Science and Technology. His input in the design of the pilot plant and the selection of processing equipment was an especially noble achievement. Later, he carried out a similar role in the planning of the Raw Products Building completed in 1972.

Moyer was well known both nationally and internationally. His outside activities included serving as a Fulbright Lecturer at the University of New South Wales, Sydney, Australia during 1953-54. In 1962, he was the leader of a National Research Council Committee concerned with the documentation of literature in food science, an activity that led to improved abstracting practices in the field. Other National Research Council committees on which he served was a study of Agriculture and the Quality of the Environment, and an advisory committee, which he chaired, on fruit and vegetable products for the military.

Jim is survived by his wife, Mary Mann; and their three children, Margaret, Steven and Elizabeth.

D.F. Splittstoesser, M.A. Rao

Abraham (Al) Nash

September 16, 1915 — August 3, 1996

Al Nash is remembered by his friends and colleagues as a social activist, an inspirational teacher, and an insightful writer on political and labor related issues. He was born in Baltimore, Maryland to parents who were working class immigrants from Italy and Russia. His family moved to New York City where Al attended De Witt Clinton High School. After graduation, he became involved in radical politics. Like many of his generation he was initially inspired by ideals of the Russian revolution but later disillusioned by the results. When he managed a labor bookstore in Greenwich Village, he was reputed to read every title that came in the store. Not only well read but also highly articulate, Al spoke on street corners and organized anti-Nazi and pro-socialist rallies and meetings.

At the outbreak of World War II, he went to work at the Brewster Aircraft Plant on Long Island where he was elected as a steward in the United Automobile Workers, a union connection he maintained throughout his life. Drafted into the army, he found it ironic that he was assigned to guard former Nazi officials in a prisoner of war camp in Germany. He also tried to organize his fellow soldiers into a union. After discharge from military service, Al moved to Detroit to work in the Chrysler Corporation's Jefferson Plant where he was elected chief steward of UAW Local 7. His subsequent career encompassed staff positions in several unions where he organized and represented diverse occupations including electrical manufacturing, municipal employment and social workers.

From his earliest years in the labor movement, Al gave priority to worker education and was increasingly involved in teaching not only in the unions with which he was affiliated but in university sponsored courses at Rutgers and Cornell University. His thirst for knowledge led him to complete his formal education enrolling at age 40. He earned a B.A. degree from Columbia College, an M.A. degree from New York University, and a Ph.D. degree in Sociology from Columbia University, graduating at age 57.

In 1966, he joined the ILR Extension faculty in New York City where he continued until his retirement in 1985. He was revered by the labor union leaders and activists who participated in his classes. For example, when Harry Van Arsdale, Jr., headed the New York City Central Labor Council, Al Nash was asked to train leaders of newly organized Taxi Drivers and Hospital Workers and was credited with playing a key role in foundation of these unions.

Always the social activist, Al Nash conducted Cornell conferences that dealt with controversial political and economic issues. For example at a time of conflict in the 1960s, he organized a major dialogue between leaders

of the civil rights movement and labor unions. Dedicated to building union strength, he was also committed to union reform, serving for many years as an active board member of the Association for Union Democracy which monitors union practices and provides assistance to union members who seek to exercise their democratic rights.

In 1974, in recognition of his excellence in teaching and scholarship, Al Nash became a full Professor in the ILR School's Department of Extension. His published works dealt with adult and labor education, organizational change and quality of work life.

Among his accomplishments as a labor educator at Cornell was the leadership he provided in the establishment of courses for university credit for adult students in New York City. He directed and taught in the Labor Relations Certificate Program, which ILR offered in cooperation with Empire State College (SUNY). Citing his contributions, Empire hailed him as "a distinguished labor educator who dedicated his life to the advancement of working people." The United Auto Workers, with which he had an association throughout his adult life, paid tribute to him as "a labor organizer, teacher and writer whose vision of social economic justice in a world of peace inspires us all."

Most of all, he was admired by the hundreds of students for whom he served as mentor and role model and with whom he empathized as a lifelong labor activist who completed his own education while working full time.

Al Nash is survived by two children, Paul and Margo, who have endowed an essay prize for labor studies students in his name, a fitting tribute to their father.

Ron Donovan, Phil Ross, Lois Gray

Arthur Leslie Neal

May 3, 1911 — January 6, 1991

A. Leslie Neal was appointed associate professor of biochemistry in the College of Agriculture in 1947. He continued in that position when the Division of Biological Sciences was established and was followed by a major expansion of the Section of Biochemistry, Molecular and Cell Biology. He retired as professor emeritus in July 1976. During his years as a member of the Cornell faculty many changes occurred, both administrative and scientific, following developments in biochemistry and the rise of molecular biology.

Professor Neal was born in Belmont, Wisconsin, on May 3, 1911. His schooling took place in a number of towns in Illinois, to which his father, a rural minister, was assigned. He received a B.S. degree in 1934 from Monmouth College in Illinois. His graduate work was initially in physical chemistry, and he obtained the M.S. degree from the University of Illinois in 1935. Following this, he spent five years first as a research chemist for the Continental Can Company in Chicago, and then as instructor in organic chemistry at Kansas State College (now Kansas State University) in Manhattan, Kansas. He entered the University of Wisconsin as a graduate student in biochemistry in 1940, and obtained a Ph.D degree in 1943, working with F.M. Strong on aspects of the chemistry and biochemistry of pantothenic acid. Four years as a research associate in the Agricultural Chemistry Department at Michigan State developed his interest in the interactions between plants, and the bacteria and other microbiota of soil.

On appointment to the faculty of Cornell in 1947, his dual teaching assignments were to develop courses appropriate for students in both the two-year and four-year programs of the College of Agriculture. These courses were intended for students with little background in chemistry, and covered basic aspects of chemistry as well as introductory principles of the rapidly developing field of biochemistry. Professor Neal continued to teach and develop the first of these courses until the two-year program was ended, and the second until the time of his retirement. The sum of his experience in teaching in the two-year program was put into a textbook: *Chemistry and Biochemistry: a Comprehensive Introduction*—which first appeared in 1971. Following his retirement, he planned to write a second textbook based on the course developed for the four-year students but unfortunately, ill-health prevented him from completing it.

In addition, he participated for a number of years in teaching a laboratory course developed by Dr. Louise Daniel. A textbook resulted from this collaboration in 1967: *Laboratory Experiments in Biochemistry*, by L.J. Daniel and A.L. Neal. His experience in teaching freshmen was also extended to developing courses for and instructing high

school students, and he taught summer session courses in introductory biochemistry both for college and for high school students for a number of years in the 1950s and 1960s. He was outstandingly successful in developing their interest, and in helping them to understand many complex aspects of the subject matter. These attributes were also evident in his role as an undergraduate adviser. Although his major focus was on teaching students at a relatively early stage in their college careers, he also taught a graduate course in plant biochemistry. Seven graduate students did their thesis research in his laboratory.

Dr. Neal's research interests covered a number of areas that reflected his strong background in chemistry and facility for collaborative research. At one time or another, he worked on methods for improving the yield and keeping qualities of fruits, on factors affecting the emergence of encysted nematodes, and on bacterial and fungal metabolism, particularly as affected by growth factor availability. His main interest during the period just preceding his retirement was in the possible value of hydrazide derivatives of amino acids and sugars as anti-cancer agents. His research interests led to the publication of about 30 scientific papers, and also to his visiting and working in a number of laboratories around the world during his sabbatical leaves. However, his major contribution to his department and his college undoubtedly lay in his dedication to teaching, particularly as it involved younger and academically less specialized students, who benefitted immensely from his understanding and gentle persistence in presenting a clear and relevant account of the basic principles of chemistry and biochemistry.

Dr. Neal was a fine experimentalist and technician. This skill carried over into a hobby that gave him much pleasure in his later years—he was an excellent photographer.

Dr. Neal is survived by his wife of 54 years, Arline Nelson Neal, of Ithaca; two sons, Arthur and David; and two daughters, Janet and Nancy.

J.M. Calvo, L.J. Daniel, J. Gibson

Therese Wood Nevin

June 16, 1899 — May 29, 1995

Therese Wood Nevin was born in Boston, Massachusetts on June 16, 1899. Her parents were Samuel and Elizabeth Wood. Her Canadian-born father and German-born mother, both American citizens, were associated with the Salvation Army; her father was a member of the Executive branch. She grew up with a closely knit family guided by parents whose professional careers focused on problems of human welfare.

Therese attended Russell Sage College for two years and completed her Bachelor's degree at Western Reserve University in 1923. She received her Master's degree from Columbia University in 1939.

Following graduation she worked as a hospital dietitian and later as a high school teacher. She began her career in Cooperative Extension as a Food and Nutrition specialist at the University of Maine in 1928, and she came to Cornell University in 1935 as an Instructor in the Foods and Nutrition Department to work with the 4-H Program in Cooperative Extension. In 1942, she transferred to the Adult Extension Program in Foods and Nutrition.

From the outset she was interested and thoroughly dedicated to the aims and ideals of Cooperative Extension. Specifically, she was interested in good nutrition for the entire family.

Therese, in her professional contacts with New York State families, had the special ability to empathize with their problems, which were compounded by the Great Depression as well as World War II. She recognized the need to help homemakers create well-balanced meals while curtailed by limited income. She also understood and practiced successful money management and was committed to working through problems with a pragmatic approach. Her goal was to find tasteful combinations of foods that would appeal to diverse New York families who had different cultural food preferences, nutritional needs, and limited resources.

An excellent teacher, Therese insisted on teaching the "why's" as well as the "how to's" to Extension leaders. She took advantage of training schools to include the nutritional values of the foods being prepared, to present the best way to retain the optimum amount of nutrients, and to teach the safe handling of food. Her high standards of food preparation set an excellent example for the homemakers with whom she worked.

Her years in Maine gave her a special interest and knowledge of fish cookery which she introduced to the rural homemakers in New York State through a series of lessons.

Therese was an expert in food preservation, an important and necessary skill for homemakers during the Depression and war years. She wrote several bulletins concerning the preservation of fish, meat, poultry, fruit, and vegetables. She directed the making of a color-sound movie on the canning of fruits and vegetables and gave many demonstrations and training schools for leaders throughout the states. Freezing foods was just developing during this period, and Therese included this new method after much experimenting and testing to discover the problems homemakers might encounter. She often conferred with professors in Animal Science, Poultry Science, and other professors in Food and Nutrition to enable her to present the latest research to her audiences.

On sabbatical leave in England in 1950, she worked for the *Farmers Weekly*, demonstrating the canning of meat and poultry to various groups including Women Institutes (similar to county extension groups in the U.S.). She also attended the triennial meeting at the Associated Country Women of the World. The goals of the ACWW were to cultivate international understanding and friendship; to create appreciation of the talents and achievements of the people in all countries; and to study their varied contributions to the culture, beauty, and wealth of one world.

Throughout her professional life and following retirement, she enjoyed travel, going to Brazil, Europe, India, and the Holy Land. She was a splendid ambassador for the college and university.

Therese retired from Cornell in 1964 as Professor Emerita and joined her sister in Ocean Grove, New Jersey, where she was active in the American Association of University Women (AAUW), the local Bible study groups, and the Historical Society.

In 1980 she married Dr. F. Reese Nevin, a long-time friend, and moved to Plattsburg, New York, where her husband was professor at the state college. To a happy late marriage, she shared her intellectual interests in reading, gardening, and traveling. Their joint interest in young people was expressed in various ways. She established a scholarship for students in the biological sciences at SUNY at Plattsburg in honor of her husband.

Therese Wood Nevin died at age 95 on May 29, 1995. Survivors include her husband, a stepson, her sister Laura, and several nieces and nephews. She will be remembered with admiration by her former colleagues and friends.

Mildred Dunn, Nell Mondy, Hazel Reed

Allan G. Newhall

July 20, 1894 — January 31, 1995

Allan G. Newhall was one of those comparatively few individuals who was blessed with over one hundred years of active and fruitful life. He was born on July 20, 1894, in Germantown, Pennsylvania, and died on January 31, 1995, in Ithaca, New York. Allan moved with his family at an early age to Minneapolis, Minnesota. He was educated there in primary and secondary schools, and went on to the University of Minnesota to complete a B.S. degree in 1918.

As so often happens in a young person's formative years, two outstanding scientists, both prominent in the agricultural field of Plant Pathology, had an impact upon the ultimate direction in which Allan's vocation would take him. The first was Professor E.C. Stakman, a world renowned Plant Pathologist at the University of Minnesota; the other was H.H. Whetzel, Chairman of the first Department of Plant Pathology in the United States. Professor Whetzel was looking for a prospective graduate student to fill a newly formed field fellowship position with vegetable diseases in upstate New York. Stakman strongly recommended Allan Newhall, then teaching Botany at Grinnell College in Iowa. That was the beginning of his association with Cornell University; Allan subsequently received a Ph.D. degree in Plant Pathology in 1925. He was appointed to a professorship at the Ohio State Agricultural Experiment Station in Wooster, Ohio, and in 1929 was asked to return to Cornell to work on muckland vegetable diseases. This began a long and rewarding career in extension and research in New York which did not end until his retirement in 1960.

On his first sabbatical leave in 1936, Professor Newhall spent six months at the University of California, Berkeley, working on storage rots of carrots, identifying causal organisms of disease, and perfecting control recommendations. In 1947, he went to Turrialba, Costa Rica, to conduct studies on cacao diseases for the Pan American Union and American chocolate interests in Central America. When the US/International Cooperative administration financed the Cornell-Los Banos project in the Philippines in 1954, Newhall was asked to teach and direct plant pathology research at Los Banos. He introduced and taught a course on plant diseases and helped to rejuvenate the Philippine government's coffee production through disease control and the introduction of rust-resistant coffee varieties.

In 1957, Professor Newhall was asked to investigate disease problems in banana production in Panama by the United Fruit Company. Later, after retirement, he returned to Costa Rica, and in 1967, he studied the black pod

rot disease of cacao. His experience with cacao diseases brought him international requests for presentation of illustrated papers, from Bahia, Brazil, in 1965, and in Ghana, Africa, in 1969.

Among Professor Newhall's contributions to the control of vegetable diseases were new findings in soil sterilization by means of heat, electricity and soil fumigation by chemicals and hot water or steam. He worked in an era of the use of chemicals in the control of plant diseases, but he emphasized the need for "pasteurization" rather than sterilization of soil in order to kill soil-borne pathogens while saving the beneficial microorganisms. Professor Newhall was the author of over 100 bulletins and technical articles on vegetable diseases, soil treatment, and nematode control.

Professor Newhall was active for many years in the Society of Plant Pathology and was made a Fellow of the American Association for the Advancement of Science. One of the last formal recognitions of his contributions to the Vegetable Industry was an award by the National Onion Growers Association, given to him at a Conference in Ithaca in December 1993. This award symbolized the satisfaction and respect of the growers and industry for a man who really had their interests at heart. A recent letter from a fellow colleague and friend of Allan's, Professor Arthur Rawlins of the Department of Entomology, who spent many hours on the road and in extension meetings with Allan, sums up his attitude: "After a meeting, Al would be talking with a knot of growers, oblivious of the time, lateness of the day, and the long road home. He would apologize for holding us up and say, 'I like to know what problems the growers have and what we can do for them. I learn a lot and I hope they do too.'" Friendliness and an infectious sense of humor, often at the expense of himself, endeared Allan to all whom he met, all over the world.

In retirement, which lasted over 30 years, Newhall's activity was not abated. He continued to travel, filling requests for presentation of scientific papers. He fulfilled personal desires, finding more time to breed for blossom color in the Impatiens plants in his backyard, and joined the American Chestnut Society, planting seedling clones of the American chestnut tree in an effort to find a source of resistance to chestnut blight. Allan was always active in community affairs. He was deacon and member of the First Presbyterian Church. He organized drivers for the local organization FISH which provides food for the less fortunate. At the request of a longtime friend, the Mayor of Ithaca signed a plaque proclaiming July 20, 1994, as Allan Newhall Day and it was presented to him at his 100th birthday.

Allan G. Newhall is survived by a daughter, Dr. Mary Alice Mathews from his first marriage to Hazel Newhall, who died in 1970. He had a granddaughter, Betsy Mathews and two great grandsons, David and Erick, all of

Newton Center, Massachusetts. In April 1975, Allan married Ruth Bartsch. Ruth has a daughter, Martha Jane Stage, married to Dr. Everett Stage. Through this union, Allan acquired a granddaughter, Nancy, and two great grandchildren, Katie and Mac; and a grandson, Robert, and three great grandsons, Patrick, Tracy, and Matthew.

H. David Thurston, Thomas A. Zitter, Carl W. Boothroyd

Paul M. O’Leary

November 29, 1901 — December 25, 1997

Paul Martin O’Leary died on Christmas Day, 1997, at the age of 96.

A native of Lawrenceville, Kansas, he earned his Bachelor’s degree in 1922 from the University of Kansas, where his father was a professor of English for 40 years. Paul was a classmate of former Cornell President, Deane W. Malott, beginning a friendship that spanned more than 70 years.

Along with election to Phi Beta Kappa, he was a star on the university track team – 440-yard champion of the Missouri Valley Conference, setting the university record of 50 seconds. The latter information would not have been surprising even to someone who saw him for the first time at 96, taking his prescribed regular “walk” along the corridors of the Kendal at Ithaca retirement community, performing calisthenics by raising his walker rhythmically over his head; or was a witness to his devoted playing of golf, until his very late years, beginning each year as soon as the snows had melted.

After earning an M.A. degree from Harvard, he came to Cornell in 1924 as an Instructor and graduate student – and, naturally, as an assistant to the university track coach, Jack Moakley. Upon receiving his Ph.D. degree from Cornell in 1929, he became an Assistant Professor, was promoted to full Professor in 1936, Chairman of the Department of Economics in 1944-49 and the Ernest I. White Chair in 1959.

Professor O’Leary’s national prominence resulted from four tours of public service. He was Advisor to the Consumer Advisory Board of the National Recovery Administration, early in the Roosevelt administration. In 1939, he was Chief Economic Analyst with the Commerce Department. Then, beginning in 1941, he was with the predecessor agency of the Office of Price Administration and OPA itself, in which he held positions, successively, as Price Executive for Textiles, Leather and Apparel, Assistant Director of its Price Division, and finally, Deputy Administrator in charge of the wartime rationing programs, an appointment memorialized in an editorial in the *Ithaca Journal*:

Remember the plainspoken teacher of economics? The man a great many of us who are still here had for Eco one and two?

Well, that’s the man.

And finally in 1949, he served as a member of the Dodge Commission, appointed by President Truman, to advise General Douglas MacArthur on the restructuring of the Japanese monetary and banking systems. The Commission

played an important role in bringing about monetary and financial stabilization—substituting a fixed exchange rate for the previous hodgepodge of rates, liberalizing financial markets and stopping inflation—which laid the basis for the startling resurgence of the Japanese economy in the ensuing decades.

He left the OPA, along with Professor J.K. Galbraith, evidently because of disagreements with its new administrator, Prentiss M. Brown, who reportedly wanted to appoint “administrators more likely to be popular and sympathetic with the public and business” (according to a contemporaneous account in the *Ithaca Journal*), and he was critical of what he regarded as the overly hasty abandonment of price controls immediately after the war, which was indeed followed by an outburst of inflation and the recession of 1948-49.

After his service with the OPA and a brief interim stint with Leon Henderson’s Research Institute of America, he returned to his years of major service to Cornell, first in a five-year term as Chairman of the Department of Economics (1944-49). He then served as chairman of the university-wide committee, constituted by President Day, which recommended the establishment of what became the Graduate School of Business and Public Administration (now the Johnson Graduate School of Management). The logic that led to joining business and public administration, as he explained it, was that:

“Relations between government and business are now so close as to require little comment,”

and

“they will continue to be close in years to come. My own experience as an economist and administrator in business and in government has convinced me that both business and government have a desperate need for men and women trained in economics, business operations and practices, and in the processes of government,”

He was the natural choice as the School’s first Dean, in which position he served from 1946-52. During that period, he helped recruit the distinguished faculty that laid the foundation for B&PA’s future achievements. Two of the first appointments (1946) were John G.B. Hutchins (business history) and William H. Shannon (accounting). They were joined in 1949 by Melvin de Chazeau (economics) and Arthur E. Nilsson (finance), all of whom finished their distinguished careers at Cornell and were widely respected throughout the university. They were joined in 1951 by Edward H. Litchfield, (administration) who later served as the School’s Dean, before going on to the Presidency of the University of Pittsburgh. The total faculty consisted of nine professors in 1952, at which point President Malott appointed Paul, Dean of the College of Arts and Sciences. He served from 1952-57, the only person at Cornell to have served as dean of two major colleges in this way. In 1957, he returned to full time teaching in the Department of Economics until his retirement in 1967.

A specialist in American financial history and corporate finance, Paul published several books and articles in that field, the most prominent of which were his *Corporate Enterprise in Modern Economic Life*, in 1933; and *An Introduction to Money, Banking and Corporations*, in collaboration with John H. Patterson, in 1937. Articles included: "Coinage Legislation of 1834," in the *Journal of Political Economy*, in 1937; "The Role of Banking Groups in Corporate Reorganizations," in the *American Economic Review*, in 1939; "Wartime Rationing and Governmental Organization," in the *American Political Science Review*, in 1945; and a note, "The Scene of the Crime of 1873 Revisited," in the *Journal of Political Economy*, in 1960.

He also served as member of the Board of Directors of the prestigious National Bureau of Economic Research, then housed at Columbia University.

In consideration of those academic interests, as well as his broad experience in public life, he was invited to membership on the Board of Directors of the Tompkins County Trust Company, a position he held from 1949 until his retirement, wherefore he remained as advisor to the Board. He was a familiar, respected figure in the Ithaca community. His many friends on the hill and downtown will remember also with great affection his wife of 57 years, Hattie, daughter of Colonel Frank Barton (for many years head of the ROTC program at Cornell), who died in 1986.

Harold Bierman, Seymour Smidt, Alfred E. Kahn

Morris Edward Opler

May 16, 1907 — May 13, 1996

Cornell University Professor Emeritus Morris Edward Opler, died Monday, May 13, 1996, in Norman, Oklahoma.

He was born May 16, 1907, in Buffalo, New York. His academic career began at the University of Buffalo, where he was graduated with a Bachelor's degree in Sociology in 1929 and an M.A. degree in Anthropology in 1930. He received his Doctorate from the University of Chicago in 1933.

He was a Fellow of the Social Science Research Council in 1932-33 and again in 1946 and 1947. He served as research assistant, then research associate, of the Department of Anthropology at the University of Chicago from 1933-35. From 1935-36, he was a Fellow for the General Education Board. From 1936-37, he was an assistant anthropologist with the Bureau of Indian Affairs.

He began his teaching career in 1937-38 as a visiting lecturer in the Department of Sociology at Reed College in Oregon. He served as Assistant Professor of Anthropology at Claremont College in California from 1938-42. During that time, he also was a summer lecturer for the Department of Sociology and Anthropology at the University of Wisconsin. He was named a Fellow of the John Simon Guggenheim Memorial Foundation from 1942-43.

From 1943-44, during World War II, Dr. Opler served as a social science analyst with the War Relocation Authority in Manzanar, California, site of one of the Japanese-American interment camps. In 1944, he moved to Washington, D.C., to become a social-science analyst with the Office of War Information. In 1945, he was appointed as deputy chief and then as chief of the Foreign Morale Analysis division with the Office of War Information (later under the Department of State), and served until 1946. In the fall of 1945, he was visiting professor at Howard University in Washington, D.C., and in 1946-48, was an assistant professor at Harvard University.

Dr. Opler became Professor of Anthropology and Asian Studies at Cornell University in 1948, and taught at Cornell until he retired in 1969, and was named Professor Emeritus.

A renowned author, researcher, and teacher, he joined the faculty of the University of Oklahoma in 1969, where he was Director of the National Endowment for the Humanities Postdoctoral Fellow Program in American Indian Studies from 1971-72.

He held membership in many professional and honorary societies including Sigma Xi, Phi Beta Kappa, Alpha Kappa Delta, and Phi Delta Kappa. He was a Fellow of the American Anthropological Association, serving on its executive board from 1949-52, as president-elect from 1961-62, and as president for the term 1962-63. He was a Fellow of the Society for Applied Anthropology and the American Folklore Society.

His wife, Lucille, served as a dedicated partner in his work. Although the Oplers did not have any children of their own, they “parented” numerous students through their educational pursuits.

He is survived by his wife, Lucille, of Norman, Oklahoma.

Office of the Dean of the University Faculty

Charles E. Ostrander

October 30, 1916 — April 15, 1994

Charlie Ostrander will long be remembered by the poultry industry of New York State and of the United States. He was an outstanding poultry extension person and excelled in the field of poultry management, bird behavior, poultry house ventilation, poultry lighting and poultry wastes. If a poultry producer was in trouble, Charlie was quickly on the scene to find a solution to the problem.

Professor Ostrander was born October 30, 1916 in Jamestown, New York. He graduated from Ellington High School in 1934 where he earned letters in three sports. All during high school and for three years while he worked following high school he dreamed of studying agriculture at Cornell University. His dream came true and he entered Cornell the fall term of 1937. Charlie graduated from Cornell's College of Agriculture in 1941 where he earned a B.S. degree with majors in rural education and poultry science. During college he was a member of the Poultry Science Club, the Round-Up Club, F.F.A., and Ho-Nun-De-Kah, the senior agricultural honorary society.

Following graduation, he taught vocational agriculture for five years at Portville and Clymer in New York and in Washington, New Jersey. Ostrander then joined the New York State Agricultural Extension Service where he served as Assistant County Agent in Allegheny County and later as Associate County Agent in Onondaga County. While in Onondaga County, he was responsible for both the poultry and fruit programs where much of his time was devoted to improving the poultry industry and developing marketing programs. He was responsible for an egg marketing program in Central New York that operated successfully for many years.

In 1951, Ostrander was invited to join the Cornell Poultry Department as Extension Poultryman. This was the first time an extension field person had been employed by the Poultry Department. After serving in this capacity for two years, he accepted a managerial sales position with a leading hatchery in New York State with responsibility for the breeding program. Charles Ostrander served in this capacity for four years and returned to Cornell as an Extension Poultry Specialist and Project Leader in Poultry Extension. His primary responsibility was in production, management and waste management. He was one of the first to work in the waste management field and saw it grow from one of little importance to one of major concern and effort. He was a member of the original planning committee for the first National Symposium on Poultry Waste Management in 1963. He participated in every national conference and many regional conferences.

Professor Ostrander received the M.S. degree in Poultry Management from Michigan State University in 1960 with major emphasis on controlled lighting for poultry. He spent considerable effort researching and developing lighting programs for poultry. He also researched and promoted the use of less intensive light for laying hens. This has aided in preventing cannibalism, resulting in less hysteria in flocks and has saved the industry many dollars. He conducted research on density requirements in cages and promoted precision debeaking, which has also been helpful to the industry. He realized the importance of environmental control in poultry housing with proper insulation and ventilation and was a strong advocate for this for many years.

Charles Ostrander was promoted to Associate Professor in 1962 and to Professor in 1973. He served on the Governor's Commission for the Preservation of Agricultural Land in New York State, was a member of the Council of Agricultural Advisors to the Department of Environmental Conservation, chairman of the Interdepartmental Poultry Industry Committee and served as a member of the College Committee on Environmental Studies and the College Energy Committee. He was also a consultant to the Canadian Department of Agriculture on poultry matters. He served on many national and statewide poultry committees and organizations. He was a member of the National Poultry Science Association and was a member of the World's Poultry Science Association.

In 1962, Ostrander was invited to spend a sabbatical leave at the University of California studying their poultry waste disposal problem. Since 1959, he had devoted a considerable amount of his time studying and working with this problem both in research and extension activities. Ostrander was invited to spend a sabbatical leave at the University of Reading, Reading, England in 1970 to work with them on waste management problems. He also worked with the Ministry of Agriculture on this problem while in England. He also looked at the waste problems in Scotland and the Netherlands. He was again invited to spend a sabbatical leave in England in 1980 at the Institute of Agricultural Engineering at Silsoe working with problems in ventilation and the formation and elimination of ammonia problems in poultry houses. In 1980, Professor Ostrander was the recipient of the Pfizer National Poultry Extension Award from the Poultry Science Association in recognition of his outstanding work in Poultry Extension.

Following his retirement in 1981, Charlie devoted much of his time volunteering for various organizations including the Senior Citizens Council of Tompkins County and drove regularly for Gadabout. He liked helping others and if someone was in need, Charlie was always there; he was a faithful and loyal friend.

Professor Charles Ostrander is survived by his wife, Gracia; two daughters, Linda Schoffel and Marcia Humphrey; and four granddaughters. Professor Charles Ostrander is and will be sorely missed.

R.C. Baker, A. vanTienhoven, R.J. Young

Charles E. Palm

June 24, 1911 — February 25, 1996

Cornell University's first Liberty Hyde Bailey Professor of Agriculture and Life Sciences, Charles E. Palm, died at the Cayuga Medical Center at the age of 84. Under Palm's direction, the College of Agriculture and Life Sciences grew in strength and accomplishment to become a leader in research and teaching among land grant universities. Palm was Dean from 1959-72.

Three years after being granted the Ph.D. degree (Cornell, '35) in Entomology, Charley Palm became Chairman of his department, a position he held for 20 years. At 27, he was the youngest professor to serve as a Chair in Entomology. Under his direction, the Department became a leader in the innovation of pest management techniques. In 1957, he became Director of Research in the College of Agriculture, and two years later he was appointed Dean. He was able to convince the scientific community and the New York State legislature in particular that agriculture, the State's largest industry, deserved broad support. Palm's wisdom became most evident as agriculture moved into the era of integrated pest management (IPM). In recognition of the basic studies needed to support the college, Palm promoted a change in name to the College of Agriculture and Life Sciences. The Department of Entomology was well positioned to take a significant role on the national level in the development of integrated pest management (IPM).

Palm was born in Austin, Texas and learned the essentials of farming as he grew up on a fruit and vegetable farm in Arkansas. In 1931, he earned the Bachelor of Science degree from the University of Arkansas and immediately entered graduate school at Cornell in Entomology and Plant Pathology. He was appointed Instructor in the department in 1934, a year before being granted his doctorate. He established programs in insecticide toxicology, insect physiology, and insect biochemistry. Again recognizing the growing importance of basic biological sciences, he was instrumental in the creation of the Division of Biological Sciences, an organization that spans the Colleges of Agriculture and Life Sciences and Arts and Sciences. With the strong commitment to research, the Division and the Department of Entomology developed a vigorous program in graduate training.

Charley was well known and respected among the farmers of the State as a practical entomologist. He earned the reputation with his development of control methods for various insects, especially for management of the alfalfa snout beetle. The temporary laboratory at which he conducted field studies was located on Myers Road

near Minetto, New York. He supervised a small group of graduate students at the location and thus the laboratory became an important resource for the local farmers in the solution of problems with pest insects.

Palm was Chairman of Entomology and then Dean of the College at a time of rapid change in environmental management and in agriculture. It was during this period that the scientific community recognized that no combination of chemicals would solve all agriculture's problems and indeed there were many hazards to be avoided. He exhibited great skill in transmitting the information to resolve these conflicts to those who supplied funding for the College. The agricultural industry needed support from the governor and members of the New York State Legislature. Palm served as the interpreter to gain that support. He was a member of the National Academy of Sciences and chaired that organization's National Research Council Committee on Plant and Animal Pests, producing a six-volume treatise establishing present-day pest management practices.

Not a colorful speaker, Palm had at his command, the reasoning and statistics to make strong arguments and he generally came away from formal presentations with the support of his listeners in hand. He moved the college from the old tradition of teaching farm practice to one of a more scientific approach to problems.

Palm was instrumental in bringing about the relocation of the Boyce Thompson Institute for Plant Research from an urban location in Westchester County to the Ithaca campus. This strong research organization was yet another boost to the international reputation of Cornell. Charlie retired officially in 1976 but he continued to serve as liaison between the Boyce Thompson Institute and the various cooperating scientists on the University Faculty.

Charles E. Palm is survived by his wife, Geraldine Gibson Palm; and a son, Alan, of Washington, D.C.

W. Keith Kennedy, Arthur A. Muka, Edgar M. Raffensperger

Lyman G. Parratt

May 17, 1908 — June 29, 1995

After a long illness, Cornell Professor of Physics, Emeritus, Lyman G. Parratt, died on June 29, 1995 at his home in Redmond, Oregon. He was born in Salt Lake City, where he was raised and received his public education and formative discipline. In 1929, he earned an A.B. degree from the University of Utah with a major in physics, holding an assistantship in physics in the year following. He went from there to graduate study in physics at the University of Chicago, where he was again an assistant in the Department. After but three years, he was awarded a Ph.D. degree in 1932 for his work in X-rays, a field in which during his lifetime he became a recognized authority both in concept and in experiment. He carried on in postdoctoral research at Chicago for the year following.

In 1933, he came to Cornell University on a National Research Council Fellowship in F.K. Richtmyer's group, thus beginning a sixty-year association with the Physics Department. In a little over two years, he was appointed Instructor, advancing to Associate Professor by 1942, his research and stature in the X-ray field steadily growing. But with increasing threat of war, the Navy requested in 1941 that he take leave for work at the Naval Ordnance Laboratory in Washington, D.C. for an important effort on submarine detection and the de-magnetization of surface ships. The University granted this leave and he spent the next two years at NOL as Physicist and Head of the Engineering Division. He was called from that task to Los Alamos early in the Manhattan project and spent the rest of the war years as Group Leader in this effort. He returned to Cornell in 1946 and took part with four others in the Physics Department's reorganization, which would put it at the forefront of the nation's physics departments. The reorganization recognized the preeminence of nuclear physics at that time and of the coming era of high energy physics. As a result, the Laboratory of Nuclear Studies was established as a major component of the Department, and some ten years later, in 1959, Lyman Parratt was chosen as the Department Chair at a time of yet a second reorganization. This resulted in the establishment of the Laboratory of Atomic and Solid State Physics. Both reorganizations saw administrative difficulties, the second more so than the first. Parratt rode through his first term and established some ground rules to be followed if he was to serve a second term. The Department agreed, almost eagerly, and he thus served another five years much more agreeably. In his role as Department Chair he was ably assisted over many years by his wife, Rhea.

His research greatly lessened with his assumption of the chairship; nevertheless, over the years, he and his students published some 80 papers related to X-ray physics (not including many war reports at NOL and at Los Alamos).

His abiding interests related to X-rays—spectrographic instrumentation, detectors, production, and utilization. This high resolution work led him to consider the effects solid state binding had on x-ray spectra, both in emission and absorption, which involved relaxation of outer electrons around an inner electron vacancy. He also studied thin films and solid surfaces by means of total x-ray reflection. At the time, his instrumentation and measurements were without peer. A 1990 review article on x-ray physics recognized his contributions this way—“the concepts he introduced have played central roles in x-ray absorption and emission anomalies so actively investigated ever since”. Lyman’s work elucidated the states of multiply excited atoms and greatly extended our understanding of atomic structure. With his student, C. Hempstead, he also studied anomalous dispersion in x-ray scattering and absorption.

In the latter part of his career, he turned his attention to the study of electronic band structure of solids using x-ray spectroscopy. A short paper he wrote in 1958 accurately foretold of the possible uses of synchrotron radiation, and the present Cornell High Energy Synchrotron Source is remarkable testimony to his insight. He authored an excellent text on experimental error which is still used in teaching the subtleties of probability and statistical error in experimental physics. And his chapter on x-rays in Richtmyer and Kennard’s early book, *Introduction to Modern Physics*, remains a classic tutorial on the basic physics of x-rays. He was a great educator as well as an outstanding experimental physicist. Even after his retirement in 1973, he maintained his interest in the field and was frequently called on for advice and expertise.

In his earlier days, Lyman Parratt was something of an outdoors man and athlete. Favorite tales recall him sharing his sleeping bag with a rattlesnake, and of going off in his Chicago days on a canoe trip into the far wilderness of the North Woods only to have the aluminum canoe break in half. He was an avid—almost compulsive— tennis player, competing even well into his final illness. In the first year here at Cornell, he with another Postdoctoral Fellow, cleaned out the Rockefeller Hall attic of accumulated pigeon guano and built there two handball courts, back to back, which were widely used by Department personnel, both staff and students. That building improvement is long gone. He was a fighter, whether it be for his ideas, in competitive sports, or his ultimate illnesses; it was not until the last week or so before his death that at age 87 he finally took to his bed.

He taught in and for many years led Cornell’s long-lived and well known Advanced Laboratory course in physics. It was under his supervision that it undertook a continuing modernization which pervades the course even today. He had broad interests, and abilities which went well beyond physics. Parratt was vitally concerned with the teaching of physics and the concerns of students, initiating a number of innovations at Cornell. He always had

the interests of students in mind and he involved them in Department affairs. Following the “student revolution” of the sixties, he initiated graduate student participation at the regular Department Monday lunch, where they have for long taken part in all but the most confidential of Department affairs. He served actively in the American Association of Physics Teachers, and he was a Fellow of the American Physical Society and member of many other professional organizations.

He is survived by his wife, Rhea; daughters, Portia Kowalowski of Redmond and Carolyn Schumacker of Salt Lake City; and three grandchildren.

Boris Batterman, Paul Hartman, Neil Ashcroft

Kermit Carlyle Parsons

July 15, 1927 — December 9, 1999

Kermit Carlyle Parsons, 72, died peacefully in his sleep at home on December 9, 1999. A few days earlier, he became Professor Emeritus of City and Regional Planning at Cornell University where he taught for more than forty years. He received a Bachelor of Architecture degree from Miami University of Ohio in 1951, and a Master of Regional Planning degree from Cornell in 1953. For the next four years, he worked for the Cleveland City Planning Commission, rising to become head of the Community Planning Section.

Kermit (K.C.) returned to Cornell in 1957 as Assistant Professor, becoming Associate Professor three years later. In 1965, he was appointed Chairman of the Department of City and Regional Planning and promoted to Professor. He also served as Visiting Professor in the graduate program in planning at the University of Puerto Rico and as a Visiting Lecturer at the School of Architecture, University of the Philippines.

In 1971, he became Dean of the College of Architecture, Art, and Planning, a position he held for nine years. It was not easy to be dean of a chronically under-funded college occupying crowded, obsolete buildings and where the requests from four independent-minded departments always far exceeded available resources. K.C. not only emerged intact and unbowed but with several significant achievements.

Dean Parsons began the first concerted college effort to obtain significant outside financial support. He succeeded in attracting the interest of Olive Tjaden, an architectural alumna, and it was her bequest that made possible the complete renovation of Franklin Hall with modern facilities for the Department of Art.

He was equally successful in his meetings with Aline Stein, the widow of the pioneering architect-planner, Clarence Stein. At her death some years later, she left the college a generous fund to support the Stein Institute for Urban and Landscape Studies. This provides a continuing source of research and travel grants, conference support, and a publications program in city planning, and urban and landscape design.

In 1979, he was instrumental in establishing and supporting the Architecture Program in Washington. This made it possible for students to spend a semester participating in design studios and related courses focused on projects in the national capital. The university's later Cornell-in-Washington Program drew on this experience as did the college's present Rome Program.

Under his leadership, the two departments of planning that had resulted from a division of the former single department amicably united to again become the Department of City and Regional Planning. It was to that growing department that he returned to teach, a position that deans with long tenure sometimes find difficult. K.C.'s transition to full-time studio and classroom activities could not have been more successful, as his colleagues and students were quick to note and appreciate.

From 1985-88, he directed the university's Cornell-in-Washington Program. This provided further opportunities to pursue his studies of urban planning projects in Washington and Baltimore, work begun earlier with grants from the Skidmore, Owings and Merrill Foundation and as a Fellow of the Woodrow Wilson International Center for Scholars where he examined urban policy making in the executive branch of the federal government. Returning to his department, he taught until his retirement in 1999.

K.C. published over 50 journal articles, consulting and research reports, monographs, and books on university campus planning, urban renewal, downtown planning, national urban policy and the history of urban planning. Recognizing the merit of his research and writing, several organizations supported his efforts with grants. In addition to those mentioned above, they included the Ford Foundation, National Science Foundation, National Endowment for the Arts, the Graham Foundation, and the Aline MacMahon Stein Fund.

He was a long-time member of the Society of Architectural Historians, American Planning Association, American Institute of Certified Planners, Urban Land Institute, National Association of Housing and Redevelopment Officials, and the American Institute of Architects, among others.

His book, *The Cornell Campus: A History of its Planning and Development* (1968), became a model for those preparing similar studies of other colleges and universities. He was instrumental in founding the Society for College and University Planning and was its president from 1966-68. A more recent book was *The Writings of Clarence S. Stein: Architect of the Planned Community*, a volume of selected and profusely annotated letters and other writings.

More than a dozen of his articles and conference papers were on aspects of Stein's work and were to be chapters in a book on this influential architect-planner, a work that his colleagues hope to see through to publication. Another book may also appear: the edited papers presented in September 1998 at the international conference K.C. organized at Cornell to mark the centennial of the publication of Ebenezer Howard's garden city concept.

An important part of his career was professional practice. He was Planning Consultant for the City of Cleveland and several architectural firms in that city, Wayne State University, the New York State University Construction Fund, the Mid-Hudson Patterns for Progress, the Chemung Valley Study of Higher Education, and as an expert witness in cases involving planning issues. He was also active in efforts to preserve at Cornell the buildings of earlier eras.

K.C. served as Consultant to the Philippine Ministry of Education on a campus plan of the Miagao campus of the University of the Philippines and in Puerto Rico on the Rio Peidras campus planning program for the University of Puerto Rico. For the Department of State, he traveled to Nigeria to advise on the projected University of Ife, and for the World Bank, he provided advice on the design of agricultural markets in Mexico and in Seoul, Korea.

An avid reader from early childhood, K.C. became an equally avid book collector. His extensive library on architecture and planning included all of the standard works and a number of rarities. He was equally successful in assembling a very large collection of books, maps, and prints on London, a city he knew well and loved. Somewhat smaller but highly selective groups of small press volumes and books by and about Ruskin were among the other treasures that graced the shelves of the library wing he had recently added to his house.

It was there that he spent his last weeks, visiting with colleagues, and students who came to say farewell. His life touched them all, and they will never forget the confidence and poise that characterized his life and the courage and composure with which he faced his death.

Stuart S. Stein, Roger T. Trancik, John W. Reps

Robert S. Pasley

March 16, 1912 — June 21, 1995

Robert S. Pasley, the Frank B. Ingersoll Professor of Law Emeritus, died on June 21, 1995 at his retirement home in Sarasota, Florida, at the age of 83. With his death, the Cornell Law School community lost a beloved and esteemed member.

Bob was born in New York City on March 16, 1912. He attended Princeton University, earning his A.B. degree there in 1933. While at Princeton he was Circulation Manager of the *Daily Princetonian* and was elected to Phi Beta Kappa.

Bob pursued his legal education at Cornell and was awarded the LL.B. degree in 1936. He was Business Manager as well as a member of the Board of Editors of the *Cornell Law Quarterly* and was President of the Law Student Association. He ranked first in his class and was elected to Phi Kappa Phi and to the order of the Coif.

From 1936-42, Bob was associated with the New York City firm of Cadwalader, Wickersham and Taft and was concerned primarily with corporate law problems. During the latter part of 1942 he was with the New York Office of the Alien Property Custodian, as Chief of the Real and Personal Property Section of the Division of Investigation and Research.

With the coming of World War II, Bob began a period of military service that would last until 1946. After joining the Army as a private, he was selected to attend the Judge Advocate General's Officer Candidate School and was commissioned in December 1943. Assigned to the European Theater of Operations, he handled mainly the review of court-martial cases and other military justice problems. Following separation from the Army, Bob held a commission as Colonel in the Judge Advocate General's Corps Reserve and served as a member of the Board of Visitors of the Judge Advocate General's School in Charlottesville, Virginia.

Bob's military service was followed by eight years as a government lawyer with important responsibilities in the Office of General Counsel of the United States Navy Department. These included his successive appointments as Counsel for the Office of Naval Research in 1947, as assistant general counsel of the Navy Department in 1949, and as acting general counsel in 1953.

In 1948 Bob served as a special consultant to the Morgan Committee which was appointed by the Secretary of Defense to draft the Uniform Code of Military Justice. During 1952-54, as a Lecturer at Catholic University of America Law School, he taught the course in corporation law.

In September 1954, Bob joined the faculty of the Cornell Law School as Associate Professor of Law. He was also made Director of Admissions and administered the admissions program for three years. He served as the School's representative on the Educational Testing Service's Law School Admission Test Policy Committee as well as on the LSAT Test Development Committee. He was promoted to Professor of Law in 1957 and was named to the Frank B. Ingersoll chair in 1974. He retired in 1976.

Bob taught an impressive array of courses during his twenty-two years at Cornell. These included Government Contracts, Equity, Trusts & Estates, Legal History, and Remedies. A pioneering course on Computers and the Law also deserves special mention.

The Cornell Law Class of 1968 gave Bob a silver bowl which was inscribed with a quotation from Chaucer's *Canterbury Tales*: "SOUNNIGE IN MORAL VERTU WAS HIS SPECHE AND GLADLY WOLDE HE LERNE, AND GLADLY TECHE".

Bob was not only an excellent teacher but also an outstanding scholar who wrote extensively on a wide variety of subjects. His practical experience as a government lawyer made his articles on government contracts particularly insightful and his broad personal experience in the military enabled him to write on the subject of court-martial and military justice with considerable authority. In a more popular vein, he also published several articles on Sherlock Holmes in the *Baker Street Journal*.

Bob's Cornell years provided him with a number of opportunities to teach and do research elsewhere through summer school and sabbatical leave teaching appointments. These included the University of Wisconsin Law School, Stanford Law School, Catholic University of America Law School, Case Western Reserve Law School and Queen Mary College Faculty of Law, University of London.

Among Bob's professional memberships were the American Bar Association, Association of the Bar of the City of New York, Tompkins County Bar Association, American Society for Legal History, and American Law Institute. He performed invaluable public service as a consultant to the New York State Law Revision Commission as well as to the New York Joint Legislative Committee to Study Revision of Corporation Laws.

Bob's active involvement in Cornell affairs was not limited to the Law School but extended to matters of University-wide concern. In 1969-70 he chaired a committee which reviewed the organization and procedures of the University Faculty and recommended the establishment of a Faculty Council of Representatives to serve as the Faculty's principal voice in the governance of Cornell. From 1971-74, Bob was the Law School Representative on

this Council. He was a consultant on legal and business matters for the Arecibo Observatory Upgrading Project, a Cornell project sponsored by the National Science Foundation. During 1962-66, he was on the Board of Traffic Control and in 1963-67, was a member of the Committee on Student Conduct, serving as its chairman in 1965-66. Bob also served a term as President of the Statler Club.

While a resident of Ithaca, Bob gave generously of his time and talents to wide-ranging civic and community causes. serving as a member of the City of Ithaca Board of Zoning Appeals as well as the Tompkins County Human Rights Commission. He served as a Trustee of the Cornell Library Association (Ithaca Public Library) and was a founding member and first President of the Ithaca-Cayuga Rotary Club.

In his April 22, 1974 recommendation of Bob for appointment as the first Frank B. Ingersoll Professor of Law, Dean Roger Cramton paid a fitting tribute to his faculty colleague and friend. Dean Cramton said, in part:

Professor Pasley's service at Cornell has demonstrated a rare combination of abilities. He is a highly effective, stimulating and kindly classroom teacher, and at the same time a careful, capable and productive legal scholar. He has a highly cultivated mind and has won the universal affection and esteem of both his colleagues and his students. He has contributed his time unstintingly to university activities, bringing tactful good judgment to issues of community concern...

A man of culture, Professor Pasley has high moral principles, is straightforward and effective in his relationships with others. Well read, a good conversationalist, tolerant of the views of others, warm and congenial manner, he contributes much to any group of which he is a part. It is not surprising that he is highly respected by his colleagues.

In a note to Dean Russell Osgood shortly after Bob's death, his wife Mary wrote: "Bob's heart was left in the Cornell Law School. His 22 years of dedicated teaching were the most fulfilling part of his life."

Eight months after Bob's death, his wife, Mary Pasley, died on February 27, 1996 in Sarasota, Florida. He is survived by his daughters, Nancy Pasley of Deerfield Beach, Florida, and Mary Pasley of New York City; his son and daughter-in-law, Robert S. Pasley, Jr. and Gay L. Pasley, and two granddaughters, Virginia and Heather, of Alexandria, Virginia.

W. David Curtiss, Gray Thoron, Russell K. Osgood

Donald R. M. Paterson

December 11, 1933 — May 7, 1993

University Organist Donald R.M. Paterson died May 7, 1993, at his home in New Hampton, New Hampshire. Professor Paterson joined the Music faculty as University Organist in 1964, and in 1966 he became Sage Chapel Choirmaster, posts he held until his retirement in January, 1993. In addition to his responsibilities as organist and choirmaster, Don Paterson was for a number of years instructor of the rigorous course which was the foundation for advanced work in the department, Elementary Theory. While his formal manner demanded respect and high standards from his students in the classroom and in the choir, his subtle wit earned their loyalty and affection, expressed in the affectionate acronym (“DRuMP”) by which the choir members referred to him. In October, 1971, the Committee on Academic Revision, a student panel funded by the College of Arts and Sciences, named him one of the College’s best teachers (along with Urie Bronfenbrenner, Walter LaFeber, Will Provine, Peter Stein, and others).

Don Paterson was born December 11, 1933, in New York City. His early music training led to his first position as church organist in Tuckahoe, New York at the age of twelve! He graduated from Williams College, *cum laude*, in 1955. While an undergraduate he served as organist and choirmaster in Stockbridge, Massachusetts, and was a member of the Williams Chapel Choir and Glee Club. He then began graduate study at the University of Michigan, serving as teaching assistant in keyboard harmony, and earning his M. Mus. degree in 1957. While in Ann Arbor, he was also organist and choirmaster at the First Unitarian Church. Don then served sixteen months in the Army, following which he spent the spring term, 1959, as acting choirmaster at Culver Military Academy, and two years as instructor in music at Stephens College (Missouri). From 1962 until 1964 he returned to Culver as choirmaster, and in 1964, he joined the Cornell Music faculty.

A chronological listing of Don’s organ and harpsichord teachers from 1946 until 1961 includes Doris Voester, Everett Tutchings, Robert Owen, Robert Barrow, Robert Noehren, Gustav Leonhardt and Nadia Boulanger. An accomplished organ recitalist, Don Paterson performed in both the United States and Europe. His 1981 recital tour of England, Scandinavia, and the Low Countries was particularly successful. He was noted particularly for his meticulous preparation of programs that were chosen to show the potential of historic pipe organs. His last recital was at the National Convention of the Organ Historical Society in August of 1992, where he was described as “a

mature performer who knows how to communicate music; the playing was elegant, stylish, and vigorous—the type of [playing] that we have come to expect from this artist.”

Don was an eminent organ historian. A founding member of the Organ Historical Society, he served as its president from 1961 to 1965, and was recipient of the Society’s Distinguished Service Award in 1980. He was involved in the effort to preserve many historic organs, especially in the northeast.

In 1979, Don Paterson was co-chairman of the First International Romantic Organ Music Symposium which he hosted at Cornell and in 1990 he arranged a festival of six concerts for the Fiftieth Anniversary of the Sage Chapel Organ, and published *An Account of the Organs in Sage Chapel* to celebrate the occasion.

Don represented the Music faculty on the Sage Chapel Advisory Council and the Department Concert Committee, and he served as director of Undergraduate Studies for five years.

For a quarter of a century Don provided leadership for music in Sage Chapel through organ and choral music for Sunday services, broadcasts, and especially, the Sage Chapel Christmas Program, which he made one of the best-loved, most faithfully attended events of the Cornell year, and which remains a memorial to his devotion to music in the life of Sage Chapel and the University.

John Hsu, Steven Stucky, Thomas A. Sokol

Roger C. Pearson

September 8, 1946 — April 4, 1993

In his 20 short years at Cornell, Roger C. Pearson rose from research associate to become, as a professor of plant pathology in Geneva, the foremost expert on fungal diseases of grapes, not only in New York, but nationally and internationally. However, Roger is missed as much for his friendly, unassuming personality, as for his excellence in plant pathology.

Roger grew up on a peach and grape farm near Kingsburg in the central valley of California. He worked on the farm and also, in the summers of his undergraduate years, at the local Del Monte peach cannery. Roger enrolled at the University of California, Davis and successively obtained his B.S., M.S., and Ph.D. degrees there. Of great influence on Roger's future career was the close and mutually respectful relationship he developed with his major professor, Dennis Hall. Dennis instilled in Roger an appreciation for the practical value of careful, in-depth research that was to be a hallmark of his future work on grape diseases. Dennis was an extension professor with wide-ranging responsibilities for vegetable crops in California, so he was also able to show Roger the methods and rewards of good extension. Roger's graduate research results on the black mold disease of tomato are still instrumental in protecting the important California tomato crop.

Roger came to Cornell in 1973 as a research associate in the Geneva Department of Plant Pathology and was stationed at the Hudson Valley Laboratory in Highland, New York. His responsibilities were primarily on tree fruits. He joined the faculty as an assistant professor in 1975. Two years later he relocated to Geneva and began his career as a grape pathologist. He was promoted to associate professor in 1981 and to professor in 1990.

Roger had statewide responsibility for research and extension on fungal diseases of grapevines in New York. He did pioneering research on the most important diseases of grapes caused by fungi. His research on powdery mildew, the most important grape disease in the world, gained him particular recognition. Although studied for more than 100 years, the powdery mildew life cycle was not properly understood until Roger and his colleagues demonstrated that spring infection of grapevines in New York originate from spores released from spore-producing structures surviving the winter in cracks on the bark of vines. This finding is revolutionizing strategies for control of this disease. Roger also discovered angular leaf scorch and grapevine yellows, both related to serious diseases in Europe, as potential threats to grape growing in New York.

Roger's daily activities and long-term goals reflected a genuine and abiding concern for the needs of grape growers to control destructive diseases. His basic research was always closely followed by an application of the results to improved disease management programs. He traveled extensively throughout New York vineyards during the growing season to talk to growers. A typical day during summer involved several hours of telephone calls from growers, managers, and even other extension, research, and industry pathologists to solve various disease control problems.

Despite the frequency with which he helped others, Roger was a remarkably productive researcher. He simultaneously managed research projects on biological control of powdery mildew with *Ampelomyces quisqualis*; biological control of downy mildew with fungal antagonists; epidemiology and control of powdery mildew, downy mildew, black rot, angular leaf scorch, grapevine yellows, Botrytis bunch rot and Phomopsis cane and leaf spot. The respect that this basic and applied research program was accorded by his colleagues and the viticulture industry is evidenced by the numerous competitive grants awarded to Roger by the USD A, the Sustainable Agriculture program, the New York State IPM program, and the New York Wine and Grape Foundation.

In addition to numerous journal papers and book chapters, Dr. Pearson co-edited and authored the internationally recognized *Compendium of Grape Diseases*. His commitment to producing an up-to-date, truly international, and comprehensive treatment of the known diseases of grapevine involved nearly three years of writing, editing, re-writing, arbitration between reviewers and authors, and hundreds of pages of correspondence. However, the end result was the realization of the goal: a high quality publication of great value worldwide.

Roger's authoritative knowledge of grape diseases was respected worldwide. He was named a research fellow of the Alexander von Humboldt Foundation in 1982, and he was presented the Agway award by the Northeast Division of the American Phytopathological Society in 1990, and the Lee M. Hutchins award of the national American Phytopathological Society in 1991. In 1982, Roger spent a six-month sabbatical at the Biologische Bundesanstalt, Institut für Pflanzenschutz im Weinbau, Bfrenkstel-Kues, Germany, and the Institut National de la Recherche Agronomique, Station de Pathologie Végétale, Bordeaux, France. In 1988, he spent a sabbatical at the Eidgenössische Forschungsanstalt für Obst-, Wein- und Gartenbau, Wädenswil, Switzerland.

Despite his success as a scientist and his genuine affection for his work, Roger's first love was clearly his family. He met his wife Karen in California. They have three children, Heather, 15, Adam, 12, and Alicia 7. Roger delighted in talking about their achievements, which are many.

His concern for others, his kindness, and his quality work were highly appreciated in his Department, at Cornell University, and throughout the worldwide scientific community. We have truly lost an outstanding scientist and a dear friend.

Thomas J. Burr, James E. Hunter, Herb S. Aldwinckle

Laverne L. Pechuman

October 18, 1913 — March 30, 1992

LaVerne L[eRoy]. Pechuman, or Verne to nearly everyone who knew him, Professor Emeritus of Entomology and an international authority on the taxonomy of the blood-sucking flies of the family Tabanidae, died Monday, March 30, 1992, at Strong Memorial Hospital, Rochester, New York, after a short battle with cancer. He was 78 years old, and had continued to be active in his research until about three weeks before his death.

He was born October 18, 1913, in Lockport, New York, the son of Henry J. and Anna Brege Pechuman. He attended the Lockport public schools, and graduated from Lockport High School in 1930. After one year of post-graduate work, he matriculated at Cornell University, and graduated in 1935 with a bachelor's degree in Entomology. In July 1935, he was appointed an Assistant in Entomology for the Dutch elm disease investigation being conducted jointly by the Departments of Entomology and Plant Pathology. He was admitted to the Graduate School at Cornell in September 1935. During the initial course of work on the Dutch elm disease, it was thought advisable to, conduct a comprehensive survey of the various insects found associated with elm, and with special reference to their potential to transmit the causative organism of Dutch elm disease. Verne carried out these early biological investigations, first begun in 1934 by Drs. Philip A. Readio and Henry Dietrich, under the aforementioned professors' direction and later that of Dr. D.L. Collins. Pechuman's work culminated in a thesis entitled "Preliminary account of the insects found in the bark and wood of the American elm (*Ulmus americana* L.)," and in February 1937 he successfully completed requirements for a master's degree in Entomology. Verne's doctorate work was a continuation of his research on the Dutch elm disease, again under the able direction of Dr. Readio. A thesis entitled "The insects found in the bark and wood of the American elm (*Ulmus americana* L.)" was submitted to the Faculty of the Graduate School of Cornell for the degree of Doctor of Philosophy in June 1939.

Upon the completion of Verne's doctorate, he gained employment with the Ortho Division of the Chevron Chemical Company (formerly California Chemical Co.). Beginning as a field representative (1939-45) in the company, he rose through the ranks, first from a Branch Manager (1945-47), to a District Manager (1947-61), and finally to a Senior Research Scientist (1961-62). After nearly 25 years of dedicated service to Chevron Chemical Company, he returned to academia and Cornell University, joining the Entomology Faculty in 1962 as an Associate Professor and curator of the world famous insect collection. He was named Full Professor in 1972. Soon after his retirement in 1982, he was awarded the title of Professor Emeritus.

Among his academic peers and colleagues, Verne Pechuman will be best remembered as a world authority on the systematics, biology, and distribution of horse flies and deer flies (Tabanidae). During his 20 years as curator of the Cornell University Insect Collection, he is credited with amassing a collection of well in excess of 40,000 tabanid specimens, the largest and most geographically diverse assemblage of world Tabanidae in a North American university collection.

In the early 1970s, while collaborating with Dr. Mathias J. Kemen, Jr., a Cornell veterinarian, on the annoying biting and blood-sucking habits of horse and deer flies, and, in an attempt to answer the plight of New York dairymen and horse owners, Verne designed a mechanical trap (a prototype of which he used previously to make general collections of tabanids) to capture and significantly reduce the number of flies in a given area. It is a known fact that dairy cattle attacked by these biting flies often show a significant drop in milk production, and in horses these flies can be vectors of a debilitating viral disease known as equine infectious anemia. His broad-based knowledge of tabanid biology and especially of some of the behavior traits of these flies was the basis for the efficacy of this mechanical trap. Tabanid flies, which are attracted by dark, moving objects, are lured to the trap by a swinging, shiny, black ball, and a carbon dioxide supply (dry ice), which fools the flies into thinking there are live animals about (anthropomorphically speaking!). Once inside the trap, the flies move upward towards light and are captured and killed by an insecticide in the trap head. This trap design is still in use today.

Although his primary taxonomic and biological work focused principally on the horse and deer flies, other interests of his included following the emergence of the various broods of the periodical cicada (the 17-year locust) in the eastern United States, a fascination with the effect of Pleistocene glaciation on several groups of insects, and yearnings in the history and pre-history of Upstate New York, local native American history, archaeology, and botany.

Verne loved the out-of-doors, and on many occasions he seized the opportunity to go collecting, usually to his favorite bogs around central New York to find his pesky horse and deer flies. He also had an admiration for plants, for which he knew many, if not most, of the local native and cultivated species. He had a special fondness for trilliums, however; so much so that he authored two articles in the early 1960s: "Trilliums of Western New York," and "Trillium Variations in Western New York." He also exchanged Trillium specimens with botanists in Japan, which are still known to be growing in his native Lockport, and donated a Trillium collection to the Cornell Plantations.

Perhaps one of Verne's rarest tributes was his welcome as a guest at Tonawanda and Tuscarora Indian ceremonies. As well he was an adopted member of the Tonawanda Band (Hawk Clan) of the Seneca Indians. Through the years, Verne was always deeply concerned about the welfare of the native Americans. On his many travels about New York State, he was known occasionally to detour to an Indian reservation to speak to and share times with his "adopted" brethren. In 1961, as a Director and Editor of *The Niagara County Historical Society*, Verne wrote an introduction to one of the early writings of David Cusick, a Tuscarora Indian: "Ancient History of the Six Nations," which was reprinted by the Society. In Verne's closing statement in this introduction, he wrote, "It is hoped that by reprinting this work of a Tuscarora Indian, it will be more readily available not only to students of anthropology but to anyone interested in a peculiar bit of Americana."

His numerous professional affiliations included the American Association for the Advancement of Science (AAAS), Entomological Society of America, Entomological Society of Ontario, American Entomological Society, New York Entomological Society, American Mosquito Control Association, Sociedade Brasileira de Entomologia, Buffalo Society of Natural Sciences, New York State Archaeological Association, and the Society for Pennsylvania Archaeology. As an active advocate for habitat preservation locally and globally, he belonged to The Nature Conservancy, Nature Sanctuary Society of Western New York, Bergen Swamp Preservation Society, and the Wilderness Society. He held advisory positions in many of these associations. Among his honors he was a member of Sigma Xi, appointed a fellow of AAAS in 1964 and a fellow of the Rochester Museum of Arts and Sciences in 1965, and listed in the *American Men of Science*. In 1960 he was made an honorary member of the Rochester Academy of Science, and also in that same year received a citation as "distinguished scientist" from the University of Buffalo.

Verne was author and coauthor of nearly 100 scientific papers and monographs. He described 22 species (and subspecies) of horse and deer flies from around the globe as new to science. Reflecting the respect that other entomologists had for his work, Verne had 26 species named after him as of 1986, mostly flies, but also including an aphid, a dragonfly, a stonefly, several wasps and hymenopteran parasitoids, and a protozoan.

He is survived by a sister and brother-in-law, Dorothy and Benjamin Neal of San Jose, California; daughters and sons-in-law, Patricia and William Ferris of Bergen, New York, and Jean and James McIntyre of Waterville, Maine; grandchildren William and Michael Ferris; and one niece and several cousins. His wife of 52 years, Berta, preceded him in death on December 3, 1991. Following a memorial service held in Ithaca, New York, he was buried in the family plot (Cold Springs Cemetery) in Lockport, New York on April 4, 1992.

Professor Pechuman has left an enduring mark on the systematics of the Tabanidae to which he did much to fashion. As well he leaves behind a legacy of scholarship and dedicated service to Cornell University that includes not only his own publications but, also, his large collection of tabanid flies. The lives of his long-time colleagues and students are much richer today for having known and worked with him. We will remember him with fondness and great respect, and for his generosity of time, dash of good humor, and as an enthusiastic conversationalist and delightful companion. He will be dearly missed by his colleagues in the profession and by his many other friends.

Carolyn Klass, James K. Liebherr, E. Richard Hoebeke

James A. Perkins

October 11, 1911 — August 19, 1998

James Alfred Perkins served as the seventh President of Cornell University from 1963-69. At the time of his death, he was Chairman Emeritus of the International Council for Educational Developments, which he had founded in 1970. Perkins devoted most of his life to the improvement of higher education in the United States and abroad. As Cornell President Hunter Rawlings stated: “Jim Perkins represented the highest ideals of liberal education, and he left a permanent legacy not only on the Cornell campus but also in the foundation of our nation’s dynamic postwar education and research institutions.”

Born in Philadelphia, Perkins was the son of Harry Norman Perkins, a banker, and Emily Cramp (Taylor) Perkins. Although his parents were not Quakers, he attended the Germantown Friends School, founded by the Monthly Meeting of Friends in Philadelphia in 1845, a school whose goal was “to give a thorough education by providing moral, intellectual, and physical training that will fit boys and girls to become useful men and women...Christian influences, positive in character, are fostered as the highest value in school life.” In his senior year, Perkins was editor-in-chief of the student literary magazine, the *Pastorian*.

Perkins entered Swarthmore College in 1930, at a time when pacifist sentiment was gaining strength on college campuses across the nation. He had attended weekly Friends’ Meetings in high school and so it was rather to be expected that during his undergraduate years he would join the Religious Society of Friends (Quakers). In the spring of his junior year, students at Swarthmore and more than sixty other American colleges solemnly took the “Oxford Pledge,” declaring their opposition to military service and participation in war. Perkins graduated from Swarthmore in 1934 with high honors.

He then entered the Doctoral program in Political Science at Princeton University, where he studied with the prominent scholar, William S. Carpenter. The topic he chose for his dissertation, “Congress Investigates Our Foreign Relations,” reflected Perkins’s ongoing concern with contemporary problems of war and peace. In 1934, the U.S. Senate had created an investigating committee under Gerald Nye of North Dakota to probe the influence of the armaments industry on American foreign policy. In 1936, the Nye Committee issued a report, which asserted that bankers and munitions makers had played an essential role in pushing the United States into the First World War.

In his dissertation, which he completed in 1937, Perkins examined the munitions inquiry as one example of many congressional attempts – beginning with a 1919 Senate investigation into conditions in Mexico – to influence presidential conduct of the nation’s foreign policy or federal policies affecting trade and immigration. Perkins’s conclusion, which he published in the April 1940, *American Political Science Review*, was that congressional investigations “have repeatedly failed to have much influence on the course of our foreign policy.” Much of his effort went to explaining the political and structural reasons for that failure, and to calling for “self-restraint” on the part of Congress so that its future actions might be “in harmony with the requirements of our democracy.”

His Ph.D. degree in hand, Perkins decided to remain at Princeton, first as Instructor in Political Science from 1937-39, and then as Assistant Director of the School of Public and International Affairs from 1939-41. On June 20, 1938, he married his college sweetheart, Jean E. Bredin (Swarthmore ‘36), and the couple eventually had five children: Barbara, Joan, John, David, and Tracy. By 1941, Perkins had already acquired valuable experience in academic administration at Princeton, and the entry of the United States into World War II in December provided him (and thousands of other able young men and women) with an extraordinary opportunity to develop his managerial skills in wartime civilian administration.

Perkins moved to Washington, D.C. in 1941 to take a position with the Office of Price Administration (OPA). Created by President Franklin D. Roosevelt in order to prevent inflation and profiteering, the agency was led by the flamboyant New Deal economist, Leon Henderson. Perkins headed the Pulp and Paper Division which had responsibility for many commodities: wrapping paper, paperboard, boxes, wastepaper, printing and writing paper, industrial paper, converted paper products, pulpwood, and wood pulp (special grades of which were used for rayon and nitrating purposes). Since the war had interrupted shipments of lumber from the Scandinavian countries, prices had begun to rise sharply. So Perkins’s Division endeavored to obtain voluntary agreements from leading producers to hold the line on prices, and, when unable to arrange for such informal compliance, to formulate and implement a schedule of maximum prices. Within about a year, most of the needed regulations were in place, and the work of the Division thereafter consisted chiefly of refining and adjusting existing standards.

In 1943, Perkins left the OPA to become Assistant to the Administrator of the Foreign Economic Administration (FEA). Headed by Leo T. Crowley, the agency had been created in September of that year to bring a measure of consistency to the efforts of the Office of Economic Warfare, the Office of Lend-Lease Administration, and the Office of Foreign Relief and Rehabilitation Operations. The FEA also sought to coordinate the work of these

agencies with that of the State Department. Perkins was now involved in issues such as the provision of Lend-Lease aid to Great Britain, the restoration of private trade in the liberated areas of Europe, and the making of plans for postwar Germany. Perhaps Crowley's most controversial decision, made in May 1945, was to cut off virtually all Lend-Lease aid to the Soviet Union.

With the end of the war, Perkins returned to academic administration, this time as Vice-President of his alma mater, Swarthmore. He remained in that office from 1945-50, years of rapid expansion in American higher education, largely as a result of the G.I. Bill of Rights, but years also noted for the relative tranquility of campus life. In the summer of 1950, he left Swarthmore to become an Executive Associate at the Carnegie Corporation, a foundation whose purpose was to promote "the advancement and diffusion of knowledge and understanding among the people of the United States." Appointed a Vice President in November 1951, Perkins remained with the Carnegie Corporation until 1963 when he moved to Cornell. In his first year at Carnegie, the Corporation made grants totaling about \$5 million; ten years later, the annual amount had reached nearly \$10 million. While at Carnegie, he helped prepare a widely circulated document, "The Power of the Democratic Idea," under the auspices of the Rockefeller Brothers Fund.

At the same time, Perkins also served as a Vice President of the Carnegie Foundation for the Advancement of Teaching, then headed by John Gardner (who also was President of the Carnegie Corporation). The Foundation had been established in 1905 as a pension fund for college professors, but its charter authorized it "to do and perform all things necessary to encourage, uphold, and dignify the profession of the teacher and the cause of higher education." The Foundation sponsored surveys and initiated policy reviews, and during Perkins's tenure, it paid particular attention to the emerging federal presence in higher education, and the implications of that presence for the autonomy of universities and the preservation of academic freedom.

In 1951, Perkins took a leave from his duties at Carnegie to serve as Deputy Chairman of the Research and Development Board of the Department of Defense. He summarized some of the Board's findings and recommendations in a paper published in the *Public Administration Review* in the spring of 1953. Criticizing various organizational shortcomings, Perkins suggested that the Joint Chiefs of staff be relieved of certain administrative tasks so that they could concentrate on military planning. He also recommended that policy planners in the State Department and National Security Council be kept better informed about new concepts of military strategy and economic planning. In April 1960, testifying before a Senate subcommittee, Perkins said that organizational shortcomings

were largely to blame for the failure of the National Security Council to provide the President clearly-defined policy alternatives.

In 1963, following the retirement of Deane W. Malott, the Cornell Board of Trustees elected Perkins President of the University. Commenting on his selection, trustees and faculty members not only mentioned the positions he had held in government, academia, and the world of private foundations, but also noted his service as the Chairman of President John F. Kennedy's Advisory Panel on a "National Academy of Foreign Affairs," and as a member of General Advisory Committee of the United States Arms Control and Disarmament Agency, the United States Committee for UNESCO, the Herter Committee on Foreign Affairs Personnel, and the Board of Trustees of the Rand Corporation. Clinton Rossiter, the John L. Senior Professor of American Institutions, said he had seen Perkins at various conferences, "and I have always been impressed by his learning, common sense and high standards."

Perkins was inaugurated on October 4, 1963, not long after Martin Luther King's "I Have a Dream" speech at the March on Washington, and not long before President John F. Kennedy's assassination. John Gardner, in his introductory remarks, praised Perkins as "an extraordinarily kind, warm, decent and charitable human being," sounded a note of caution – which, in the event, proved prophetic – when he said that, "like every other social institution, universities are subject to disintegrative forces, are the scene of power politics, and are susceptible to the decay that so often sets in at precisely the hour of triumph."

Perkins's inaugural address, however, emphasized only the exciting opportunities facing Cornell. Calling for a "sweeping reexamination" and "redefinition of our mission," he proposed that Cornell embrace its role "in the hard world of affairs." Forecasting the future of American universities, he declared:

"Having meshed their gears with society, they must now develop the institutional policies and the administrative muscle required to be a driving rather than merely a spinning gear. The university has a direct stake in the shape and substance of the society in which it will do its work. If free universities require free societies, universities cannot shirk their obvious responsibilities."

Perkins elaborated on some of these ideas in November 1965 when he delivered the Stafford Little Lectures at Princeton University, later published as, *The University in Transition*, a book which sparked considerable controversy. The university, Perkins said, was "increasingly vital in the application of knowledge to the problems of modern society."

In his six years in Day Hall, Perkins brought about far-reaching changes in virtually all areas of Cornell life. The very look of the campus changed with the planning and construction of the Herbert F. Johnson Museum of Art, the Space Sciences Building, the Robert R. Wilson Synchrotron Laboratory, the Noyes Student Center, the underground Campus Store, and Uris, Clark, Emerson, and Bradfield Halls. There were innovative modifications in departmental structure, too, such as the formation of the Division of Biological Sciences (which combined departments from the endowed side of the University with departments from the New York State statutory side), and the Department of Computer Science (which belonged jointly to the Engineering College and the College of Arts and Sciences). Perkins's administration also witnessed the creation of the Plasma Physics Laboratory, the Water Resources Institute, and the Cornell Institute for Social and Economic Research.

Changes in the academic life of the university and the role of the professoriat were equally significant. In his first year in office, President Perkins persuaded the trustees to provide an across-the-board salary increase that dramatically improved the faculty's standard of living. He initiated the Andrew D. White Professors-at-Large Program that brought eminent scholars to campus for two-week visits; he saw to the creation of 23 endowed professorial chairs for distinguished faculty members; and he established the Society for the Humanities. During Perkins's presidency, the university moved to a more structured use of internal ad hoc committees in cases involving tenure and promotion. A system of five-year terms for department chairs became the rule rather than the exception.

The undergraduate experience, too, was transformed during the six years of Perkins presidency. Under Professor W. Rea Keast, who was appointed Vice President for Academic Affairs, committees were established to evaluate many areas of undergraduate education. A committee headed by Professors Alfred Kahn and Raymond Bowers issued a far-reaching report regarding curricular changes. Another group, led by Professor Alain Seznec, explored the possibility of establishing residential colleges, and, indeed, the International Living Center was established, as was Risley House for students interested in the performing arts. The College Scholar program was created in order to free some of the ablest students from the ordinary requirements of a departmental major, and the faculty decided to switch from a numerical to an alphabetical system of grading. A six-year Ph.D. program was instituted, which, while it did not prove successful, nevertheless demonstrated Perkins's imagination and ability to obtain funding for his ideas. During his presidency, also, Perkins saw to the completion of two capital fund-raising campaigns that raised more than \$100 million for Cornell and the Medical College in New York City.

No change was more significant, however, than the adoption of a new minority admissions policy. A believer in the cause of racial justice and the university's role in achieving it, Perkins set up a new procedure to recruit African American students. In 1963, when he assumed the presidency, there were fewer than ten African-American undergraduates at Cornell. Perkins created a Committee on Special Education Projects that fostered non-traditional admission criteria, emphasizing not only grades and scores on standardized tests but also an applicant's motivation and leadership skills. By 1969, because of these efforts, African American undergraduates numbered nearly 250.

Yet while Perkins, like others of his generation, supported integration, nonviolence, and gradualism, the motivating ideals of the early civil rights movement, many African American students who had entered Cornell were devotees of Black Power, with its emphasis on nationalism, self-defense, and non-negotiable demands. Under the circumstances, conflict was unavoidable, and it reached crisis proportions in the years 1968 and 1969. African American students demanded that the university create a separate Black Studies program, and demanded, too, that Black students who had violated campus rules as part of a political protest be exempted from appearing before the judicial system. Perkins attempted to steer a middle course, agreeing to create and fund a largely autonomous Africana Studies Center, but not interfering in the ordinary workings of the judicial system. "I operate on the assumption that the Cornell community will function reasonably if I and my colleagues deal reasonably with these demands," he said in December 1968.

Tragically, by the following spring that assumption was proven unworkable. At six o'clock in the morning on Saturday, April 19, 1969, a number of students in the Afro-American Society (AAS) took over Willard Straight Hall, armed themselves when they feared an assault from hostile whites, and plunged the campus into crisis. National media attention focused on the most sensational events of the following week: Black students leaving the Straight brandishing rifles and shotguns, AAS leaders making speeches over the radio threatening the lives of professors, thousands of students occupying Barton Hall and demanding the faculty nullify the judicial system's reprimand of the Black activists, and, finally, the faculty's decision to reverse itself and to rescind the penalties.

The actions of the administration in persuading the AAS to leave the Straight and in persuading the faculty to rescind the penalties succeeded in averting what Perkins feared most: a violent confrontation between students and the police. However, Perkins paid a heavy price, indeed, for he appeared to his critics as weak, vacillating, and indecisive. Many faculty members, particularly in the Law School, publicly expressed a lack of confidence in his commitment to academic freedom and his ability to maintain law and order. Many alumni, troubled by the

adverse national publicity surrounding the events of April, concluded that Perkins had been unwilling to stand up for basic principles but rather had caved in to the demands of radical students. On May 31, 1969, he offered his resignation and the Board of Trustees decided to accept it immediately rather than have him remain, in effect, as a “lame-duck” president.

In the years that followed, he avoided commenting on the tumultuous events that had led him to leave Cornell. Nevertheless, in a speech to the Tower Club shortly before his resignation he defended his actions. His foremost goal, he said, was to prevent violence. Responding to the argument that he should have called in the civil authorities to end the Straight takeover, he explained: “We calculated that the odds were in the direction of loss of life on the Cornell campus if the Black students were not evacuated from Willard Straight promptly.” Perkins’s aversion to the prospect of violence may have reflected his Quaker background; it certainly reflected his conviction that, in the end, the greatest danger to the university community and the consensus on which it necessarily had to rest was the use of armed force on campus. “If we in higher education cannot find useful avenues toward racial cooperation,” he said, “then I honestly do not know how society at large will be able to deal successfully with this problem.”

On leaving Ithaca, Perkins returned to Princeton, New Jersey, to establish the International Council for Educational Development (ICED) which, over the years, proved highly successful. In 1970, he suffered a profound loss when his wife, Jean, died after a long illness. He would eventually be remarried to the former Ruth B. Aall. In 1990, he retired from the ICED and was named Chairman Emeritus. In 1992, Cornell established the James A. Perkins Professorship in Environmental Studies. In 1995, Cornell trustee Thomas W. Jones, (who had been one of the most militant leaders of the AAS in the 1960s) established the James A. Perkins Prize for Interracial Understanding and Harmony, awarded annually.

President Perkins once declared it his hope that universities could muster the “compassion,” “patience,” and “courage” to perform the important work which society needed. To his closest acquaintances during his Cornell years, those qualities indeed, best described James A. Perkins.

Dale Corson, Robert Miller, Richard Polenberg

Catherine J. Personius

August 5, 1904 — October 31, 1994

Emerita Professor Catherine J. Personius joined the faculty of Home Economics in 1930, when Martha Van Rensselaer and Flora Rose were co-directors. She provided a continuation of strong leadership in the college until she retired as Coordinator of Research in 1966. When she came to Cornell, a new building was in the process of being erected and before she retired she helped develop plans for a new addition.

Catherine was born in Elmira, New York and graduated from Elmira College in 1925 with a degree in home economics and chemistry, subsequently joining the staff as foods instructor. In 1928, she completed a M.A. degree at Teacher's College, Columbia University and then accepted a teaching position at Hampton College in Virginia for two years. She was at Cornell during the thirties, a time best remembered for the depression, and joined the Home Economics staff first as an Instructor, later as a Research Assistant, or as a supervisor of the Home Management House. At the same time, like others of her generation, she studied for a doctoral degree, not in home economics, but in the field of biological chemistry, bacteriology, and physical chemistry. It is little wonder that she learned to manage time and resources, a prelude to her later career where she assumed a large range of responsibilities. After obtaining her degree from Cornell in 1937, she joined the faculty as an Assistant Professor. From 1940-43, she was an Associate Professor at the University of Wisconsin, Madison, and then was invited back to Cornell as Professor and co-Head of the Department of Food and Nutrition and a year later as Head. In 1947, she added two more responsibilities—Coordinator of Research for the College and Assistant Director of the Experiment Station. She was the first woman at Cornell to hold the latter position and one of two in the entire United States. These responsibilities she carried until her retirement. Thus not only did she have a significant role in the development of the Department of Food and Nutrition but she also influenced the direction of the College, most significantly in development of research programs.

She provided strong leadership for the Department in teaching, extension and research. Not only was she a dedicated teacher herself but she encouraged department faculty in a commitment to teaching. She was instrumental in developing courses that emphasized the physical and chemical properties of major groups of food products in relation to their utility. During most of her career at Cornell, Catherine continued to teach. She came to know the seniors well and was instrumental in encouraging them in various career paths. It is perhaps significant that she was honored in 1976 by a scholarship in her name endowed by two former students, a mother and daughter,

giving us a glimpse of her impact over a generation. It is perhaps less well known that CJP, as she was known by the faculty, took time from her busy schedule to address the needs expressed by some upper level students, namely that they have the opportunity for additional depth in subject matter and be allowed to pursue individual projects in the laboratory—and the opportunity was provided. This actually became the basis for the Honors Program in Food and Nutrition started in 1961. There seems little doubt that she was ahead of her time encouraging the involvement of undergraduates in research.

Catherine was equally committed to encouraging extension and research programs in the department. In the late forties she participated in a weekly radio program, “What’s New in Home Economics”, where she interviewed different faculty members about research programs. She also worked with the Nutrition Council, a state-wide association, and in alternate years provided leadership for a program at Cornell where recent research findings were made available to state based health professionals. She was more diligent than many in reviewing the various publications which were developed in the department. She also served as an Administrative Advisor on many regional research projects in the Northeast. She had a knack of posing just the right questions to steer diverse individuals toward a common goal, and was one of the most effective people in this role and was sorely missed following her retirement by those who had the benefit of her guidance.

One of the lasting influences on the college was probably her encouragement of research-based personnel as an addition to the faculty. Using her role as Coordinator of Research, she encouraged departments to seek individuals with discipline-based research and to encourage these individuals to adapt their research to the needs of the department program. She believed that while Home Economics was the focus of the college, the strength was in utilizing the education of those who were in areas basic to program areas in the college. She believed that students needed to understand basic principles that would enable them to use knowledge intelligently, to think analytically, critically and constructively when facing new situations.

Although her schedule did not permit extensive involvement in her own research, she was, nevertheless active with a number of research areas, and worked with graduate students. Further, during the war years, and shortly after, many new methods of food preservation and utilization were studied as part of the war effort. Her published work is found in *Food Research*, *Cereal Chemistry*, *Food Technology* and *Journal of Home Economics*. She was recognized throughout the country for her leadership in research.

The many demands on her did not deter her from responsibility to the university community. Among her commitments were Long-Range Planning, Review of University Calendar, Executive Committee of Center for

Housing and Environmental Studies, Governing Board of Social Science Research Center, Board of Control of Cornell United Religious Work, Board of Trustees Cornell Research Foundation, and the Faculty Council. It is perhaps illustrative of her career that she was the first woman to be a faculty representative on the Board of Trustees where she served from 1959-64.

At the national level, she was appointed to a number of committees, including the Executive Committee for both the Association of State Universities and Land Grant Colleges, and the Home Economics division of the Association. She also served as member of the U.S.D.A. Advisory Committee on Home Economics Research, the Commission on Home Economics and as an advisory member of the N.Y.S. Nutrition Council.

She belonged to a number of professional organizations including American Home Economics Association, American Association of Cereal Chemists, Institute of Food Technology, American Chemical Society, American Association for the Advancement of Science, among others. She was also a member of honorary societies such as Omicron Nu, Phi Kappa Phi, Sigma Xi, Phi Tau Sigma, Alpha Lambda Delta (honorary member).

She decided to retire at the peak of her career, long before any of us thought she should. After a year or so of involvement at the national level, she returned in leadership roles in the community. She was active with volunteers at the Tompkins County Hospital, and had a regular schedule there. She served as treasurer for the Directors of the Ladies Union Benevolent Society, an organization concerned with housing of the elderly. She was active at St. Paul's Methodist Church where she taught a Sunday School Class and helped with a day care program for children. In 1979, she moved to Horseheads, New York near her family home. Here she worked with nursery school children where interaction of the older adults and children was beneficial to both. Catherine once said that Flora Rose was a person of enthusiasm who would try anything once and that Martha Van Rensselaer was a very effective leader. Catherine had qualities of both.

Throughout her life she retained a strong interest in activities at Cornell. Her greatest regret being away from Ithaca was the loss of interaction with former colleagues and the opportunity to take advantage of Cornell events. Although during her career at Cornell she was involved in what can only be described as a rigorous program, she still took time to encourage students and faculty. She routinely did more than she asked of any of us. She perhaps exemplified the motto "Freedom with Responsibility". As faculty members we had leeway to develop different pursuits and interests with the understanding (never expressed) that we had a responsibility to both

the department and to the college. By those who knew her, either as a student or a colleague, she will long be remembered and she has significantly influenced our lives.

Henry Ricciuti, Mary A. Morrison

Shailer S. Philbrick

May 11, 1908 — August 19, 1994

After a short illness, Shailer Philbrick died on August 19, 1994, at Tompkins Community Hospital, ending almost thirty years of association with Cornell University.

Shailer was born in Columbia, Missouri on May 11, 1908. He was educated at DePauw University where he first came in contact with the Cornell influence. While at DePauw, he worked as an assistant to Professor Ernest R. Smith, a former student of Cornell Professor G.D. Harris and a member of Harris' 1914 and 1915 expeditions to the Atlantic Coastal Plain on his boat, the *Ecphora*. Shailer received his A.B. in Geology in 1930 and was elected to both Phi Beta Kappa and Sigma Xi. He continued his studies at Johns Hopkins University, receiving a Ph.D. degree in 1933. His dissertation dealt with contact metamorphism of the Onawa pluton in Maine, a work that provided what is now considered a classic description of that area (*Am. J. Sci*, 5th Series, V. 31, pp. 1-40, 1936). Portions of the resulting paper were republished many times in subsequent metamorphic petrology texts.

During the fieldwork for his dissertation, Shailer found it necessary to prepare his own topographic map of the heavily forested research area lying between the villages of Monson and Katadin Iron Works, Maine. In the process, he laid out the route of that portion of the Appalachian Trail and described it in the original trail guidebook. In his memory, his family is preparing a plaque to be placed on an overlook along the Appalachian Trail in his dissertation area, and a brochure to explain the geology to passing hikers.

Shailer's professional career began when he joined the United States Geological Survey as a Junior Topographic Engineer in 1934 and worked out of the Craftsbury and Lyndon, Vermont offices. The next year he moved to the Soil Conservation Service in Zanesville, Ohio. In 1936, he joined the Department of the Army, Corps of Engineers, as a civilian employee. During his thirty years with the Corps, mostly working out of the Pittsburgh, Pennsylvania office, he rose from GS-5 to GS-14, and he had a major role in many Corps projects. He was in charge of the geologic and foundation investigations and planning for three locks and dams on the upper Ohio River and six locks and dams on the Monongahela River. For one of these, the Youghiogheny Dam, he designed the landside portion of the spillway which required a cut slope of 310 feet, the highest such slope in the area at that time. For details of his many contributions during his time with the Corps of Engineers, please refer to "Memorial to Shailer

S. Philbrick (1908-1994)” by Brian H. Green and R.E. Gray; *Environmental and Engineering Geoscience*, V. 1, No. 1 (Spring), 1995, pp. 125-126.

His teaching career began toward the end of his tenure with the Corps, first as a Visiting Lecturer in Geology at Northwestern University in the fall of 1960. In 1963-64, he was a Visiting Professor at Cornell University. Then in 1966, with Professor Storrs Cole nearing retirement, Professor George Kiersch, the new department chairperson, asked Shailer to become a full-time faculty member. Thus, forty years after working with Ernest Smith, Shailer came to Professor Smith’s old university.

Professor Kiersch was quite familiar with Shailer’s work and first met him in 1955 when Philbrick was chair of the Engineering Geology Division of the Geological Society of America. Philbrick’s first stay at Cornell in 1963-64 was as a temporary replacement for Kiersch who was on leave that year. Kiersch described Philbrick as, “...an imminent pioneer in his chosen field of applied and engineering geology” (letter to A.L.B., Sept. 22, 1994).

He quickly applied to his new career the same energy, vitality, and dedication that had been his trademark with the Corps of Engineers. One of his teaching assignments was the introductory geology class. In only two years, Shailer’s knowledge, his ability to communicate this knowledge, and his engaging personality, resulted in dramatic enrollment increases in those courses. In fact, as enrollment reached 250 in one semester, he lectured in a room so large that he failed to notice the attractive blonde woman student in a rear seat who faithfully attended for the entire semester before revealing herself as his beloved wife, Billie, in a wig!

While at Cornell, Philbrick’s paper “Kinza Dam and the Glacial Foreland” was selected by the Association of Engineering Geologists for the Claire Holdredge Award for its outstanding contribution to the Engineering Geology profession. Also, from 1966-75, he was a consultant to the Buffalo (NY) District, U.S. Army Corps of Engineers and participated in their Niagara Falls preservation project. He was appointed Emeritus Professor upon his retirement December 31, 1972. For many years Shailer provided excellent geological engineering expertise to his local community as a Trustee of the Village of Cayuga Heights and a member of the Southern Cayuga Lake Intermunicipal Water commission. He was a deacon and member of the First Presbyterian Church of Ithaca.

He was an active member of many professional societies and charter member of several, including The American Institute of Professional Geologists (AIPG). His AIPG registration number in 1964 was 274. He was a founding member of the Pittsburgh Geological Society in 1944 and served as its president in 1947-48. He was also a member of the Society of Economic Geologists, a Fellow in the Geological Society of America, and was Chair of

the Engineering Geology Division of the Geological Society of America in 1955. The Association of Engineering Geologists made him an honorary member in 1986.

He is survived by his wife of 58 years, Elizabeth (Billie); two children, John W. Philbrick and Anne P. Isenbey, both of Poughkeepsie, New York; four grandchildren; a brother; and a sister. His daughter, Margaret P. Maurer, and a brother predeceased him.

In accepting the Honorary Member Award of the Association of Engineering Geologists, he spoke about his profession: "Let us always bear in mind our duty to provide factual information and to call the shots as we see them even if this runs counter to the views and desires of our employers. An honest geologist is the first requirement now and in the future." These are words of wisdom that he lived by and shared with his many students at Cornell. The citation for his award concluded: "Shailer S. Philbrick, through his distinguished practice, teaching and writing, has set an outstanding example of professional excellence in engineering geology."

William R. Brice, Jack E. Oliver, Arthur L. Bloom

Robert A. Polson

July 6, 1905 — July 4, 1997

Robert A. Polson, Professor of Rural Sociology Emeritus, died on July 4, 1997 at his home in Ithaca, New York. Bob was a part of the Department of Rural Sociology for 66 years starting in 1931. He was department head during 1948-57. His career, which spanned the decades before and after World War II, had a significant change in a career path, and was marked by years of generous contributions to the university and the community, and a devoted dedication to family and friends.

Born in Nova Scotia, Canada, Bob and his family moved to the state of Washington where he was reared on a large dairy farm. His initial career goal was to stay in the dairy industry, but after only two years at Washington State College in Pullman, he transferred to the University of Wisconsin where he received a B.S. degree in Agricultural Economics in 1928. He then continued at Wisconsin in the field of Rural Sociology and earned a Ph.D. degree in 1933. He also did graduate work at the University of Chicago and postdoctoral studies at Columbia University.

Polson's dissertation research was used for a Wisconsin publication, *Trends in Town-County Relations* (1933), co-authored with his thesis advisor and one of the founders of the discipline of rural sociology, J.H. Kolb. This study was conducted in the same county used 16 years earlier by Charles J. Galpin for his pioneering work reported in *The Social Anatomy of an Agricultural Community* (1915). Polson's was one of the first locality group restudies made by sociologists. The restudy was in cooperation with the U.S.D.A.'s Division of Farm Population and Rural Life and with President Hoover's Committee on the Study of Recent Social Trends. Though the nature of Professor Polson's career changed dramatically, his interest in the community continued.

Polson came to the then Department of Rural Social Organization in 1931, the same year Warren Hall, the Cornell home of rural sociology, was built. His appointment as an extension instructor in rural social organization had been preceded by a year as rural sociologist at Virginia Polytechnic Institute. During the years of the depression, Bob assisted New York communities in planning and developing improvements in community services such as fire districts (the number grew fourfold in the 10 years preceding World War II) and in training officers of community organizations. World War II made new demands on faculty, especially those who might give some assistance to the war effort. In this regard, Bob had two special assignments: he was first called upon to organize civilian defense programs while on the field staff of the New York State War Council, and in 1944 and in 1945, he was the

State Supervisor of the Emergency Farm Labor Program run by the Cooperative Extension Service at Cornell. This program helped house and feed seasonal farm workers.

Polson's career underwent a change in 1948 when he began a nine-year term as department head. The task of administration exposed him to the broad scope of programs and activities covered by the department and facilitated a more marked change in his career. This change began during 1952-1953 with a Fulbright appointment the purpose of which was to start a rural social science research program at Silliman University in the Philippines. The results of the original research and restudy were reported in *Rural People's Response to Change: Dumaguete Trade Area, Philippines* (1973). The work also began a long affiliation with Professor Agaton Pal. Polson was also asked to help train the first group of community development workers who inaugurated President Magsaysay's barrio improvement program. The theme of local community improvements was the same as that begun as an extension specialist in rural social organization many years earlier. The exposure to Philippine villages, and later, under the auspices of International Cooperation Administration and the Ford Foundation, similar exposure to rural development programs in 13 countries in the Far and Near East, changed the domain of his work. He turned to the under-developed areas of the world where technical assistance programs undertaken by the United States government and by public and private international agencies called for the contributions which social scientists could make to understand the problems of rural communities and regions and to the train staff for development agencies. Bob specialized in training students, foreign and U.S. citizens, in the application of sociology to the organization, the conduct, and the evaluation of rural community development and agricultural extension programs.

Bob had a key role in the formative years of Cornell's international programs in the 1950s and 1960s. He helped establish the Office of International Agricultural and Rural Development in the College of Agriculture and Life Sciences. In 1953, he was a cooperating member of the prestigious graduate program in South and Southeast Asia. His work at Silliman University added considerable strength to the university's many new efforts in the Philippines. Even his classroom interests shifted to courses in social change and organization. Over the years, he was an advisor to more than 200 graduate students of whom more than half were from Asia and Africa.

Professionally, his work was recognized through service in 1950-51 as President of the Rural Sociological Society. He was also a member of the American Sociological Society, the American Academy of Political and Social Science, the American Association for the Advancement of Science, Alpha Gamma Rho, Phi Kappa Phi Honor Society, Epsilon Sigma Phi, and Alpha Zeta.

In his devotion to the betterment of the communities in which we live, Ithaca was not overlooked. He served as President of the Ithaca Rotary Club, was director of the Ithaca Community Chest, the YMCA, the Tompkins County TB and Public Health Association, and the Cooperative Consumers Society. Similarly, his personal generosity supported a student emergency fund in the Department of Rural Sociology. Dozens of students benefited from the Polsons' contributions to this fund. In 1989, this fund was named the Polson-Larson Fund for Excellence and has since grown to be an important source of support for Department of Rural Sociology programs.

The warm hospitality of Professor and Mrs. Polson, who opened their home to graduate students and faculty, was widely recognized. Professor Polson is survived by Ruth E. Polson, his wife of 67 years; and a daughter, Margaret R. Polson, of Boone, North Carolina. A second daughter, Marion, died in 1975. Bob was devoted to his immediate family and to his extended family. (He proudly displayed photos of his family's large dairy farm and, later, their logging operation in western Washington.) It is extraordinary that on July 4, 1997, the day Bob Polson died, the Polson Museum, devoted to the long Polson family history, was opened and dedicated in Hoquiam, Washington.

Olaf Larson, Philip Taietz, Eugene Erickson

Richard F. Porter

February 8, 1928 — September 1, 1991

Richard F. Porter, our friend and colleague, died in Ithaca on September 1, 1991.

Richard F. Porter was born in Fargo, North Dakota on February 8, 1928. He attended Marquette University, in Milwaukee, graduating with a Bachelor of Science degree in 1951. He received his Ph.D. degree from the University of California, Berkeley, in 1954, having worked under the direction of Professor Leo Brewer. His thesis research was on thermodynamic and spectroscopic properties of high-temperature gas-phase species. Dr. Porter then spent the year 1954-55 as a Postdoctoral Research Associate in the Physics Department of the University of Chicago under the tutelage of Professor Mark Inghram. It was at Chicago, working with Inghram and William Chupka, that Dick began his lifelong association with mass spectrometry, which he applied at first in further studies of the high-temperature gas phase of refractory materials. He joined the Chemistry faculty at Cornell as an Instructor in 1955 and spent the rest of his career with us.

Recognition by his peers came early for Dick. From 1960 to 1964 he was an Alfred P. Sloan Fellow, and in 1964, the year of his promotion to Full Professor at Cornell, he was named a John Simon Guggenheim Fellow. He spent half that year on leave at the laboratories of the National Research Council of Canada, in Ottawa, where he was associated with C.C. Costain (with whom he collaborated on a study by microwave spectroscopy of a cyclic molecule of boron, oxygen, and hydrogen) and with the world-renowned spectroscopist and future Nobel laureate, Gerhard Herzberg. The rest of that year he served as a Visiting Professor at the University of Florida. In the academic year 1970-71, Dick was a NATO Senior Postdoctoral Fellow at the University of Freiburg. He had an appointment as Visiting Collaborator at the Brookhaven National Laboratory (1978-82), where he was associated with the group of L. Friedman, and in 1985 he was appointed Visiting Scientist at the laboratories of the Exxon Research and Engineering Corporation, where he collaborated with a research group headed by his former graduate student, Andrew Kaldor. Dick maintained close contact with both laboratories over the years. He was also a Consultant at the Corning Glass Company.

While Dick was an excellent experimentalist who used the most sophisticated techniques, his primary research goal was the exploration of the basic characteristics of matter. His interests focused on mass spectrometric, electron-diffraction, and spectroscopic studies of gaseous systems at high temperatures. These included thermodynamic studies of vaporization, high-temperature boron chemistry, the photochemistry of boron compounds, and ion-

molecule reactions. His work spanned a broad range of science, as evidenced by his bibliography, which lists 144 articles in 35 different periodicals.

Dick was also a scientific catalyst for others. He co-authored papers with colleagues in the Department of Chemistry and in Cornell's College of Engineering, as well as with faculty members at other universities and with scientists at the laboratories he visited. With Professor Arthur Ruoff of the Department of Materials Science and Engineering in our College of Engineering, he studied the properties of solid ammonia and the ammonium halides under very high pressures, in a search for the onset of metallization. Dick was one of the original members of Cornell's Materials Science Center.

In much of Dick's most recent research he used a new technique he developed, "neutralized ion beam spectroscopy", to prepare and study unstable radicals and metastable states. In this way he undertook very beautiful spectroscopic studies of some of the metastable states of triatomic hydrogen and deuterium. First he produced the singly positively charged triatomic species by the reaction of the diatomic molecule ion with the ordinary neutral diatomic in an ion-molecule reaction, and then allowed the charged triatomic to be neutralized by near-resonant electron transfer from alkali metal atoms. It was from the latter step that the technique derives its name. Before he became too ill to travel, Dick had been planning to spend nine months as a Visiting Scientist at the Institute for Molecular Science in Okazaki, Japan, but, sadly, he was unable to pursue those plans.

Dick was a dedicated and enthusiastic teacher and adviser of undergraduates. As late as July of 1991 he had been looking forward to meeting his class at the end of August, but that was not to be. He was a friend as well as mentor to his graduate students and postdoctoral associates, many of whom will feel the loss all the more keenly because of the close relationships he had established with them. He was a stalwart participant in the Chemistry poker game, where he displayed skills equal to and not altogether different from those he showed in the laboratory. There, too, he is sorely missed.

Professor Porter's first wife, Dolores, whom he had married in 1955, died in 1978 while they were on leave in Brookhaven. They had two children, Patricia and Thomas. In 1983, he married Marjorie Louise Haupin, then an Administrative Supervisor at the Johnson Art Museum, and who, together with his two children, survives him.

In his life as in his science, Dick was a person of absolute integrity. He was modest, straightforward, generous, and kind — a loved and valued colleague and friend.

S.H. Bauer, W.D. Cooke, B. Widom

Arthur J. Pratt

May 3, 1905 — December 14, 1994

Arthur J. Pratt, Professor Emeritus of Vegetable Crops, was born to Bert and Gertrude Barber Pratt in Norwich, New York. He grew up on a farm that had been cleared and settled by his ancestors in 1810 and attended a one-room school and the Oxford Academy. Art received his B.S. (1926) and Ph.D. (1933) degrees from Cornell University. He retired from the Department of Vegetable Crops in 1962 after thirty years on the faculty.

Much of Dr. Pratt's early career was spent working in vegetables with students of all ages. He co-founded, with Professor Grant Snyder, the National Junior Vegetable Growers Association and was active in it for over seventeen years. He was also active in the Tompkins County 4-H Club and other 4-H groups; and he coached state 4-H teams that many times won national judging, grading, and identification contests. Dr. Pratt also coached collegiate vegetable teams for fifteen years. In 1940, Dr. Pratt was given the Duncan Memorial Award for his outstanding work in encouraging young people to continue their education in marketing vegetables; and in 1963, he received the State Honorary Empire Degree from the Future Farmers of America. Dr. Pratt was a member of the American Potato Association, the American Association of Horticultural Science, and Sigma Xi.

In 1955, Dr. Pratt began teaching a new general horticulture course that had not been taught since the days of Liberty Hyde Bailey. The course—which Dr. Pratt continued to teach until his retirement—covered fruits, flowers, and vegetables. It grew to be popular with students from many parts of the University, as it still is today. Dr. Pratt was recognized by the students in 1962 when they awarded him the Professor of Merit Award from the College of Agriculture.

Dr. Pratt wrote a number of publications on vegetable production, including Victory Garden leaflets and many service letters during World War II. He was author of the book *Gardening Made Easy* in 1955. In 1935, Dr. Pratt was an early developer of the Consumers' Cooperative Society of Ithaca, serving on various committees and as president several times over a forty-year span.

Potato culture was always an interest of Dr. Pratt's, and he did considerable research on effects of irrigation on yield and tuber set. After his retirement, Dr. Pratt spent time growing and testing potato varieties, and he developed the "Pride" potato variety. While working in Ithaca and in Arizona, Dr. Pratt's innovative research on the use of specialized irrigation techniques, spacing, and other cultural practices with peppers resulted in pepper yields that far exceeded what growers were normally achieving. He also did research throughout his career on irrigation,

plastic, and organic mulches for home gardens as well as for commercial vegetable crops. A particular research interest was finding a method to determine when a crop needed water. A common question was, and still is, "What is the best time of day to water vegetables?" His answer, "It makes little difference, just be sure you do it before the crops are damaged." Dr. Pratt liked to put into practice what he had learned from a career of teaching and research. For many years he grew potatoes on Mt. Pleasant, near Ithaca; and from 1968-74, he operated Perry City Farms, growing potatoes and vegetables for local markets and "U-Pick" customers.

His experience in farm operations and research procedures also took Dr. Pratt overseas. He served as a consultant on potatoes to the Tasmanian and Australian Departments of Agriculture, and he taught horticulture at the University of Liberia for more than a year. He taught for nearly two years in Jamaica, West Indies, on a U.S.A.I.D. assignment.

He is survived by his wife of sixty-three years, Terrace Pratt of Ithaca; a son, Dr. David Pratt of Davis, California; a daughter, Jean Washington of San Diego, California, and Thailand; and a daughter, Sarah Davis-King of Oroville, California. Surviving grandchildren are Michael and Bruce Pratt, Brian and Jeff Washington, Brian King, Wendy and Deborah Pratt, Laura Washington, Tamara Pulsts, and Melissa Hillis. Surviving great-grandchildren are David Washington, Amy and Karen Cucuvitch, and Geoff and Brennan Pratt.

Dr. Pratt was a man who enjoyed taking creative approaches to practical, applied problems. He loved his work and gave generously of himself to colleagues, family, and friends. His students kept in touch and visited him over many years. His personal and professional lives were woven together in an harmonious union. He was demanding of himself and tolerant of others; and will be remembered with respect and affection as a person of enterprise, integrity, and always good cheer.

Art thoroughly enjoyed his interaction with young people. Once, during the course of an interview, he was asked whether there was anything he would enjoy after having had a successful career as a teacher, researcher, and professor emeritus. He paused for a moment and simply replied, "I would love to hear from more of my past 4-H Club members and former Cornell students." It was typical of Dr. Pratt's generosity and interest in young people that he and Mrs. Pratt made a substantial contribution to establish the Vegetable Crops Graduate Student Fund endowment. This fund has grown over the years, and many graduate students have benefited from it, just as many young people benefited from knowing him.

W.C. Kelly, R.D. Sweet, L.D. Topoleski, E.E. Ewing

Dorothy M. Proud

April 10, 1904 — February 8, 1995

Miss Dorothy M. Proud was a native of Indiana, born into a close knit and caring farm family. She received her bachelor's degree from the Flora Stone Mather College of Western Reserve University in Cleveland, Ohio, majoring in Nutrition and Dietetics. After completing her undergraduate degree, she went to the Mayo Clinic to enter a training course for student dietitians.

Upon completion of the program, she was selected for the coveted position of Mayo Foundation Fellow. The fellowship provided her with the opportunity to work with Dr. Barboraka, a physician interested in the field of nutrition, at that time a singular opportunity for a young dietitian. During her time at the Mayo Clinic, Miss Proud was also a graduate student working towards a masters degree in Administrative Dietetics at the University of Minnesota. She received her degree in 1930, one of the early dietitians to obtain the degree, and was uniquely qualified to take her place in the profession.

Western Reserve University invited Miss Proud to return to the University and teach Foods and Nutrition. Following one year of teaching, she was invited to remain at Western University Hospital's Department of Dietetics with an appointment as the Assistant Director of the Department and Director of the Dietetic Internship Program. In the latter role, she was responsible for the planning and supervision of the courses prescribed by the American Dietetic Association for membership in the American Dietetic Association and recognition as a professional dietitian. These courses were taught by the members of the hospital administration and medical and surgical departments as well as the staff of the dietary department.

During her years at Western Reserve, she pioneered the program for dietetic interns to experience the application of the class materials in a planned rotation in the departments and services of the teaching hospital. She trained many of the future leaders who would direct the expansion of programs for dietetic interns in the following years.

Miss Proud joined the faculty of the Department of Institution Management in the College of Home Economics in 1942 as an Extension Specialist in Institution Management in Cornell Cooperative Extension. She was appointed Assistant Professor in 1946 and Associate Professor in 1949.

World War II brought many changes in the area of food and nutrition. To meet these needs, the New York State Food Commission was formed. The poor nutritional status of many migrants prompted the commission to provide

assistance to those living in migrant labor camps throughout the State. Miss Proud held the leadership position in this effort with only a small staff. They provided assistance in nutrition education and in integrating menu-planning, sanitary food service, storage and food purchasing in order to better the living conditions and health of the people. The day care centers in the labor camps were also a responsibility of the staff. Ration books were a way of life during the war years. Miss Proud and her staff went into factories and other work places to teach the use of the books and substitutes for rationed foods which might be available.

Miss Proud was a pioneer in the concept of a specialist in institution management in Cooperative Extension. At the end of the war, it was her assignment to provide help to community kitchens, located in churches, grange halls and summer camps. She was involved in planning the remodeling of buildings and facilities, the selection of food service equipment and efficient organization of the equipment. She developed both printed materials and visual aids to enhance the program. Many states requested her publications and her work received high acclaim. She later expanded her work to facilities for the school lunch program and the particular needs of nursing home kitchens. In 1969, Miss Proud received an award from the American Association of Home Appliance Manufacturers recognizing her use of technical knowledge in the development of educational programs.

During 1954 and 1955, Miss Proud participated in the AID program at Los Banos in the Philippines. She spent sabbatical leaves at the University of Wisconsin and the University of Washington, pursuing additional course work and research on facilities for quantity food preparation.

Miss Proud was a member of the American Dietetic Association, both State and local chapters, and the American Home Economics Association. She was active in community organizations, especially the Unitarian Church and the League of Women Voters. Programs for women and children were her primary concern. She was a strong supporter of the Women's Studies Program. Her home was open to many graduate students and new staff members and holidays were shared with students who were in Ithaca, including many foreign students.

Following her retirement, Miss Proud continued to maintain her home in Ithaca where she remained active in community affairs. She also traveled extensively. In 1980, she moved to Seattle to be nearer her family.

Many organizations benefited from Miss Proud's generosity. She endowed the Dorothy M. Proud Lectureship in the Division of Nutritional Sciences to bring outstanding members of the dietetics profession to Cornell to enrich the dietetics program. Many young dietitians learned the fundamentals of their profession from her and observed a professional with a strong work ethic and an understanding of the importance of integrity.

Mary E. Purchase

February 17, 1921 — March 6, 1990

Mary Purchase was a member of the Cornell faculty for twenty-eight years prior to her retirement in 1986. She came to Cornell in 1945 as a graduate student in chemistry, having earned the bachelor's degree from Eastern Michigan University in education and mathematics. After completing her masters degree, she was an instructor for three years in the Department of Household Economics and Management in the College of Home Economics. In 1951, she left Cornell to study and teach at Iowa State University, where she earned the Ph.D. degree in household equipment and chemistry in 1957.

After teaching in the Department of Home Management at the University of Tennessee for four years, she returned to Cornell in 1961 as an associate professor in the Department of Household Economics and Management. Upon the college's reorganization in 1969, she became a member of the faculty of the Department of Design and Environmental Analysis in the College of Human Ecology, where she served as graduate faculty representative and department extension leader. In 1973, Dr. Purchase was named professor. With the 1985 reorganization, Professor Purchase became a member of the Department of Textiles and Apparel and was named professor emerita the following year.

As a chemist and home economist, Mary Purchase used her scientific training in research, teaching, and extension in the interests of individuals and families. She was nationally known for her work in household equipment, detergency (particularly related to the phosphate ban), child-guard safety packaging of household products, consumer use of microwave ovens, metrication, and energy use. Teaching materials she developed provided sound and timely information to consumers on widely diverse topics, with particular attention to environmental issues and consumer products. Joint work with business and industry produced voluntary standards and educational materials.

Mary Purchase was active throughout her career on a variety of industry panels and boards. She was named to the Major Appliance Consumer Action Panel at its formation in 1970. This panel, composed of independent consumer specialists, represented consumers at the highest level in the appliance industry. She was also a member of the Technical Advisory Committee on Poison Prevention Packaging (Consumer Product Safety Division), the Evaluation Panel for the Center for Consumer Product Technology (National Bureau of Standards), and the Consumer Advisory Council of Underwriters' Laboratories.

She contributed to the profession of home economics in a wide variety of activities. She held district, state, and national offices in the American Home Economics Association and also served as a member of the editorial board of *Home Economics Research Journal*. She was also a member of the American Chemical Society, the American Association of Textile Chemists and Colorists, the American Association of University Professors, the American Association for the Advancement of Science, Omicron Nu, Sigma Delta Epsilon, Phi Kappa Phi, and the Society of Sigma Xi.

Recognition of Mary Purchase's achievements has taken several forms. In 1971, she was named a distinguished alumna of Iowa State University. In 1972, she received the Pacesetter Award for colleges, universities and research, given by the New York State Home Economics Association. In 1973, the Major Appliance Consumer Action Panel recognized her work in consumer education on appliance energy conservation. The American Home Economics Association named her one of 75 outstanding leaders in the profession in 1984. She was awarded the ASTM Award of Merit in 1986 and was named a fellow of the society, "in recognition of exceptional leadership, acute technical and editorial insights, and for diplomatic recommendations that brought together opposing points of view."

Colleagues, former students, and friends knew Professor Purchase for her scholarship, integrity, intellectual honesty and commitment. She demanded excellence of herself and stimulated her students to raise their own professional standards. For many she was a mentor in the development of their professional careers. She was active on many college and university committees, e.g. the University Academic Integrity Appeals Board, the Review and Procedures Committee, and the College Education Policies Committee.

Her interest in service to people was exemplified by her sabbatical leave in the developing countries of Sudan and Malawi in Africa. In the Sudan she taught home management at Ahfad University College in Khartoum and visited in both urban and villages homes to observe homemaking work and equipment. In Malawi she visited Chancellor College in Zomba where her work involved helping with a new design of a washing slab, and experimenting with insulated cookers and charcoal coolers, as well as lecturing in textiles and housing classes. She felt that there was much that home economists can do in developing countries to make life somewhat easier for women. She had hoped to continue her international work after retirement, but illness prevented such service.

Locally, she was a long time, active member of St. Paul's United Methodist Church where she served as lay leader and in a variety of leadership roles including Nominations, Council on Ministries, Administrative Board, and Finance. She was a member of the board of directors of the Wesley Foundation. Mary motivated others to become active in the church. She received strength from her faith and was respected by both clergy and laity. In addition to

the church, she was a member of the Cayuga Trails Club, participating actively in building and maintaining trails. She had a lifetime interest in sports and outdoor activities.

Professor Purchase had a deep commitment to home economics and human ecology. All of her activities and pursuits had a strong concern for human and social consequences. As the New York State Home Economics Association noted in presenting her with the Pacesetter Award, she was “a champion for consumers” and had “the gift of giving untiringly to her profession, to her job and to people.”

Betty Lewis, Mary Morrison, S. Kay Obendorf

Alexius Rachun

November 10, 1911 — October 20, 1990

Alexius Rachun was a professor of clinical medicine and a member of the staff of the University Health Services and the team physician for the university for thirty-one years before his retirement in 1978, when he became professor emeritus.

Alex was born in Brockton, Massachusetts of Lithuanian parentage. As a child he learned the Lithuanian language and became skilled in his ancestral folk dances, which he delighted in teaching to his younger sisters and a multitude of neighborhood children. He was always interested in athletics and participated actively in a variety of sports from his days in high school when he was the boxing champion of the school, to his later years, which featured a hole-in-one achieved at the Country Club of Ithaca in 1979.

His father died when Alex was 18, and as an elder brother Alex helped to provide for his father's absence. About that time, however, he was one of a number of the students in his high school who were selected for testing by a psychologist who was doing a study in the school system. The fellow found Al's performance so amazing that he called the school authorities to urge that Al be persuaded to go to college to study either journalism or medicine (rather odd alternatives, it would seem). No one in Alex's family had ever attended college, and funds were not easy to come by, but family and friends rallied around and contributed to make his education possible. He graduated from New York University with a bachelor's degree in 1936 and from the Long Island College of Medicine (now the SUNY Downstate Medical School) in 1940.

During these years he continued his imaginative extracurricular pursuits. He continued his love of dancing and performed occasionally on the stage in New York City, most memorably at the World's Fair of 1939. During summers he and a friend toured the Borscht Circuit in the Catskills as magicians and sleight-of-hand artists. On other occasions he sought adventure in travel, sometimes by prolonged bicycle trips and occasionally by "riding the rods" of freight trains.

Upon completing his internship at Brooklyn's Cumberland Hospital in 1942, Alex was commissioned as a First Lieutenant in the Medical Corps of the United States Navy and was assigned as a battalion surgeon with the First Beach Battalion from 1942 to 1946. This was harrowing duty as the unit participated in landings in Africa and, more particularly, in Italy, where at one point at Anzio he spent 17 consecutive days in a foxhole. He was discharged as Lt. Comdr. MC USNR.

Following his naval service, Alex took another year of residency at the Lowell General Hospital. He came to Ithaca to inquire about the possibility of establishing a general practice in town. He talked to Norm Moore who convinced him to join the University Health Services with the intent of developing a program in athletic medicine. Although this was not a field with which Alex was familiar, he learned quickly, largely on his own for this was not yet a specialty with any depth of clinical or scientific expertise. He immersed himself deeply in his work, seeking out consultants who could provide him with instruction and attending an eclectic series of post-graduate courses that would round out his skills in this new area of specialization. He gradually became a leader in the field.

He published several papers on sports injuries in various medical journals and was a frequent speaker at meetings and teaching sessions all over the country. He was recognized for his skills by his appointment to AMA's Committee on the Medical Aspects of Sports and he became the first chairman of its subcommittee on the classification of sports injuries. He was a founder and the first chairman of the Athletic Medicine section of the American College Health Association. For many years he led the teaching sessions on sports injuries that he originated for the annual meetings of the ACHA. These sessions continue to this day and are now entitled the Alexius Rachun Teaching Conferences.

And during all these years Alex continued as the team physician for the football and other sports teams at Cornell. In this role he not only made full use of his diagnostic and therapeutic skills, but he had a significant impact on many of the athletes far beyond their clinical or orthopedic problems. Bob Kane was always impressed with how the athletes would flock around Alex, particularly on road trips, to hear words of wisdom and even guidance from this kindly master. Indeed, a number of former athletes later expressed their thanks to Alex for guiding them to careers in medicine.

In spite of Alex's sincere dedication to the well-being of his charges, it wasn't always deadly serious. His sly sense of humor was always just below the surface. Old timers recall the occasion of his dead-pan announcement to the football players and staff before an important game that he was going to replace the usual pregame steak breakfast with an intravenous meal of cabbage soup. This is hard to believe now, but apparently the proposal was convincing enough so that some alarmed parents called the higher authorities of the university to find out what kind of foolishness that crazy doctor was up to now.

Upon retirement from the university, Alex joined the staff of the emergency department of the Tompkins Community Hospital and provided a valuable service to the community in this role for three years. He then filled the position as medical director of the Reconstruction Home until 1989.

Alex was a delightful and remarkable man. An absolutely straight shooter. Crusty but tender. Serious but with a light touch. Dedicated but with a broad perspective. A most natural and complete physician, who established an instant rapport with his patients, whether they were sturdy athletes or frightened young women or frail and confused senior citizens.

He leaves behind his wife, Addie, whom he met on a golf course fifty years ago and married shortly thereafter; his son, Alexander, of Trumansburg; two daughters, Priscilla Rachun Linn, of Arlington, Virginia and Elizabeth Maria Rachun, of Ames, Iowa; a brother; two sisters; five grandchildren; and numerous nieces and nephews. He also leaves behind a host of neighborhood children, for whom he was a favorite and most revered story teller.

Norman S. Moore, W. Jack Lewis, Allyn B. Ley

Efraim Racker

June 28, 1913 — September 9, 1991

Efraim Racker came to Cornell in 1966 as Albert Einstein Professor (one of six awarded by the State of New York) and Chairman of the Section of Biochemistry in the newly created Division of Biological Sciences. He was a key figure in the expansion of the Section at that time, bringing with him eight younger colleagues as faculty members. His brilliant research, and concern for developing a strong graduate research program for the Section were instrumental in setting the pattern for the breadth and strength Biochemistry (now Biochemistry, Molecular and Cell Biology) enjoys today. An example of Ef's efforts to strengthen the biochemistry graduate program at Cornell led him to hold an evening seminar program in which each student spoke on his own research. For the first ten years, or so, Ef only occasionally allowed other faculty members to attend and he constantly interrupted the students with questions about the presentation or research. The seminars are still held, now with all faculty invited but the primary advisor not allowed to speak, and are known as the Racker Seminars.

Ef Racker was born in Neu Sandez, Poland, and grew up in Vienna. He had natural artistic talent, and almost went to Art School. Instead, he decided on Medical School for his advanced training, graduating in 1938. Biochemistry, brain function and art had become major interests, and remained so for the rest of his life. He escaped to England as the Nazis moved in, and began work on energy metabolism of the brain at the Cardiff Mental Hospital. In 1941 he moved to the United States. After short stays at the University of Minnesota, and Harlem Hospital in New York City, he worked for eight years (as Instructor, then Assistant Professor of Microbiology) at the NYU School of Medicine. There he pursued his interest in energy metabolism and made the seminal discovery of a thioester high energy intermediate, a bond previously unknown in biology. During a short period at the Yale University School of Medicine he discovered the enzyme, transketolase. For the next twelve years he was Chief of the Division of Nutrition and Physiology at the Public Health Research Institute of the City of New York. During that time he mounted large programs dealing with the nature of mitochondrial oxidative phosphorylation, and control of energy metabolism in cancer cells. He discovered the enzyme of mitochondria responsible for making ATP (called F₁), and isolated several of its functional subunits. After moving to Cornell he developed and refined methods for tearing apart the membranes that accomplish oxidative phosphorylation, then putting their pieces back together in small lipid vesicles to restore the original activity. This resolution and reconstitution approach to understand the function of membrane enzymes was one of the most important contributions of Efs career, opening up an enormous field of research for others to follow and revolutionizing the field of membrane biochemistry. Ef worked

at the lab bench throughout his career, and a particularly dramatic experiment he did himself was the incorporation of bacteriorhodopsin, a bacterial proton pump driven by light, together with ATP synthase from beef hearts to form a chemiosmotic chimera, which used energy of light absorbed by the bacteriorhodopsin to synthesize ATP on the beef heart enzyme. This work is often cited as the final evidence supporting the chemiosmotic theory of energy coupling. Later, he returned to the study of the biochemical basis of cancerous growth. He had long emphasized that ATPase is necessary for glycolysis and proposed that in many transformed cells the high glycolytic rate is caused by an aberrant ATPase that normally transports sodium and potassium ions. He was studying the probable role of protein kinases in such a pathway when he died.

During his career Ef published about 500 research papers. In 1965 he wrote an advanced text titled *Mechanism in Bioenergetics* and then wrote completely new texts in this area in 1976 and 1985. He received numerous honors, including the National Medal of Science, honorary degrees from the Universities of Chicago and Rochester, and was elected to the National Academy of Sciences in 1966. He was a prolific reviewer of grant applications, and a tremendous advocate for bright young scientists. He was concerned about public understanding of the importance of science, and in 1979 wrote a collection of essays in support of basic research titled *Science and the Cure of Diseases: Letters to Members of Congress*. He had a passion for hearing about new advances in science, and kept abreast of many areas. Ef admired good critical thinking, and was not very tolerant of that which he considered sloppy reasoning; he was known for almost always asking the first, and usually the most penetrating questions, at seminars that he attended. He had many students, postdoctoral associates and visiting scientists in his laboratory over the years; but never ceased to work at the bench himself (including the very last day, at the end of which he was overcome with a fatal stroke).

There were many other facets to Ef Racker's life, besides a total dedication to good science. He had a warm, supportive family life and was a wonderful husband, father and grandfather. With sterling help from his wife, Franziska Racker, their house was the site of ever flowing hospitality for lab members and visiting friends, most often other scientists. Ef and Francis both formed deep friendships with scientists and artists from all over the world. He had a rich sense of humor, and was a source for many stories. Ef enjoyed physical activity, and was an ardent (and competitive) tennis and squash player for as long as he was able. But above all Ef remained an artist. He would work late at the laboratory, come home, have dinner, and paint for the rest of the evening. He had several, usually Impressionist derived styles, and was amazingly prolific. Many paintings were sold in benefit sales, including the Edsall fund, a fund used for interest-free short term loans to graduate students and postdocs

in the Section. Many other paintings were gifts to departing students or visiting colleagues. Prior to a student's leaving, there was a small ceremony in which a choice had to be made between about 50 paintings available at that particular moment. There are Ef Racker paintings all over the world, in scientific institutions and in the homes of scientists. Together with the monumental scientific output, they will help keep his memory warm for all who knew him.

Andre T. Jagendorf, June Fessenden MacDonald, Peter C. Hinkle

Robert L. Raimon

September 29, 1923 — August 31, 1995

Robert L. Raimon is remembered by his colleagues and the students he taught at the School of Industrial and Labor Relations as a labor economist whose policy interests and surpassing intellect combined to provoke both thought and argument. Students who took his courses regarded them as quite demanding, yet he received high marks from them for his stimulation of independent thought, the lucidity of his exposition, and his refined sense of humor. One student, who later became a professor of economics himself, regarded Bob as “... a wonderful teacher, both caring and fair.” Another has the following memory:

His classes, as I remember them, had a deceptively simple format. They would typically begin with Bob talking about a current issue in the news that related to the labor market. . . . Somehow, once Bob had formulated the issue, the remainder of the next hour would pass rapidly, painlessly and, in some cases even joyfully, as the class debated among themselves and with Bob's alternative views about the effectiveness of public policies. . . . Only after the session was over was it apparent that the discussion had been used to teach principles of economics in general and labor economics in particular. . . . Anyone who has ever tried to teach will recognize the remarkable accomplishment of making students active participants in the learning process rather than recipients of revealed truth.

Like many of his generation, Bob's undergraduate education, which began at Brooklyn College in 1941, was interrupted by World War II. He suffered a near-fatal neck wound during combat in the Pacific, but was able to finish his Bachelor of Science degree at Columbia by 1947. He immediately enrolled as a graduate student in the recently-opened School of Industrial and Labor Relations at Cornell, and he never left. His Ph.D. degree was awarded in 1951, the year of his engagement as an Assistant Professor by the School, and he immediately assumed primary responsibility for teaching required courses in labor economics, economic security, and corporate finance. He also taught several intermediate and advanced courses and seminars, and was often called upon to conduct courses in the School's off-campus programs (an activity he valued as a source of “real world” case materials for his on-campus courses).

During the 1950s and 1960s, when the field of labor economics was moving from an institutional focus to a more theoretical one—and from case studies to more general tests of hypotheses—Bob's works were among those that provided a “bridge.” His analyses of wage data and wage dispersion, for example, combined a theorist's rigor with the institutionalist's attention to real-world detail—a combination that was then quite rare but has recently become prominent. Similarly, he also wrote on such other now-fashionable topics as labor-management cooperation, international competition, and migration flows. Not surprisingly, his skills as an applied economist

were in demand by the private and public sectors, and he produced reports on railroad ratemaking, a shorter workweek in automobile manufacturing, plant location decisions, and the future of oil prices.

Sadly, Bob's formal career was ended by an automobile accident in 1969 that left him paralyzed below the waist. Unable to maintain both his required regimen of exercise and his high standards of teaching, research, and service to the University, Bob reluctantly chose to retire in 1974. After his appointment as Professor Emeritus, he served the School until 1989 as a member of the editorial board of the *Industrial and Labor Relations Review*.

Despite his premature retirement, Bob continued to be an epitome of the intellectual. He read both widely and deeply, was tireless in his quest for information, eager for debate, and dogged in his demand for logical argument on the part of himself and anyone brave (or foolish) enough to take an opposing view. He knew good research—and a good research topic—when he saw it, and he remained invaluable as a critic and as a source of ideas to his colleagues until his death.

For those who knew him, Bob will be remembered most poignantly for his strength: most assuredly for the strength of his intellect, but perhaps more dominantly for the strength of character that permitted him to cope with extreme adversity, the strength of idealism that fueled his interest in public policy, and the strength of love and concern for his children, Daniel, Eve, Martha, David and Jon Charles.

Ronald Ehrenberg, John Windmuller, Robert Smith

Richard M. Ramin

November 22, 1929 — May 27, 1995

Richard M. Ramin, 65, who served as Vice President for Public Affairs at Cornell University for 24 years and as a member of the Cornell staff for 41, died peacefully and surrounded by his family on Saturday, May 27, 1995 at the University of Pittsburgh Medical Center, Presbyterian University Hospital. He died of pulmonary fibrosis.

A memorial service was held for Dick on Sunday, June 18, 1995 in Sage Chapel on the Cornell University campus. The overflowing crowd of mourners attested to the words of President Frank H.T. Rhodes:

The secret of Dick's extraordinary success is not to be found, I believe, in superior fund-raising technique or organizational structure, important as both things no doubt are. The secret lay rather in two qualities Dick embodied: his unwavering conviction of the transforming value of a Cornell education and his endless capacity for friendship. Dick knew everyone and everyone knew Dick. He was first a friend-raiser and a trust builder: the fund-raising followed. His friendship enriched us all too brief a while.

Richard M. Ramin was born in Williamsport, Pennsylvania, on November 22, 1929. He was the son of Richard and Florence Ramin. Dick was a starting player for his high school football team, the Williamsport High School Millionaires, and in 1946 was named a lineman for the Pennsylvania All-State Team.

Ramin was a 1951 graduate of Cornell's College of Arts and Sciences. While an undergraduate, he was co-captain, with Rip Haley, of the freshman football team and was a starter on the varsity football team from 1948-50, a time when the team won two Ivy League titles. As a student at Cornell, Dick majored in political science. He was a member of Delta Kappa Epsilon fraternity and the Sphinx Head honorary society.

After graduation, Dick served in the U.S. Army for two years as a First Lieutenant. He was then employed as a Cruise Director for the Holland-American Steamship Lines. Ramin joined the Cornell administration in 1954 as an Alumni Field Secretary. In 1956, he became an Assistant Director of Admissions, a position he held until 1959, when he was appointed an Associate Director of Development. From 1964-71, he worked as the Director of Development and in 1970 also became Assistant Vice President for Public Affairs. He participated in the Graduate School of Business and Public Administration's (B&PA) Executive Development Program in 1968. Speaking of Ramin's accomplishments as Director of Development, President Dale Corson said, "under Dick Ramin's guidance, Cornell's record in fund-raising has been unsurpassed by any educational institution in the United States."

In 1971, President Corson named Ramin to the post of Vice President for Public Affairs, in charge of departments responsible for Alumni Affairs, Alumni Systems and Gift Services, University Development, the University Council, the Trust Office, Office of University Events, college and unit Public Affairs offices and a network of ten regional offices, including International Alumni Affairs. For the past 24 years, Dick served in that position with great pride and distinction. During his tenure, the Cornell University Council and the University's Regional Public Affairs Offices were established—two precedent-setting achievements—and three major capital campaigns took place.

Under Ramin's leadership the Corneirs Centennial Campaign was successfully completed at \$73.2 million in 1965, and he had responsibility for the Cornell Campaign, completed in 1980 for \$250 million. Dick spearheaded Cornell's \$1.25 billion Capital Campaign, begun in 1991 and successfully completed in 1995. "Cornell never had a more devoted alumnus, nor I a more steadfast friend, than Dick Ramin," said President Rhodes. "He lived and breathed Cornell. He was a superb fund-raiser: his work will live on in the remarkable benefits that the present \$1.25 billion campaign will contribute to the future strength of the university he loved so much."

Robert V. Tishman (Cornell A.B. 37) reflected the thoughts of many alumni and friends when he said of Dick Ramin: "He was creative, knowledgeable, and the results of what I have done [for Cornell] under his guidance are among the most rewarding I have experienced. Behind that easy country-boy approach was a very sharp mind. I will miss him."

While serving as a Cornell administrator, Ramin was a member of the Board of Managers of Willard Straight Hall, the student union (1956-58) and a member of the Straight Board of Governors (1958-60). He was faculty advisor to Delta Kappa Epsilon social fraternity from 1956-59 and a member of the University's National Scholarship Committee during that same time. He also served as a member of the University's Administrative Systems Planning and Control Committee and was a member of the American Alumni Council (AAC) and the American College Public Relations Association (ACPRA).

In 1956, Dick married Frances Anthony of Penn Yann (Cornell A.M. '52), who was then employed in the Program Department of Willard Straight Hall. In all his activities, his wife Fran was a devoted and enthusiastic partner. In September 1960, Dick and Fran's first child, Robert Anthony was born, and in 1963, their daughter, Nancy Alice was born. Bob married Denise DeConcini in 1985. They have two children, Margaret Alice and Daniel Anthony. Nancy married Lawrence Dalton in 1987. They have a daughter, Christine Alice. Over the years, Dick enjoyed attending the children's school functions, traveling, cooking Sunday morning brunches, boating, barbecuing at

the cottage, playing with his grandchildren, winning at “The Poker Group,” listening to jazz, playing the boom bass, and relaxing with those he loved.

In Ithaca, Ramin was a member of the Tompkins County Chamber of Commerce, a deacon of the First Congregational Church, a member of the YMCA Board of Directors, and was active in Explorer scouting and the United Way.

Harvey Sampson, one of Dick’s closest companions for 48 years, remarked at Dick’s memorial service: “Dick was a very special person. He was modest and unassuming about his accomplishments, which were many and substantial. He was never boastful, nor did he do anything with fanfare or to promote himself. He always praised and gave credit to others.” Cornell is a better place because of Dick Ramin’s hard work and dedication to supporting its mission. He will be remembered fondly by those who worked for and with him, for his integrity, his kindness and compassion, his unswerving friendship, his gentle manner, the twinkle in his eye, and his pride in Cornell University and its potential.

Dale Corson, Walter Lynn, James Maas

William C. Rebhun

July 24, 1947 — March 24, 1999

Cornell University and the College of Veterinary Medicine occupied the majority of Bill's professional life. As a faculty member in the College of Veterinary Medicine from 1977-99, he rose through the professional ranks. From 1985-88, he served as head of the Large Animal Clinic. Bill was board certified as a Diplomate in both the American College of Veterinary Ophthalmologists and the American College of Veterinary Internal Medicine.

Prior to his faculty appointment, Bill was in private mixed veterinary practice in Troy, New York, from 1974-77, and in Delmar, New York, from 1971-74. His college days were spent at Cornell's New York State Veterinary College from 1967-71 and the New York State College of Agriculture from 1965 -67.

Bill was President of the Capital District Veterinary Group in 1973 and President of the New York Southern Tier Veterinary Medical Association from 1982-83. His professional associations included the American Veterinary Medical Association, American Society of Veterinary Ophthalmologists, American Association of Bovine Practitioners, American College of Veterinary Ophthalmologists, American College of Veterinary Internal Medicine, and the New York State Veterinary Medical Society.

Although a tireless clinician first, Bill still authored or co-authored 107 scientific manuscripts, 20 textbook chapters, and a textbook entitled, *Diseases of Dairy Cattle*, published by Williams and Wilkins, Baltimore and Philadelphia in 1995. He was a respected reviewer and editor of scientific manuscripts for a variety of journals with topics from equine and bovine medicine to ophthalmology. He gave countless seminars at national and international veterinary meetings as he was a well-respected and immensely popular speaker.

Both the regional and state veterinary medical societies honored Bill by presenting him with the award of Outstanding Service to Veterinary Medicine. These awards honored Bill for his contributions in education, research, and practice.

Since his appointment to the faculty at the College of Veterinary Medicine in 1977, over 2,000 graduate veterinarians from Cornell University were influenced by his unique teaching personality, thousands more in veterinary medicine have benefited by his publications, invited presentations, seminars, and continuing education programs. His practical, no-nonsense approach to the diagnosis and treatment of clinical problems, particularly

of dairy cattle, was a wonderful, almost mystical phenomenon. His ability to combine the science and artistry of medical practice was held in awe, if not envy, by many.

Bill was a competitive individual who worked extremely hard and played hard. His presence was commanding, comforting, candid, often passionate, and always appreciated. He had a remarkable gift for accurately recalling and relaying experiences. He had a prodigious and exact memory, and candid uncompromising honesty. These qualities were evident in his relationships, professionally and recreationally. He was entertaining in a wide spectrum of situations. These traits were also evident in his classroom. Bill was quick to use past situations and cases, both good and bad, as teaching material. He was quick to use mistakes he had made or witnessed to emphasize a point. Bill respected the opinion of others and relished the academic exchanges with colleagues. He was opinionated and passionate when expressing his own ideas. He admired and respected the talented individuals around him and held his head high and his mind open, always striving to learn — even in his final months.

Bill had a tremendous impact on many individuals but a group that was especially important to him were the residents in medicine, ophthalmology, and surgery. He spent time with them, nurtured them, celebrated their successes and commiserated when they failed. He touched their lives in a way that only a mentor can. Bill also held a special place in the hearts of the staff and technicians who worked with him. He treated them with respect and valued their efforts and their opinions. Bill was loved and respected by students, past and present, and served as a role model for hundreds of the veterinary students whom he taught in lecture, laboratory, and one-on-one in the teaching hospital. Countless clients and farmers in New York and neighboring areas have been devastated by losing such a talented and devoted veterinarian and friend.

Bill was as active with non-academic interests as with academe. He was not a spectator but an active participant in numerous sports, particularly softball. A rugged individualist, he was also a true outdoorsman and an avid hunter.

Bill is survived by his wife, Bridget Barry; son, Rob; daughter, April; and grandson, Zach. His professional influence lives on, especially in the minds of his colleagues, the 18 large animal medicine residents, 9 ophthalmology and numerous surgery residents who spent formative, unforgettable years in training under Dr. Rebhun, Bill, Boom, or “the Chief.”

He will be deeply missed and remembered by all his colleagues, clients, and friends as a warm and caring person who touched the lives of many people and their animals.

“The cow is the foster mother of the human race. From the day of the ancient Hindoo to this time have the thoughts of men turned to this kindly and beneficent creature as one of the chief sustaining forces of human life.”

W.D. Hoard, Founder of Hoard’s Dairyman, Copyright 1925, by W.D. Hoard and Sons, Co.

Susan Fubini, Ronald Riis, Eric Trotter

Helen J. Recknagel

September 6, 1910 — November 19, 1992

Helen J. Recknagel, a member of the University Faculty for over thirty years, is best remembered for her remarkable effort and success in founding, then editing for fifteen years, the Hotel School's quarterly magazine, until recently the only academic journal in the field. In addition, Helen was the first woman faculty member in the Department and the first woman to gain tenure.

Helen was born on September 6, 1910, in Stratford, Oklahoma, and occasionally commented—always with great pride—on her Cherokee ancestry. She attended the public schools in Ardmore, Oklahoma and graduated from Oklahoma State University with a Bachelor of Science degree, in 1932. She continued her education at the University of Chicago (M.B.A., 1937) and New York University (Ph.D., 1953). Early employment included positions with Standard Oil of Indiana and the National Association of Manufacturers as well as an appointment as assistant professor at the University of Tulsa.

Helen joined the Department of Hotel Administration, then a division of the School of Home Economics, in February 1943 to teach business communications—then little more than secretarial courses. From this beginning she began to offer a variety of technical writing classes, not only for the women students, but to enhance the managerial skills of all “Hotelies.” During these early years Helen's research involved studying the role of professional women in the workplace. Among other projects, she conducted research with the Hotel Sales Management Association and worked for such organizations as Hilton Hotels. Too, she took an active service role with New York State Cooperative Extension and was a national officer of two business fraternities, serving as president of Sigma Alpha Sigma in the mid 1950s.

Without question, it is Helen's legacy at *The Cornell Hotel and Restaurant Administration Quarterly* which is most remarkable and for which she will ever be remembered. In 1960 Dean Meek decided to establish a journal to serve the hotel and restaurant industries and to provide an outlet for faculty writing and research. But the School needed someone to take on its leadership. There was only one logical choice: Helen Recknagel was selected, not only to determine the necessary logistics but to serve as its first editor, a position in which she continued for more than 15 years and for 65 issues. In this capacity, she dealt not only with all the faculty and other academics but, perhaps to her male colleagues' chagrin, with more industry executives than most if not all of them.

Her successor as editor, Paul Beals, recalled working with Helen: “It is impossible to be timid or bland in writing about Helen Johnson Recknagel. Helen had her own perspective, her own firmly held view of persons, of events, and of our industry in general. You may not have agreed with Helen or fully comprehended, but you knew where she stood. Pride, dignity, aplomb, and no small measure of grit characterized her. Surely *The Quarterly* would not have survived to be what it is today without Helen’s distinctive qualities.”

In addition to the magazine, Helen produced a number of manuals and two books during her editorship. One of these, *Marketing for a Full House*, written with C. DeWitt Coffman, became the seminal marketing handbook for the industry and still is in demand more than thirty years later. The book evolved out of a business communication class which had adopted a sales and marketing theme. Few remember that she was instrumental in adding sales and marketing courses to the School curriculum and finding the industry practitioners to teach the first several terms; the field has grown to be among the most popular in the School.

Stories abound about Helen’s forceful leadership. She was a part of everything in and about Statler Hall. She took many junior faculty members under her wing and counseled—even cajoled—them as they made their career decisions. She eagerly met with international visitors, especially the participants in the Hotel School’s “Summer School/’ as the week-long professional seminars were generally known for several decades. At an early picnic at Taughannock Park she fearlessly took her turn in a faculty-student softball game and was involved in a bone-jarring collision during a run-down between first and second base. Helen threw herself headlong into everything she did, and she accomplished so much.

When she retired in 1976, Helen was named professor emerita. She continued to live in Ithaca until her death on November 19, 1992. Her husband, Arthur B. Recknagel, had died thirty years earlier. Helen Recknagel is survived by a daughter and son-in-law, Carol I. and Earl B. Neigh, Jr., of Ithaca; two grandsons, Robert Neigh of Tupper Lake and Phillip Neigh of Ithaca; two nephews; and several great nieces and nephews. Countless others around the world, hotel and restaurant and tourism professionals especially, will always remember Helen for her myriad contributions to the School and to the hospitality industry.

Robert M. Chase, Glenn Withiam, Richard H. Penner

Hazel E. Reed

June 7, 1907 — January 4, 1997

Professor Emerita Hazel E. Reed joined the College of Home Economics faculty in 1949 as Associate Professor in Cooperative Extension work and an Assistant State Leader of home demonstration agents. Throughout her career at Cornell University, she provided strong leadership to community leaders and professional home economics educators in all counties across the state. She encouraged the development of innovative home economics programs at statewide and local levels, established a supervised professional development experience for extension home economists assuming program leadership positions, and chaired a task force whose deliberations led to new opportunities for extension to contribute to the quality of living for children and families and to expand programs emanating from the college to a growing audience. Her experience statewide as well as a love for travel provided her with important perspectives on how different cultures dealt with social concerns. She retired as Assistant Director of Extension and full Professor in 1967.

Professor Reed was born June 7, 1907 in Savannah, New York, the only child of Albert and Bertha Evans Reed. Valedictorian of the 1926 high school class, she received her Baccalaureate degree from Cornell and her Master's degree from Michigan State. After a seven-year career teaching home economics at Oswego High School, she held several key professional positions with Cooperative Extension in Monroe and Oneida Counties and in the City of Syracuse prior to joining the Cornell faculty and College of Human Economics administration in 1949. She became an Associate State Leader in 1954; Professor in Extension in 1962; State Leader in 1965 and Assistant Director in 1966. She witnessed major changes at the university, the college and Cooperative Extension during her tenure and in the years following retirement. The College of Human Ecology (nee home economics), was still in Comstock Hall when she was a student, its small size creating an atmosphere of close camaraderie among professors and students. Martha Van Rensselaer and Flora Rose were co-directors at the time. At her 50th reunion, Hazel Reed reflected upon the 25 year old discipline she had studied as an undergraduate and that her 50th reunion marked twice the number of years the college was old when she entered: "No wonder there are changes".

Professor Reed was a role model for Cooperative Extension staff and college colleagues; she demonstrated and encouraged commitment to educational excellence. She represented Cooperative Extension to the (then) Bureau of Home Economics in the State Education Department, and consulted on a statewide study of adult education programs in home economics. Acting as Extension Administration's official representative to the New York State

Nutrition Council, she also held leadership positions in the Council as vice-president, institute program chair and policies committee chair. Through responsibilities such as these she persisted in interpreting and communicating home economics extension programs to many people outside of the immediate extension family.

Her commitment to the Cooperative Extension system and the people of the state did not keep her from assuming responsibilities in the broader college and university community. College committee work (related to Cooperative Extension) included educational, extension studies and television policies, health and safety, inservice education and farm and home week. She served on the college's nominations and elections and institute committees and chaired the ad hoc College Study Name and Focus Committee that resulted in the change in name to the College of Human Ecology in 1969.

Her professional affiliations included: American Home Economics Association; Adult Education Association; Epsilon Sigma Phi; New York State Association of Extension Home Economists; Omicron Nu; Phi Kappa Phi; and Pi Lambda Theta. During her period of affiliation, she held district, state, and national elective offices. Among these positions were: chair, Extension Service section, American Home Economics Association; national recognition as an outstanding home demonstration agent in New York State; vice-president and president of the New York State Home Economics Association; and president, New York State Home Demonstration Agents Association. Although names of several of these have changed, Miss Reed remained committed to their missions and goals.

Throughout her life, Hazel Reed maintained a strong interest in Cornell activities and a commitment to the university's philosophy of extension and outreach. She was interested in the new directions of Cooperative Extension and a major supporter of the Human Ecology Endowed Family Policy Professorship in Extension. She established a trust to develop the professorship and to support the Herbert F. Johnson Museum of Art, Laboratory of Ornithology, the Cornell Plantations, the Cornell University Library Associates and the Fund for Quality Concerts. Professor Reed also made a testamentary commitment to Cornell by participating in the 1993 taping of the Planned Giving Video, "Close Ties".

She worked diligently to continue interaction with former colleagues and friends and to support many interests in the Ithaca community. Following retirement, she took an active part in the Tompkins County Hospital (now Cayuga Medical Center) auxiliary board and its volunteer staff, and the Friends of the Library Board, chairing its annual book sale. She was a member of the First Congregational Church, the Cornell Campus Club, Cornell Women's Club, and Tompkins County Senior Citizens. The concert series and lectures at Cornell and Ithaca College, as well as opera, local theater, bridge and dinners with friends were among the many social activities she

enjoyed. Traveling was a particular passion; she delighted in the many foreign and domestic sites she had visited. She loved returning to Ithaca as much to her roots, friends, and colleagues.

We, her friends and colleagues, miss her. She was a true professional, mentor, and a caring, gracious friend.

Lucinda A. Noble, Ethel W. Samson, Bettie Lee Yerka

William Woodland Reeder

March 26, 1911 — April 2, 1999

William Woodland Reeder, Professor of Rural Sociology, Emeritus, served as a member of the Cornell faculty from 1949-76. His lifelong passion was delving into the beliefs, disbeliefs, and social actions that he felt were the essential determinants of why individuals and groups behave as they do. He passed away on April 2, 1999 in Logan, Utah, his home after retirement from Cornell.

After his birth in Robin, Idaho, on March 26, 1911, his family moved to Brigham City, Utah, where he grew up on a dairy farm. There he learned the values of hard work and commitment to rigorous schedules and came to appreciate the importance of an education. After high school, he attended Utah State University where he completed a B.S. degree in Sociology in 1935 and a Master's degree in 1937. In 1939, he enrolled at Cornell University to pursue a Ph.D. degree program in Rural Sociology.

When military service loomed, with the outbreak of World War II, he was accepted in officers' training in the Army. As he completed his training, he had an opportunity to join the Army's Morale Research Division. Bill was one of the designers of the extensive study of the dimensions of morale among American soldiers in the European theater. His assignments required research in England, France and Germany. This opportunity launched his career pursuits in studies in human behavior.

Following release from the Army, he served as an Instructor in the Department of Sociology at Utah State University for a short period, then returned to Cornell to finish his Ph.D. dissertation. He taught for a few months at the Pennsylvania State University when he was offered a position as Assistant Professor in the Department of Rural Sociology at Cornell. Bill's mentors at Cornell were Dwight Sanderson, W.A. Anderson, Leonard S. Cottrell, Jr., Robert A. Polson and Olaf F. Larson, successive heads of the department. Professor Cottrell counseled Bill when he first joined the faculty as an Assistant Professor, thus, "When I tell people I am a sociologist they reply, 'What do you do with that discipline?' I would like you to stress its useful application in all of your teaching and research. Remember, the sky is the limit." Bill took that counsel to heart and dedicated his career to teaching both undergraduate and graduate students how to use theory and principles in improving their quality of life as individuals and in their service to families, organizations and communities.

Professor Reeder had an easy-going manner that was engaging to his students and colleagues, yet they sensed depth and earnestness in his warm, friendly style of teaching and service. He rose through the ranks to become a

full Professor. His popular courses on “Determinants of Successful Leadership” and “Community Development” attracted numerous undergraduate and graduate students. Throughout his career, he was continuously involved in conducting research aimed at testing his theories about the fundamental influences of beliefs and values as important determinants of behavior and social action. His long list of publications has added significant dimensions to the body of literature in this arena. He was also a member of the Rural Sociological Society.

In 1967, Professor Reeder filled a special assignment for his department when he traveled around the world to interview former graduate students to assess the quality and value of the training they had received and of the professional applications that they were making of that training. A report, “The Transferability of North American Rural Sociological Training to Other Cultures and Other Societies,” was prepared.

Professor Reeder long-practiced the principles that he taught. He was actively involved in the Ithaca community. He was a board member of Cornell United Religious Work, the South Side Community Center and the Bryant Park Civic Association. In his church affiliation, he served as Counselor in the Eastern States Mission of the Mormon Church for eleven years. He served as President of the Ithaca Branch and as Patriarch of the Ithaca, New York Stake.

After his retirement in 1976, the Reeder family moved to Logan, Utah. There he became affiliated with the Department of Sociology at Utah State University and was active in community affairs and served as a teacher and Patriarch in his church. In his retirement years, he loved to pore over his research findings on the “Determinants of Morale Among American Soldiers.”

Bill’s life was a rich legacy of love for teaching, for his family, for community service, for his church callings, and for his Maker. He is survived by his wife, Letty; and their four children: Kathleen, Claudia, Douglas, and Kimberly.

Eugene C. Erickson, Olaf F. Larson, Harold Capener

Charles Glenwood Rickard

May 4, 1922 — October 20, 1993

Professor Emeritus Charles G. Rickard, 71, of 1234 Ellis Hollow Road, died Wednesday, October 20, 1993 at his home.

He was born on May 4, 1922 on a farm near Cairo, Hall County, Nebraska, where he spent his early years in farming activities. His family moved several times, eventually settling in Ithaca, New York. On June 10, 1943 he married Florence Mae Gates of Hamilton, New York.

After having completed the pre-veterinary collegiate requirements at Franklin and Marshall College, he matriculated in the New York State College of Veterinary Medicine at Cornell University, and was awarded a D.V.M. (Doctor of Veterinary Medicine) degree in 1943. He practiced veterinary medicine for two years at Catskill, New York. Then, after having been admitted to study in the Graduate School at Cornell, he was awarded a M.S. degree in Microbiology in 1946. At that time, he was appointed as Assistant Professor in the Department of Pathology of the College of Veterinary Medicine where he established the first Clinical Pathology Laboratory at that institution.

After four years as Assistant Professor and then as Associate Professor of Clinical Pathology, he was appointed Professor of Pathology, a title he held until his retirement in 1985.

His first sabbatic leave (1952-53) contributed to his meeting the requirements for a Ph.D. degree, which he received in 1957. It was spent at the Medical College, University of Michigan, studying pathological aspects of liver disease under Dr. C.V. Weller, a preeminent pathologist. The title of his thesis was "Liver Cell Dissociation". He was elected a Diplomate of the American College of Veterinary Pathologists in 1953.

His second sabbatic leave (1960-61) was spent in Tubingen, West Germany, at the Federal Research Institute for Virus Diseases of Animals, where he studied electron microscopy of virus-induced diseases in collaboration with Dr. Eva Reczko, an internationally recognized scientist.

Dr. Rickard was involved in diverse activities at the College of Veterinary Medicine. He served as Chairman of the Pathology Department from 1965 to 1973, as Acting Chairman of the Department of Microbiology, as Associate Dean for 15 years (1969-84), and as Acting Dean for one year immediately prior to his retirement.

He was Professor of Aquatic Animal Medicine from 1980 to 1984, and co-founder with Dr. Donald A. Abt of the University of Pennsylvania of “Aquavet”, a teaching program in aquatic animal medicine. The program involved collaboration with scientists at the Woods Hole Marine Biological Laboratory in Massachusetts. This initial venture predated the expansion of the Department of Avian Diseases and its re-naming as the Department of Avian and Aquatic Animal Medicine in the College of Veterinary Medicine.

In 1962, Dr. Rickard established the Oncology Laboratory for Cancer Research. From 1965 to 1976 he was Principal Investigator for research projects on feline and canine leukemia, largely supported by federal grants and contracts. One contract, supported entirely by funding from the National Cancer Institute, called for the design, construction, staffing and operation of a splendid, biohazard-safe laboratory building on off-campus land opposite the P. Philip Levine Laboratory for Poultry Disease Research on Hungerford Hill. His research involved viral induction of leukemias and sarcomas, characterization of tumor-producing viruses, and chemicals that interact to produce cancer.

He served during 1981-87 as the College’s veterinary representative in a U.S. consortium which assisted in establishing a modern veterinary college at the King Faisal University in Saudi Arabia.

He had extensive involvement in the Veterinary College’s capital projects during his last fifteen years there, including the Veterinary Research Tower and the master plan for the present building program.

Dr. Rickard was actively involved in the design and operation of a biohazard-controlled facility for the study of equine infectious anemia, a disease of enormous importance to the horse racing sport, and two other major research programs involving horses. One, a program to study equine bone and joint diseases in collaboration with the College of Agriculture and Life Sciences, required readaption of the Warren Farm to construct a model harness racing track for experimental physiological studies. The other required a specialized staff of pharmacologists and facilities for research and monitoring of drug interventions in race horses.

The New York State Veterinary Medical Society awarded him the status of Distinguished Member, and in 1989 named him Veterinary Educator of the Year. He enjoyed membership in a large number of scientific societies and professional organizations, including the Societies of Sigma Xi and Phi Kappa Phi. In addition, he was elected to membership in the Society of Phi Zeta, the “Phi Beta Kappa” of veterinary medicine.

A careful and positive thinker, always sensitive to another point of view, never condescending and consistently optimistic, Dr. Rickard had a low-key and confidence-inspiring manner. His eloquent speech, his sterling integrity,

and his calmly persuasive manner were qualities that, along with his tall, strong physique made him a giant, indeed, among visionary, scholarly academic leaders. He was considered a genius by some, and admired for being a most patient teacher. He was a magnificent Cornellian whose impact upon the institution and the students he served will remain with them always.

An important avocational interest in Dr. Rickard's life was sailing his sloop, "Cricket". His sailboat, in turn, spawned his interest in and commitment to the United States Power Squadron (U.S.P.S.), an organization committed to teaching boating and boating safety, which consumed much of his retirement before and even after he became ill. He joined the U.S.P.S. in April 1976 and quickly rose through the ranks to become the Commander of the Ithaca Power Squadron for two years before he went on to become a Lieutenant Commander in New York's District 6. He was next in line to become the District Commander when his illness interrupted his boating career. All during his career in the U.S.P.S., he taught several courses every year and won the District Award for Excellence in Teaching in 1990 for his devotion to and active participation in more than 10 years of teaching boating. He is one of the few locally to have attained the designation of N, which signifies that he not only attained the highest possible rank in the U.S.P.S., but also that he took all of the courses available. He was rightfully proud of his "Full Certificate" classification.

Dr. Rickard is survived by his wife of fifty years; sisters, Mrs. Shirley Caplan and Mrs. Janice Stahr, both of Seattle; sons, Charles G. Rickard III of San Diego, David B. Rickard of Minneapolis, and Andrew W. Rickard of Burlington, Vermont; daughters, Jean (Mrs. Kenneth Sill) of Mendon, New York, and Claire (Mrs. George Whitcomb) of Orlando, Florida; and six grandchildren.

John M. King, Robert W. Kirk, George C. Poppensiek

Blanchard Livingstone Rideout

April 28, 1906 — December 3, 1993

“I came to Cornell in 1933 in the middle of the Depression. My salary was \$1,350 per year and I taught eighteen hours. One of my early students, Anna Louise Roehrig, got the highest grade I ever gave. She became my wife soon after.” These words written by Blanchard Rideout in a charming, light hearted letter he sent a friend shortly before his death, could be the beginning of the Cornell biography of a man who in the next sixty years was to grace us all with his presence and until 1971, serve the University in more diverse ways than probably any other individual in its modern history.

Blanchard, who was born in Johannesburg, South Africa, received an A.B. degree in 1927, magna cum laude, from Harvard College, the A.M. degree from Harvard University in 1930, and the Ph.D. degree in 1936 from Cornell. He came to Cornell in 1933 after teaching French Language and Literature at the University of Vermont, Harvard, Radcliffe, and the University of Rochester. While he is remembered by his students as a lively and devoted teacher, it is his many services as a gifted and innovative administrator that gave him a place in the University’s history. A series of deans and especially Presidents soon became aware of his talents and he was asked over the years to undertake a host of University-wide administrative tasks, including Assistant Dean and Director of the Navy V-12 Program, chairman of the committee on Admissions for the College of Arts and Sciences, and founding director of the Division of Unclassified Students (DUS). In this respect, his enthusiastic promotion and dedicated leadership of DUS was both typical and outstanding. It was his conception and that of the Division that scores of students would find themselves every year having selected and been admitted to the college at Cornell that was not right for them, yet unable to transfer at once to the new college of their choice. DUS offered them the transitional opportunity to remain at Cornell, change curriculum and prove their admissibility into that second college. Hundreds of students, now loyal Cornell alumni, will attest that Blanchard helped them in this way through a difficult transition in their lives, and in effect saved them for Cornell.

From 1962 to 1965, Blanchard was also the founder and Project Director of Peace Corps Training Programs at Cornell. Finally, in 1966, he was appointed as Secretary of the University and occupied this position until his retirement in 1971, when he became Professor of Romance Studies Emeritus. He also served for twenty years as University Marshal and as such led the yearly Commencement procession and presided over the ceremony including calling out the names (many of them with a distinctly exotic flavor) of all the Ph.D. candidates. What struck observers of these activities was Blanchard’s unflappable authority and control.

During his life he received many honors including being named to Phi Beta Kappa, Phi Kappa Phi, and many other honorary societies. He also served as director of the Sweet Briar Program in Paris and the Middlebury Graduate School of French during sabbatical leaves.

This brief list only gives a partial view of a man who served five Cornell Presidents but also touched the lives of thousands of students, many of whom remember him with affection and respect. Such was the case over the years for members of the Cornell University Glee Club, many of whom thought of themselves as part of the Rideout extended family. Blanchard was, if anyone ever was, a citizen of Cornell and of the world. He was always in love with France and spoke fluent idiomatic French, often traveled to that country and even served as a bi-lingual lecturer aboard the S.S. France on cruises around the world after he retired.

For Cornell, he was for many years an all around ambassador who received important visitors, introduced visiting VIPs to the University, and helped hundreds of foreign faculty members and students feel at home in Ithaca. The latter trait is typical of a man who was not only kind, but profoundly generous and thoughtful, as so many of us can attest. Blanchard helped many people in many ways, but always in a discreet and tactful fashion.

What perhaps stands out above all for his many friends was his irrepressible energy and sense of humor. He brought good cheer to all (including in his well known tour of friends' homes at Christmas as Santa Claus handing out outrageous ties). One always felt better off after talking to him, and his generosity of spirit included never burdening others with the problems of his jobs or his health. In the fullest and richest sense, he embodied an expression of his land of adoption: "joie de vivre".

Dale R. Corson, Alfred Kahn, Barlow Ware, Alain Seznec

Robert F. Risley

March 28, 1922 — January 20, 1994

Robert Risley who spent most of his working life at Cornell, grew up in Horseheads, New York and graduated high school in 1940. After two years working variously as a construction laborer, grocery clerk, meter repairman, and lathe operator, he enrolled at Union College. For the next half year, he was both full-time student and full-time industrial worker until he entered the U.S. Air Force.

The three and one-half years spent in the service provided early experience in two areas in which he would excel during his lifetime — teaching and administration. After his own training as a bombardier-navigator, he became an instructor of others. When he was shipped overseas as bombardier in a B-29 crew with the 20th Air Force, he held various administrative assignments including those of Squadron Intelligence Officer and Squadron Executive Officer. Captain Risley was mustered out in August 1946.

Graduating from Union College in 1948, Bob came to Cornell's newly established School of Industrial and Labor Relations where he earned the M.S. degree in 1949 and the Ph.D. degree in 1953. While still working on the degree, Bob was administrative assistant to ILR Dean Martin P. Catherwood. He also served a year as consultant to the President of the State University of New York on administrative organization and personnel policy. His dissertation dealt with faculty personnel policies.

Bob Risley was appointed to the ILR faculty in 1953 and a year later was promoted to the rank of Associate Professor. In 1959, he became Acting Dean of the School pending selection of a new dean. This was an assignment he was to take on again on two other occasions, in 1963 and in 1971. In 1960 and 1961, Dean Catherwood, who had become Industrial Commissioner for New York State, persuaded Bob to take a leave of absence to assist him as Deputy Commissioner for New York City. From 1963 to 1970, Bob was Associate Dean for Extension and Public Service. From 1971 to 1974, he served in Day Hall as University Vice Provost. All of these assignments called on Bob Risley's special talent and sensibility in working with varied persons and interest groups whether he was dealing with governmental bureaucrats, legislators, labor or business people, or university employees. He accomplished these purposes, less by rhetorical skill, than by dint of a keen, perceptive and creative intelligence. He was a continuing source of fresh, imaginative ideas to those with whom he worked, and in turn he encouraged others to perform at their best.

Bob was not concerned with style, either in manner or in dress, a fact that sometimes led persons initially to underestimate him. What did come across was the absence of pretention, his total genuineness. What you see is what you got. This directness, coupled with an immense capacity to enjoy life and his great energy, earned him a very large network of friends.

What particularly marked Bob as a teacher was his commitment to the notion that students in the ILR School should acquire some sense of practical problems in the field. Consequently he always made extensive use of practitioners in the classroom. In his first years in the School, Bob was identified with a required course on Industrial Occupations and Processes, known to all as “Bus Riding”, because it featured field visits to area industrial firms including a Pennsylvania coal mine. The course afforded students an opportunity to study labor policies within a specific work setting. Years later, Bob developed a new course on human resource management in small business that focused on entrepreneurship and students did case studies of a firm and reported their findings to management.

Extending the idea of learning from firsthand experience, Bob led the way in creating the School’s credit internship program that permits students to earn full academic credit for a semester while working with some private or public organization related to industrial relations. Bob scouted out the internship opportunities, primarily in Albany, New York City, and Washington, and supervised the program for several years. The program has continued to grow to the benefit of students and to the School itself.

Another example of Bob’s interest in relating education to current problems and issues is the annual conference now called the Netter Seminar that he initiated over 25 years ago. These seminars jointly sponsored by the National Conference of Christians and Jews and the ILR School examine timely issues with special attention to implications for race relations. It is a theme that was especially important to Bob harking back to his days as Deputy Industrial Commissioner for New York City when he inaugurated a number of programs dealing with the status of minorities in the work force, including a pioneering study of household workers. Also as Director of Extension, Bob initiated programs in urban affairs and civil rights leadership training, themes that have continued to occupy a prominent position in extension offerings. In cooperation with the Urban League and the Puerto Rican Forum, he founded Skill Advancement, Inc., a non-profit organization which conducted programs for upgrading the skills of low income workers.

In his various roles at Cornell, Bob was active in the affairs of the ILR Alumni Association. It was his idea to establish an annual award to honor a distinguished graduate of the School who has demonstrated exceptional

professional accomplishment in the field of industrial and labor relations. Over the years, the Judge William B. Groat Award has become highly prized. Fittingly, Bob himself was the 1989 recipient of the award.

From his graduate student days on, Helen and Bob Risley lived in Candor where they became central figures in the life of the village. Here they raised their two sons, Robert, Jr. and Thomas. Helen was a popular high school teacher. For over 25 years, Bob was active in public education as a member and president of the Candor School Board and also with the Tompkins-Seneca-Tioga Board of Cooperative Educational Services, including time as its president. Indeed, whenever the community needed to get things done, Bob Risley was usually called upon. Thus among many other public activities, he was at various times president of the Tioga County Economic Opportunity Board; president of the Tioga Industrial Development Corporation; and board member of the Tioga General Hospital and the Tioga County Chamber of Commerce.

The Risley's big house on Main Street was important in the social life of the community. Traditionally town and university friends would gather there for Fourth of July and New Year's Eve celebrations. Another regular event was the annual "Risley Open" at Catatonk Golf Course.

It was not uncommon for the Risleys to house or provide financial assistance to improvident students. One former student wrote to Helen Risley of her husband: "It was the quality of putting principle before personal advantage that marked him extraordinary. He taught me the job of giving, the job of reaching down and lifting up someone who needed a hand, the job of connecting with others rather than remaining aloof."

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These and similar sentiments shared by the many people who knew him fairly represent the lasting legacy of Bob Risley.

Karin Ash, Ronald Donovan, Lois Gray

Willard Bancroft Robinson

April 19, 1918 — December 28, 1997

Dr. Willard B. “Robby” Robinson, 79, was Professor Emeritus, retired head of Cornell University’s Institute of Food Science, and retired head, Department of Food Science and Technology (1967-82), New York State Agricultural Experiment Station, Geneva. Robby served as head of the Department of Food Science and Technology for 15 years until his retirement in June 1982. He was appointed head of Cornell’s Institute of Food Science in 1975 that was established to help coordinate teaching, research, and extension activities in food science in Ithaca and Geneva.

Robby was an authority on New York State wines and wine making. He organized a Wine Industry Advisory Committee that served as a vehicle for the exchange of technical information between Cornell scientists and wineries. He also organized seminars and workshops for the benefit of the wineries. He helped organize and served as chairman, Eastern Section, American Society of Enologists, and in 1974, he was awarded the American Wine Society’s Annual Award of Merit. Robby served as co-chairman of the annual New York State Fair wine tasting competition from its inception in 1978 until his retirement from Cornell. His efforts also contributed towards the New York State legislature passing a bill that permitted establishment of small (farm) wineries.

Robby was also an authority on nutrition and food safety. He was a member of a number of committees of the National Research Council of the National Academy of Sciences: the Food and Nutrition Board and served as chairman of the Committee on Food Chemicals Specifications, the Food Protection Committee and served as its secretary and a member of the subcommittees on food technology, artificial sweeteners, generally recognized as safe (GRAS) additives, and chemicals used in food processing. He was a member of the panel on saccharin of the Institute of Medicine of the National Research Council.

As a consultant to the U.S. Interdepartmental Committee on Nutrition for National Development, Robby served as food technologist for nutrition surveys in Colombia, Bolivia, and Honduras. He also served as a food technology consultant in Bolivia for the Pan American Health Organization and the World Health Organization. Perhaps, because of his extensive international travel, he felt comfortable appointing several foreign-born faculty in the Department of Food Science and Technology.

Dr. Robinson was born in State College, Pennsylvania, the son of the late Clair and Helen Bancroft Robinson. He joined Cornell in 1943 after receiving his B.S. degree from Pennsylvania State University, and his M.S. and Ph.D.

degrees from the University of Illinois. He was named Assistant Professor, Associate Professor, and Professor of Chemistry in 1944, 1951, and 1955, respectively.

Dr. Robinson was a gladiolus enthusiast since boyhood and developed the color classification system used by the North American Gladiolus Society. He served as chairman of the Phelps Democratic Committee and was a member of the school board of Phelps Central School District. At the United Church of Phelps and its predecessor, the United Presbyterian Church of Phelps, he was a member of the choir, and served as Presbyterian Sunday School superintendent and ruling elder.

He is survived by his wife, Alice; five children; nine grandchildren; two siblings; and several nieces and nephews.

D.F. Splittstoesser, G.S. Stoewsand, M. Anandha Rao

Daphne A. Roe

January 4, 1923 — September 22, 1993

Daphne Anderson Roe was Professor Emeritus of Nutritional Sciences, Cornell University. A native of London, England, Professor Roe received her undergraduate training at the University of London, and was awarded a Doctoral degree in Medicine from that institution in 1950. She joined the Cornell faculty in 1961 as a Research Associate in the Graduate School of Nutrition. In 1970, she was appointed to the professorial faculty as an Associate Professor, and was promoted to full Professor in 1976. Professor Roe also held appointments in the Department of Medicine of the Cornell Medical College, and at SUNY Upstate Medical Center in Syracuse.

Professor Roe was recognized internationally as an outstanding teacher and researcher whose career spanned over four decades of achievement. Her scholarly talent was recognized early in her career by the award in 1950 of the Chesterfield Medal in Dermatology by the Institute of Dermatology, London. Later in her career, she was named a Fellow of the Royal College of Physicians, received the Lederle Award from the American Institute of Nutrition and the Joseph B. Goldberger Award in Clinical Nutrition from the American Medical Association, and was named a Fellow of the American Institute of Nutrition in 1990.

Recognition of Professor Roe as an outstanding educator grew from the many students she mentored through graduate studies, classes she taught in both the undergraduate and graduate curricula, and from the many texts she authored on various aspects of clinical nutrition. During her career at Cornell she taught classes in several subjects, including geriatric nutrition, public health nutrition, nutritional toxicology, and methods of human metabolic study. She attracted graduate students from around the world, and was keenly interested in nutritional problems of developing countries. Many of her former students have gone on to productive careers in academia, industry, medicine, and government. A sensitive and caring mentor, Professor Roe would often have students living in her home. She authored and edited 21 books and contributed to over 60 other books on various aspects of clinical nutrition related to aging, drug-nutrient interactions, and toxicology. Her treatise on the history of pellagra is considered a classic.

Professor Roe made significant contributions in many areas of nutrition research, weaving interests in geriatrics, drug-nutrient interactions, toxicology, carotenoids, and photodermatology. Her work is documented in over 150 original publications in the peer reviewed literature and invited reviews in her recognized areas of expertise. These papers, many utilizing imaginative approaches, expanded knowledge of the many aspects of health and disease

that influence vitamin utilization and requirements. Recently she was recognized for her contributions to the understanding of nutritional problems and food-drug interactions in older persons. Professor Roe was one of the first to draw attention to the subtle effects of chronic drug administration on nutritional status, particularly in vulnerable populations. Her recent appointment to the Committee on Nutrition and Aging of the International Union of Nutritional Sciences recognized her significant contributions in geriatric nutrition. Other recent research of note included the study of effects of ultraviolet light exposure on immune function, and the photoprotective effects of *fi*-carotene. Having received medical training in dermatology, she was concerned with the effects of excessive sun exposure, particularly in the elderly. Combining imagination and curiosity with a constructively critical mind, Professor Roe was an effective collaborator. She was especially eager to offer her clinical talents and experience to colleagues interested in aspects of human metabolism. She carried out fruitful collaborative projects in many areas, such as regulation of energy intake, and the relationship between oral nitrate reduction and endogenous formation of N-nitrosoamino acids.

In addition to her teaching and research activities in nutritional sciences, Professor Roe was a practicing dermatologist. Prior to her appointment to the Cornell faculty, Professor Roe served at St. John's Hospital, London, first as Registrar for Diseases of the Skin (1948-52), then as First Assistant in Dermatology and Radiotherapy. After coming to the U.S., she served as a Research Associate in Dermatology at the University of Pennsylvania and the Memorial Hospital in Wilmington, Delaware. She continued her practice in the Ithaca area and was an Honorary Member of the Central New York Dermatological Society. She passed on her love of medicine through her involvement with the Health Careers Program at Cornell, and always made time for counseling students interested in medical school.

Although diminutive in size, Professor Roe possessed boundless energy, infectious enthusiasm, and emotional strength. A devoted mother of three (David, Adrian, and Laura), she combined her crisp intellect with wisdom, wit, and kindness. When her beloved husband of thirty-four years, Shad (Albert S. Roe, Professor of Art History, Cornell University) passed away in 1988, her many activities continued unabated. At the time of her death, Professor Roe was preparing for a third career, that as a priest in the Episcopal Church. She had long been an active member of the Episcopal Church at Cornell, and was instrumental in the endowment of its chaplaincy. This new challenge, taken on at age 70, typified Professor Roe's life as a helper-healer. Throughout her career, she championed the cause of the impoverished, lonely, elderly person, in need of medical and nutritional advice delivered with a caring

heart and hand. Her remarkable life will continue to serve as a role model for students and colleagues alike, a life with space for science, family, lifelong learning, and giving.

Cutberto Garza, David A. Levitsky, Robert S. Parker

Joseph Linville Rosson

December 7, 1919 — April 1, 1995

Joseph Linville Rosson was born in Memphis, Tennessee, on December 7, 1919. (Colleagues who know of the date would good-naturedly kid him by saying they knew two bad things that happened on December 7, one was Pearl Harbor, and the other)

After graduation from the University of Tennessee with a Bachelor of Science in Electrical Engineering degree in 1942, he joined the Naval Reserve as an ensign. It is interesting that he spent the 90 days of his commissioning indoctrination at Cornell.

By his discharge in 1946, he had risen to the rank of Lieutenant and the position of commanding officer of an LSM (Landing Ship Medium). Although he served in the Atlantic, Mediterranean, and Pacific theatres, his colleagues do not recall that he recounted any “war stories.”

Joe spent 1946-47 as an Instructor at the University of Tennessee Junior College. While there, he contacted Jack Tarboux (who had been the Head of EE at Tennessee when Joe was a student there, but who was now a Professor of Electrical Engineering at Cornell) concerning graduate work and employment. Through Tarboux’s efforts, Joe became an Instructor and a graduate student in Electrical Engineering.

Upon receiving his Master of Electrical Engineering degree in June 1951, he was appointed an Assistant Professor. He was highly recommended for promotion to Associate Professor in 1956, but the Engineering College administration felt that he had not had enough research experience and so decided not to promote him. He then took over the directorship of a research project on the atmospheric refraction of radio waves (an area completely unknown to him because his experience in teaching and in industrial contacts had been in electric power and feedback control). His performance on that project led to his promotion to Associate Professor in 1957. He became a Professor in 1969 and, upon his retirement in 1986, an Emeritus Professor.

If only one word could be used to describe Joe in his professional career, it would be *versatile*. Others would include *dedicated*, *loyal*, and *unselfish*.

Shortly after his promotion to Associate Professor, Joe was asked to represent the University on an extra-high-voltage cable project sponsored by the Association of Edison Illuminating Companies of the Edison Electric Institute. In collaboration with electric utilities and cable companies, he coordinated the construction and

installation of operating facilities and designed all the test and measurement systems. In addition, he trained more than 60 students to operate the field facilities on 24-hour schedules.

When the project was completed in 1964, the cable text was considered a landmark event and Joe was the recipient of the highest compliments and commendations from all the industry officials concerned.

Joe was appointed Assistant Director of the School of Electrical Engineering in 1965 and subsequently Associate Director in 1975. In these positions he was responsible for course and staff scheduling, the budget, non-academic staff, and student-faculty relationships. While carrying out these administrative responsibilities, he continued to teach undergraduate courses and to advise students. In all of these activities, Joe's performance was considered to be outstanding.

In 1968, he became the advisor for a Master of Electrical Engineering design project of an electric vehicle for urban and suburban transportation. More than 70 students participated in all aspects of developing and manufacturing five prototypes of electric vehicles, three of which were licensed for continuing study and evaluation. In 1970, a Cornell team was placed first in the National Clean Air Race, and in 1977, another Cornell team won the Emission award in the Urban Vehicle Design competition.

Joe was a member of the honorary societies, Eta Kappa Nu, Tau Beta Pi, and Sigma Xi. He was also a member of the Institute of Electrical and Electronic Engineers.

Joe's non-professional life was as interesting—and full—as his professional life. His dedication to students was as great outside the classroom as it was in. (The students lovingly referred to him as “Pappa Joe.”) He could always be counted on to participate in any activity that they would organize—golf, bowling, poker, bocci ball, Monte Carlo night, Delta club (a student-faculty organization whose only activity was beer drinking. The initiation consisted of chug-a-lugging a quart of beer and, for many years, Joe held the record—nine seconds over both students and faculty. He said it was simple—”just open up your throat.”).

Joe played golf on a regular basis with a Phillips Hall foursome for many years. He enjoyed all aspects of the game whether spectator or participant.

Joe had an extraordinary talent for getting people together whose cooperation was essential to building up a successful event. Every spring he collected an enthusiastic team of students and faculty (along with his devoted wife, Olive, whom he married in 1950) to prepare the food for the school's Annual Alumni Breakfast get-together.

While they were busily cooking away, Joe never failed to give them encouragement and, when all was done, they especially appreciated his sincere words of thanks (and the alumni appreciated the excellent breakfasts!).

The annual end-of-term picnics he organized were also appreciated. Many think back fondly of the refreshments, games, and especially the good-fellowship they enjoyed.

When Olive died in December 1991, Joe decided to move to a retirement home in Memphis, where he died. He is survived by his son, Michael and daughter-in-law, Marianne of Brooklyn, New York.

Paul D. Ankrum, G. Conrad Dalman, William H. Erickson

Colin Frederick Rowe

March 27, 1920 — November 5, 1999

So. What to say? (As he might have said.) In a eulogy for his great friend, James Stirling, Colin made this remark:

Jim loathed, as I do, the sanctimonious soft voice, the agonizing verbal message, which is apt to be the predominant tone of obituary eulogia. ... [Stirling] had a Churchillian vehemence about pietistic evasiveness; and I share with him an impatience about the whole sentiment of grief, often a spurious and nearly always a self-indulgent emotion.

So someone has died—kinda tough because you had wanted to say something to them; and now all possibility of communication is forever extinguished. Simply they are no longer there; in other words, we are denied our pleasure.

With Colin Rowe's death, on Friday, November 5, 1999, the world lost one of the century's greatest deducers on things architectural, and Cornell University lost the most significant fabricator of its sense of architecture. Among the complexity and chaos of an architectural education, two very simple principles made an education in Cornell Architecture unique and valuable. The first is that the individual building is part of a greater whole: it exists in a context. A building would then be designed in a manner that is not only affected by this physical context, but it simultaneously responds to that context and contributes to it. This building would not be a decorated object standing alone, but would be a part of the city, part of the landscape. The second principle is that history is important (not a particularly obvious concept in a modernist endeavor that considered itself to be founded on continuous invention): the student should be placed in a philosophical and historical context. The person responsible for making these two principles the foundation of Cornell's architectural pedagogy was Colin Rowe.

Colin Rowe saw the teaching of architecture differently from most. He taught students, colleagues and architectural scholars around the world that modern architecture in particular was not revolutionary, as it was supposed to be, but evolutionary and connected to history. In his first great essay, "The Mathematics of the Ideal Villa" (first published by the *Architectural Review*, 1947) he brilliantly and conclusively demonstrated the influence of Palladio's Villa Foscari (the Malcontenta of c. 1550-60) on LeCorbusier's modernist manifesto, the Villa Stein (1927) at Garches, France. In this one essay, he reunited modern architecture with a past that, according to the polemic of the time, it was never supposed to have. Many years later in an introduction to a book, *Five Architects* (Wittenborn, 1972), Colin wrote:

When, in the late nineteen-forties, modern architecture became established and institutionalized, it lost something of its original meaning. Meaning, of course, it had never been supposed to possess. Theory and official exegesis had insisted that

modern building was absolutely without iconographic content. That it was no more than the illustration of a program, a direct expression of social purpose. Modern architecture, it was pronounced, was simply a rational approach to building; it was a logical derivative from functional and technological facts; and at the last analysis it should be regarded in these terms, as no more than the inevitable result of twentieth century circumstances. There was very little recognition of meaning in all this. Indeed the need for symbolic content seemed finally to have been superseded; and it was thus that there emerged the spectacle of an architecture which claimed to be scientific but which—as we all know—was in reality profoundly sentimental. For very far from being as deeply involved as he supposed with the precise resolution of exacting facts, the architect was (as he always is) far more intimately concerned with the physical embodiment of even more exacting fantasies.

With statements like this, many have credited (or blamed) Rowe for setting the stage for “Post-modernism” and the “New Architecture”. However, far from criticizing modern architecture’s inherent ideas, Rowe was pointing out its inevitable relationship to historical precedent. Many years after writing *Five Architects*, Colin wrote:

While I am constantly moved by the magnificence of the original idea of modern architecture and while I can scarcely think except in terms of its repertory of forms, I cannot really believe in it any longer.

This is, in many respects, more a critique of modern architecture’s execution than its inherent principles. Characteristically Rowian, it professes an enthusiasm that is both faithful and filled with doubt.

As a teacher and a muse, Colin Rowe constantly crossbred an extensive knowledge of architectural history with equally extensive erudition in the arts, as well as in political and cultural histories. All were combined with one of the most perceptive eyes to have ever been cast in the direction of a building or a drawing. More than retellings, more than reconstructions, Rowe’s writings and lectures were biographies of architecture: chronology and documentation can provide only skeletal information; the mind and the eye would provide the organs and flesh. He conveyed a conviction that speculation was the mind’s most intimate engagement with a work. And that designing was the flirtation of minds through eyes. With his brilliant insights he was able to enlighten students to the notion that many ideas in architecture are universal; that by studying the history of architecture, the arts, politics and culture, one could liberate their ideas, and through a process we call transformation, apply them to contemporary problems. Colin Rowe went on to write many more important essays and books. His most influential work, *Transparency: Literal and Phenomenal*, was written as two essays with Robert Slutzky; the first in 1955, published in 1963, and the second published in 1971. The essays related analytical cubist painting and Gestalt perception psychology to architecture. Alex Carragone, in *The Texas Rangers* (MIT Press 1995), wrote:

Credit both of them for discerning a new perception and conception of architectural space, a reemphasis of the relationship of the plan to architectural space, and most importantly the recognition of phenomenal transparency as a means of conceptually organizing architectural space.

Colin was best known by colleagues and students at Cornell for creating the graduate urban design studio, which drew students from around the world and produced more educators in the field of urban design than any other such program. Colin's lectures on the architecture of the Italian Renaissance drew not only students, but many faculty members from all corners of the campus.

For all of his intellectual contributions, Colin will be best remembered and loved by many of us for his conversations—amazing conversations—late into the night, and for his friendship. In his eulogy address, David Rowe, Colin's brother, put it this way:

It is obvious that my brother inspired great affection, yet he was undeniably self-centered (although not selfish). He was certainly not given to showing emotion. I think the answer is that he liked his friends greatly, and he needed them for all sorts of reasons. Somehow and despite his apparent gruffness he made this known...elliptically, of course. I suppose this amounts to that indefinable quality—the gift of friendship.

We all retain our memories of this amazing, amusing, grumpy, sometimes infuriating, endearing, but above all, life-enhancing man. Memories make his loss so painful, but keep him among us in our hearts.

After a brief stay during the 1957-58 academic year (while on leave from Cambridge University), Colin Rowe returned to Ithaca and Cornell University in 1962, where he remained until his appointment as A.D. White Professor Emeritus in 1994. Andrew Dickson White, a great expounder of architecture and humanism, would have been delighted with Colin's appointment to a professorship in his honor. At Cornell, Rowe inveigled students and faculty alike with ingenious projections of everything from cities—ones where, as T.S. Eliot would have it, "...the women come and go/Talking of Michelangelo"—to rooms, like those of Edith Wharton's Mrs. Mingott, "which recalled scenes in French fiction, and architectural incentives to immorality such as the simple American had never dreamed of."

His presence at Cornell over more than three decades has directly inspired hundreds of architects, and through them, indirectly inspired thousands of other architects, and unaccountable numbers of individuals who have wandered, with eyes and minds, through the prodigious spaces engendered by Colin's scions. No one has built more for as many.

Supplement: Educated at Liverpool University, The Warburg Institute, Cambridge and Yale, Colin Rowe taught at the University of Texas at Austin and at Cambridge University before arriving permanently at Cornell. He was named Andrew Dickson White Professor of Architecture in 1985; in 1990, he was named Professor Emeritus. His contributions to architectural pedagogy were recognized by the AIA and the Association of Collegiate Schools of Architecture in 1985 when he was awarded the Topaz Medallion, their highest prize for teaching excellence. He was named an honorary fellow of the Royal Institute of British Architects (RIBA) in 1983, and became only the third academic to be awarded the Royal Gold Medal for Architecture by RIBA in 1995; it is widely perceived as the most prestigious award for architecture in the world. Colin Rowe's books include *The Mathematics of the Ideal Villa and Other Essays* (1976), *Collage City* (with Fred Koetter, 1978), *The Architecture of Good Intentions* (1994), and *As I was Saying: Recollections and Miscellaneous Essays* (1996). He was working on a book about Italian Renaissance architecture with Leon Satkowski (B.Arch. '70) when he died. (Elizabeth L. Kim, "The Reluctant Modernist: Colin Rowe at Cornell" in *College of Architecture, Art and Planning Newsletter*, Vol. 3:2.)

Professor Val Warke (B.Arch. 1977, Cornell; M.Arch. 1978, Harvard) was a student of Colin Rowe's both at Cornell and at Harvard, and a colleague of Rowe since joining the Cornell faculty in 1982. Professor Jerry Wells (B.Arch. 1959, University of Texas) was a student of Colin Rowe at the University of Texas and a colleague of Colin's at Cornell since 1965, and a life long friend. Both Professors Warke and Wells served as chairs of the Architecture Department during Colin's tenure at Cornell.

Thomas Arthur Ryan

September 15, 1911 — June 16, 1996

“Art” Ryan was continuously associated with Cornell and its Department of Psychology since he arrived as a freshman in 1929. He was an undergraduate until 1933, then a graduate student until he completed his Ph.D. degree in 1937, then an Instructor until 1942, then an Assistant Professor until 1946, then an Associate Professor until 1949, then a Professor until his retirement in 1977, and finally an Emeritus Professor. He chaired the department 1953-61. He also taught in Administrative Engineering 1939-46 and in Mathematics 1943-45.

Art consistently pressed for connecting the Psychology Department to the real world. This interest was reflected in his teaching, which at various times included courses in industrial psychology, personnel management, occupational analysis, and fatigue and efficiency, in addition to less applied courses in experimental psychology, perception, statistics, and introductory psychology. Reflecting this wide range of interests, Art was Book Review editor of the *American Journal of Psychology*, 1957-67.

Art was in many ways an ideal model of a scientist—he worked on problems he considered important, his judgments in that respect were generally ahead of their time, and his work was of consistently high quality. His early work on the interrelations of sensory systems, on symbolizing, and (with Mary Ryan) on geographical orientation, all stand out as excellent pioneering work in areas still considered important. Similarly, his continuing attention to how statistics are used to draw conclusions from data anticipated more recent developments in that field. He recognized that artificially devised research problems could very likely lead to dead ends, or even misleading conclusions. He brought scientific concerns to the applied settings (effort and work) that guarantee what is now called ecological validity, well before there was a discipline of ergonomics. In all of these, he was extraordinarily open to new ideas, while soberly checking consistency and implications. Art was generally indifferent to the spotlight. Though well-known in his fields of interest, he never sought out the media.

During his career, Art published three books: *Work and Effort: the Psychology of Production* (1947), *Principles of Industrial Psychology* (1954) with Patricia Cain Smith, and *Intentional Behavior: an Approach to Human Motivation* (1970). He also was long interested in the problem of “multiple comparisons”—the fact that in a long series of significance tests, one expects some of the results to appear significant just by chance. In 1960, he developed a new method for handling such problems, which is still used and accepted. This interest in multiple comparisons

continued into his retirement, and in later years he ran numerous analyses on his personal computer, completing a manuscript on the topic in 1990.

As Chair of Psychology, 1953-61, Art was again thought of as a near-perfect role model for that position—not a manipulative or self-aggrandizing “Head,” but a considerate, thoughtful and fair chair of peers, each with his or her own agenda. He was known for his ability to minimize onerous and contentious faculty meetings by distributing memos in advance that laid out the major issues and alternative solutions. Under his chairmanship, the department built up a small but internationally known program in industrial psychology, with effective research connections to various firms around central New York.

Art consistently urged the department to trust its own judgments in hiring, promotions, and in decisions on new research directions, rather than seeking the advice of the same small cadre of outside psychologists whose views were simultaneously influencing many other departments. He was inspired more by the chance to be unique than by the fear of being thought out of fashion.

Art was truly a pioneer concerning women in academia. Under his leadership, Patricia Cain Smith became the first tenured woman, and later (1963) the first female full professor, in the College of Arts and Sciences—all years before this issue became important politically at Cornell and across the nation.

His students and colleagues also remember the conscientiousness with which he acted as a statistical consultant on numerous research projects. He once told a colleague that he avoided leaving Ithaca for sabbatic leaves, because he felt a responsibility to remain available for students. With his own graduate students, he felt it important to allow them freedom to choose their own research problems within a broad area; he felt that learning to select problems was perhaps the most important skill a student could gain in graduate school.

One of Art’s favorite activities was playing chamber music on his viola. For most of his adult life he played in various chamber music groups and attended string quartet workshops.

Art and his wife, Mary, lived for many years in a comfortable house on Linden Avenue, a short walk from campus, and spent their summers in a lakeshore cottage they built themselves near King Ferry, where they often invited students and colleagues. They also often invited new faculty and others to stay at their home while searching for permanent housing. After retirement, Art and Mary lived for many years in Ithaca, but later moved to the Foxdale retirement community in State College, Pennsylvania, where their son, Tom, served on the Board of Directors.

As a friend, Art was honest, fair, and unobtrusively and unaggressively upright and straightforward on all occasions. His politics were humane but subject to debate, and his assistance always available and generous.

Art's interest in statistics was picked up by his son, Thomas Arthur Ryan Jr., who created the popular Minitab statistical package. Besides Mary and Tom, Art is also survived by a daughter, Adelaide Lyon of Canandaigua, New York.

Elizabeth Adkins-Regan, Julian Hochberg, William Lambert, Richard Darlington

Carl Sagan

November 9, 1934 — December 20, 1996

Carl Edward Sagan, David Duncan Professor of Astronomy at Cornell University, who died on December 20, 1996, was an enthusiastic scientist of great breadth, and a preeminent spokesman for science and for critical thinking. In the exploration of the solar system, the technical achievement for which our generation will be remembered, Carl was a pivotal figure.

The son of a garment worker from Russia, Sagan was born on November 9, 1934 in Brooklyn, New York. The University of Chicago granted Carl two undergraduate degrees and a Master's, all by the age of 20, before he continued for his Ph.D. degree there under Gerard Kuiper, at the time America's only full-time academic planetary scientist. Carl spent postdoctoral years at Berkeley and then joined the geneticist Joshua Lederberg at Stanford. After a faculty appointment at Harvard, Carl came to Cornell in 1968 where he remained.

Sagan's publications, more than 600 in number, spanned a remarkable breadth of fields. Among his earliest papers, written while in his early twenties, are discussions of the synthesis of complicated molecules by natural processes in early reducing atmospheres and of lifelike forms in meteorites, showing the direction of his emerging interests. The recent discovery of putative microfossils in a Martian meteorite has rekindled interest in these topics. The possibility of life elsewhere was his scientific passion, and much of his work touched on some aspect of this, often by pointing out the harshness of our own surroundings.

SETI, the search for extraterrestrial intelligence, gained scientific respectability following Carl's first book as an author, in which he heavily annotated a slender volume earlier written by the distinguished Soviet astrophysicist, I.S. Shklovskii. He participated in several SETI programs, most recently with Jim Cordes. With support from the 100,000-member Planetary Society, which Carl and Bruce Murray founded to involve average citizens in space exploration, Harvard's Paul Horowitz is now pursuing a multi-million channel search. The LAGEOS, Pioneer, and Voyager spacecraft carried messages designed by Carl, Frank Drake, and others, intended ostensibly for any extraterrestrials who might happen upon the craft; the real purpose (well achieved) was to advertise to other humans that our species had begun to visit the stars.

Most of Carl's planetary studies arose out of his participation in spacecraft missions. Carl was a member of the Infrared Radiometer Team for the Mariner 2 space mission to Venus, the earliest successful interplanetary flight, and wrote a series of papers during the 1960s with the late James Pollack, Carl's initial graduate student and

long-time collaborator on the radiation balance of the Venus atmosphere. He argued, correctly as it turned out, that a strong greenhouse effect warms Venus, thereby explaining the till-then mysterious high brightness temperatures observed by microwave measurements.

From 1966-73, Sagan was on the Imaging Team of NASA's Mariner 9 orbiter of Mars. Prior to the spacecraft's launch, he and Pollack suggested that seasonal variations detected in Martian surface markings by telescopic observations were caused by windblown dust. The Mariner 9 imagery verified this, and even today the most complete information concerning the distribution of global surface winds on Mars comes from mapping eolian streaks in spacecraft images.

The 1976 NASA Viking Mission to Mars placed two spacecraft in orbit to monitor the planet, and two landers on the surface, principally to carry out biological experiments. Sagan was a member of the imaging teams for both the landers and on the orbiters. These missions produced the first detailed maps of the surface of another planet, and the first in situ study of another planet. Together with Pollack and Joseph Veverka, Sagan analyzed the nature of wind erosion on Mars, and mapped surface erosional wind indicators. With Brian Toon and Peter Gierasch, he proposed climate change mechanisms for Mars in an effort to explain the puzzling drainage patterns that indicated water once flowed on a planet whose temperatures are currently below the triple-point temperature of water.

From 1970-90, Sagan was part of the Imaging Team for the Voyager missions to the outer solar system that made close flybys of the four gas-giant planets and of Saturn's satellite Titan. Surfaces and atmospheres in the outer solar system contain dark coloring agents in the solid form whose spectroscopic signatures are inconclusive and whose composition remains uncertain. Sagan, his students, the late Reid Thompson and Bishun Khare, argued that the dark materials are produced by photochemistry that leads to complex hydrocarbons formed by the action of sunlight on ubiquitous methane. They demonstrated the process in the laboratory, and carefully measured the optical properties of the products from the infrared through the visible.

By the 1980s, it had become clear that dust in the dry atmosphere of Mars affects atmospheric and surface temperatures, and that interannual differences in dust storm activity is a major cause of climate variability on Mars. This information, combined with his longstanding interest in radiative heat balance, led Sagan, together with Brian Toon, Richard Turco, Thomas Ackerman and Pollack, to explore the thermal effects of atmospheric soot and dust following a major nuclear exchange on Earth. The "Nuclear Winter" image that emerged from this work in 1983 stimulated wide discussion and study of possible global consequences of large scale warfare. The

size of the effect, even its sign, remains controversial, but the failure of national security agencies to imagine this horrendous outcome highlighted the limitations of previous models.

Carl was an Interdisciplinary Scientist on the NASA Galileo orbiter and probe mission to Jupiter, which was launched in 1989 and arrived at Jupiter in late 1995. His preparations for this experiment included extensive laboratory measurements, in collaboration with Khare, Thompson and Gene McDonald, of the optical properties of candidate organic materials that might be identified on Jupiter or its satellites. He became ill just before data began to be returned.

As a first-generation planetary explorer of the first rank, Sagan enormously influenced the direction of the early NASA program, not so much in mission details (although, as mentioned above, he was active in the Mariner, Viking, Voyager and Galileo flights), but through the public attention that he brought to these enterprises and through his access to policy-makers. He was an unwavering critic of NASA's manned space program, including the Space Station, and a staunch advocate of unmanned planetary exploration.

Planetary studies was born as a scientific discipline three decades ago, and Carl was one of its founders. He helped establish the Division for Planetary Sciences (DPS) of the American Astronomical Society, and was one of its first chairmen. Early on, he edited the journal *Icarus* for 11 years, introducing peer-review and guiding the journal's affiliation with the DPS. Most of all, Carl set the tone for the discipline, through his infectious enthusiasm about space exploration, his scientific generosity, and his interdisciplinary interests. He enticed students and faculty, including ourselves, to join him in the fun of exploring a previously unknown Solar System. In addition to others named above, David Morrison, Dave Pieri, Kathy Rages and Chris Chyba, were his students who are still influential in space exploration; although not officially his advisees, Steven Soter, David Stevenson, William Newman and Steve Squyres were greatly influenced by Carl as graduate students at Cornell.

Carl's talent as a popularizer of science set him apart. A remarkably gifted writer, he was aptly called the poet laureate of science. As James Michener wrote when reviewing the book, *Cosmos*, "His style is iridescent, with lights flashing upon unexpected juxtapositions of thought." *Dragons of Eden*, Sagan's ruminations on the evolution of the human brain, received a Pulitzer Prize. All told, his books stood on best seller lists for more than three years. At his death, he was co-producing the movie, "Contact," based on his novel, and the Omnimax film, *Comet*.

The Emmy and Peabody award-winning "Cosmos" television series, written with his wife-to-be, science author Annie Druyan, and Soter, was seen by half a billion viewers worldwide. It was a visually stunning amalgam of

anthropology, history, biology and astronomy, that showed how our changing perception of the Universe led to a new view of ourselves. In this series and especially during his frequent appearances on Johnny Carson's couch, Carl's charm, puckish sense of humor and boyish good looks overturned the popular perception of the scientist as a remote, stoop-shouldered character in a white lab coat. Suddenly science was interesting and woven into the human fabric.

Perhaps Carl's greatest public influence came through his columns in *Parade*, the Sunday newspaper supplement with a circulation exceeding 80 million. Here, sometimes collaborating with Annie, he shared his wonder at the Universe's beauty and he explained difficult scientific concepts, while simultaneously chiding the public for tolerating scientific charlatans. Because of his interest in exobiology and his visibility, Carl was frequently drawn into public debates about all manner of pseudoscience: from UFOs to parapsychology. With sharp wit, he argued vigorously for rationality and the scientific method, maintaining that the known world was fascinating enough; one need not look for extraterrestrials in every unexplained happening. This campaign led to Carl's most recent book, *The Demon-Haunted World: Science as a Candle in the Dark*.

Not an aloof academic, Carl ventured frequently into debates with public policy implications, such as the already mentioned Nuclear Winter, the reduction of nuclear stockpiles, the hazard posed by asteroid impacts, the best way to destroy threatening asteroids, and strategies to get the superpowers to explore Mars together. In the early 1990s, he brought together a broad coalition of scientists to alert the world's religious leaders, and ultimately its politicians, that the environment was in a crisis that would profoundly affect all the world's peoples.

Sagan received more than twenty honorary degrees, and numerous awards for his pioneering efforts in space exploration, and for his writing and public service. Yet, this most widely known scientist of his generation was never admitted to the U.S. National Academy of Sciences, reportedly because he was blacklisted at the last moment by a few members as someone whose pure scientific accomplishments were insufficient for membership. The paradox is that others have become academicians because of their influence in their field or their administrative positions. Nevertheless, in the last year of his life, Carl was awarded the Academy's Public Welfare Medal, its highest honor.

In a similarly odd twist, Carl was occasionally dismissed as a "mere" science popularizer by some scientific colleagues. His accomplishments in this arena, which would have been considered remarkable had he been a full-time journalist or author, were judged somehow less worthy because of his scientific training and professional standing. Yet most scientists agree that, strictly from self-interest, our community should be urging members to be engaged in interpreting scientific ideas and bringing critical thinking to the public at large.

Every life cut short is a tragedy. Perhaps the most poignant aspect of Carl's death is that life elsewhere—the search that was his scientific passion—may soon be found.

Joseph A. Burns, Peter J. Gierasch, Yervant Terzian

Gerard Salton

March 8, 1927 — August 28, 1995

Gerard Salton, Professor of Computer Science, died of cancer on August 28, 1995. Gerry was the preeminent researcher and leader in the field of information retrieval—almost from the time he started working in it in the early 1960s until his death 35 years later. Today, dozens of well-known commercial systems, including some “search engines” on the world wide web, use ideas developed in his work. Gerry was the first recipient of the award for research given by the ACM Special Interest Group for Information Retrieval (1983), and upon his death, the award was named the “Gerard Salton Award for Distinguished Contribution to Information Retrieval Research”.

We share the grief of his passing, as well as all the fond memories of him, with his wife, Mary Birnbaum Salton; younger brother, Jean Sahlmann; daughter, Mariann Salton Thompson and her husband; son, Peter and his wife; and three grandchildren.

Gerry was bom in Nürnberg, Germany, on March 8, 1927, the son of Rudolf and Elisabeth Sahlmann. He spent his youth in Germany. During World War II, however, he and his parents had to flee Germany. Later, at one point, he and his brother Jean were spirited across a border in the middle of the night, taking care to elude German guards.

Gerry came to the United States in 1947, changing his name from Sahlmann to Salton, and became a citizen in 1952. In 1950, he married Mary, his wife of 45 years. He attended Brooklyn College, receiving a Bachelor’s degree in mathematics in 1950 and a Master’s degree in 1952.

Gerry entered the Ph.D. program in Applied Mathematics at Harvard, receiving his Ph.D. degree in 1958. He was the last of Howard Aiken’s Ph.D. students, and also one of the first programmers of Harvard’s Mark IV computer. He stayed on as Instructor (1958-60) and Assistant Professor (1960-65). Gerry was extremely fond of Harvard, and he often prefaced remarks with, “When I was at Harvard ...”.

In 1965, Gerry moved to Cornell to help create the Computer Science Department—along with Richard Conway, Juris Hartmanis, and a few others. He served as Chair of the Department from 1972-78 and was active in the Department until his death.

Gerry’s real professional love was not the Department but his research in information retrieval, which he had started while at Harvard. This research, including working with students, was all-important. To him, a good Department Chair was one who kept the administration away from the rest of the faculty, giving them a chance to

do their research and teaching—most administrative problems would go away by themselves, if you just let them alone. And to some extent, he practiced that philosophy very effectively while Chair of the Department.

While at Harvard, Gerry conceived of and began implementing SMART, an experimental computer System for the Manipulation and Retrieval of Text. He persisted with this work, despite discouraging comments about its relevancy and applicability from many people. But Gerry was right, and today, the concepts and techniques developed in SMART by Gerry, his students, and his colleagues elsewhere are found in dozens of well-known commercial systems on the Internet.

Gerry demanded the highest scholarship from himself and his students. It has been said that he was more responsible than anyone else for the development of a sound experimental tradition in his field. He was a prolific writer—the excellence of his 150-plus research articles and six texts on information retrieval make him the most cited person in information retrieval. His writing was indeed excellent—worth a Best JASIS Paper Award, a Best Information Science Book Award, and even an award for the best review in *ACM Computing Reviews*. He was a Guggenheim Fellow; he was selected as an ACM Fellow; and he received an Alexander von Humboldt Senior Scientist Award (Germany) and the ASIS Award of Merit.

In the midst of his research and writing, Gerry found time to be of service to his field. He was editor-in-chief of several journals at various times and on the editorial board of several others. He was on the Council of the ACM, was a member of the ASIS Board of Directors, and chaired Section T of the AAAS. He was founder and first chair of ACM's Special Interest Group in Information Retrieval.

Gerry was professionally literate across a variety of subjects, from linguistics to European literature. He could express himself like a professor of English; yet, he created a highly technical subject that depended heavily on computers and mathematics. Classical music was also important to him, and he and Mary rarely missed a Cornell concert. For years, he was a member of the Cornell University Faculty Committee on Music. A series of four Brahms concerts was dedicated to his memory and to Mary, and a plaque is being installed on the back of his favorite seat in Barnes Hall.

Gerry did not believe in “bigger is better”, and he did not like change for the sake of change. Talk of increasing the size of the Department would evoke the retort that it was better when it was smaller, as would talk of growth at Cornell and in Ithaca over the years. When the Department constructed two new floors in Upson Hall in the 1980s, Gerry said of his bigger and better office, “It’s nice, but I don’t like it—it’s *different*.”

Gerry loved his family, and took the time to be with Mary, Mariann, and Peter. Exercise and the outdoors were a source of joy for him. He sailed, swam, ice-skated, and hiked. He was a strong supporter of Cornell hockey. He skied regularly, both downhill and cross-country, in Ithaca and in Aspen, Colorado, where he and Mary had a condominium.

Richard Conway, Juris Hartmanis, David Gries

Martin Wright Sampson, Jr.

July 11, 1914 — June 6, 1999

Professor Emeritus Martin Wright Sampson, Jr., died on June 6, 1999, in Roseville, Minnesota. He was born in Ithaca, where his father was an eminent Professor of English at Cornell. He received the degree of B.S. in Administrative Engineering from Cornell in 1939 and the degree of M.S. from Cornell in 1945, with a major in Industrial Engineering and a minor in Industrial Psychology. His wife, his son, and many other family members also received their baccalaureate from Cornell.

After receiving the B.S. degree, Marty worked for one and one half years as an engineer at the Buffalo, New York Chevrolet Division of General Motors, gaining experience in plant layout, production methods, and industrial organization and management. He started teaching at Cornell in 1941, in the Administrative Engineering Department, which at that time was a part of Sibley School of Mechanical Engineering. This department gradually evolved into the present School of Operations Research and Industrial Engineering, and Marty played an essential role in constructing the new curriculum, teaching a variety of courses. He also played an important role in educating students outside of Cornell. He taught courses in job analysis and evaluation to industrial and labor union groups in several cities in Mexico, aiding about twenty different Mexican firms. He spent a year as a Visiting Professor at the Middle East Technical University in Ankara, Turkey, as part of a program administered by the Cornell Graduate School of Business and Public Administration, under the auspices of the United States Agency for International Development. In addition to teaching courses there, he advised the Department of Business Administration on curriculum revision and teaching methods. Marty also taught courses at the University of the West Indies in Trinidad as a Fulbright Lecturer, and numerous extension and adult education courses for many American corporations. Wherever he gave courses, he was known as an excellent teacher.

In addition to his teaching duties, Marty served on several college and university committees, and for several years before he retired in 1980, he was Director of Cornell's Summer Session.

Marty Sampson had broad interests outside of his academic work. He was active in track and field as a young man, and later officiated at track and field events. He was a vestryman and treasurer at St. John's Church in Ithaca. After his retirement, he served on several committees involved with improving conditions in the Ithaca area.

Marty Sampson was an exceptionally kind and considerate person. After he retired, he was a volunteer van driver for "Gadabout," an organization which transports the elderly and the handicapped to medical appointments and

shops. When students who were sent to Cornell under the accelerated military training program were invited back for the 50th anniversary of the program, Marty was still remembered with affection.

Marty's wife, Anne Beers Sampson, died in 1987. He is survived by his son, Martin Wright Sampson III; daughter-in-law, Ellen Sampson; grandson, Aaron Sampson; daughter, Debbie Sampson; a brother and sister; and nieces and nephews.

Robert N. Allen, Henry P. Goode, Narahari U. Prabhu, Lionel I. Weiss

Charles I. Sayles

July 17, 1903 — January 9, 1991

This past year the Hotel School lost a most loyal friend, former faculty member, and alumnus, Charles I. Sayles. He was a member of one of the first graduating classes of the newfound hotel program and returned, in 1931, to spend almost 35 years on the faculty.

Chuck Sayles was born in Watertown, New York, into a family of New York educators and innkeepers. His father was president of the State Teachers College in Albany and, during the summer months, operated the Star Lake Inn in the Adirondacks. Chuck embraced these family traditions; he recalled taking the Inn's horse and wagon to the train station at Indian Lake, greeting summer guests arriving from New York, and carrying their trunks back to the lodge.

Graduating from Colgate University in 1924, Chuck then attended the Alliance Francaise in Paris before returning to the States where he received a second Bachelor's degree from the Department of Hotel Management (then in the School of Home Economics) in 1926. At that time, the hotel program was directed from a closet under the stairs in Roberts Hall. Chuck describes these humble beginnings of the School of Hotel Administration in his last work, *The Closet Under the Stairs* (1989). He later earned a Master's degree in electrical engineering from Cornell in 1937.

Chuck Sayles became an instructor in industrial engineering at the Hotel School in 1931. In those early years he would arrive back from the Adirondacks in late September, only a day or two before the fall term. He loved the outdoors and was an avid hunter and fisherman. A charter member of the Cayuga Heights Fire Department, the back of Chuck's car invariably held a combination of fishing and fire gear.

In his office at Cornell, Chuck loved to point out to the Home Economics dean the framed letter from his wife, "Ted", announcing her resignation from the faculty at the time of their marriage. Their nearly fifty years together produced three children, Harriet, John, and Margaret. Chuck's second wife, Janet E. Sayles, of Ithaca, and his son, John, survive.

Chuck created an impressive legacy at the Hotel School. He maintained, out of his own pocket, a personal loan fund for students, lending amounts up to \$100 as the need arose. He kept a ledger of names and amounts and, when settled, would tear out the appropriate page and return it to the student. No one ever failed to repay a debt.

Chuck taught courses in construction, property management, and electrical engineering to two generations of Cornell hoteliers. His inquisitiveness for education—and for the practicality of innkeeping—continued throughout his career. In the 1960s he became a pioneer in the emerging field of data processing and its application to the hospitality industry. As the School's first director of research, Chuck was highly involved with IBM, NCR, Hilton Hotels, and other leading firms in practical application of information systems to the industry. Chuck was the consummate faculty member. Engaged with teaching and research alike, he served at one time or another on practically every school committee as well as two terms as acting dean of the School. In 1949-50 he was appointed to supervise the construction of Statler Hall, which was built on the former site of faculty homes lining East Avenue.

All this time Chuck continued to operate his beloved Star Lake Inn, travelling north each spring weekend to prepare for the upcoming season. As a professional hotelier, Chuck also served as president of the Cornell Society of Hotelmen and was a director of the New York State Hotel Association. He is the quintessential faculty member and alumnus, combining passions for education, research, and service to the university and industry.

It is rare, indeed, when faculty and alumni together can honor the myriad contributions of one of their own. We remember with affection and love our friend, colleague, and mentor, Charles I. Sayles. Many lives are richer today for having known and worked with Chuck.

Richard H. Penner, Richard G. Moore, Robert M. Chase

George F. Scheele

May 23, 1935 — February 13, 1993

George Scheele was a prominent chemical engineer, a successful educator, a valued colleague, and, most of all, a much-loved friend and advisor to hundreds of undergraduate chemical engineers at Cornell. With his untimely death, Cornell lost one of its most beloved and effective professors. Although he had a recurring liver condition which became pronounced at the beginning of 1992, we had expected to see him recover as he had done before. Indeed, he had taught with his usual enthusiasm in both the 1992 summer session and the fall term. It was only at the end of 1992 that the prospect of a liver transplant seemed to become an urgent necessity. Our elation over an apparently successful transplant early in 1993 was turned to sorrow when he succumbed to complications. He is survived by his wife, Carol Teaman Scheele of Ithaca; his mother; one sister; and two nieces.

George came to Cornell in January of 1962 having just completed his Ph.D. thesis at the University of Illinois. There he had studied the effects of heat transfer on fluid flow instabilities under the direction of T.J. Hanratty. During a leave spent with the Dow Chemical Company in Midland, Michigan, he expanded his research interest to include the stability of jets and the general area of drop coalescence. Much of the work he directed in subsequent years grew out of these experiences. He spent other leaves at Exxon Research and Engineering and DuPont's Engineering Department. The latter contact led to his consulting for DuPont over a period of years. He also consulted for Union Carbide and IBM at various times. All of his exposure to industrial practice was incorporated into his teaching and made the subjects of transport phenomena and computer-aided design come alive for his students. Adding to his diverse background, one sabbatical leave was spent as a visiting professor in the Department of Chemical Engineering at the University of California Berkeley campus.

Growing up in Yonkers made George, naturally, into a New York baseball fan. He had a vivid memory of the Yankee's glory days from the 1940s on and could recall most lineups and batting averages with remarkable accuracy. He had numerous part-time jobs including a post as a doorman at Radio City Music Hall. He was certain that it was his height that got him that job although most of us would guess that his outgoing attitude was the key. As a Phi Beta Kappa student at Princeton majoring in chemical engineering, George found time to be on the crew. Through all his life he enjoyed many sports as a spectator as well as a participant. From Princeton he went on to graduate school as a National Science Foundation fellow at the University of Illinois. When he had completed his studies, he interviewed at several universities, then selected Cornell.

At Cornell, George directed research in the field of fluid mechanics. For example, a series of four papers with his student B.J. Meister appeared in the *American Institute of Chemical Engineers Journal* on the subject of drop formation from jets. These papers treated both experimental and theoretical aspects of the problem and had a major impact on research in this area. In addition to its influence on other academic research, insights from this work influenced practical industrial processes such as polymer formation. Other important papers appeared in quality journals such as *Chemical Engineering Science* and *Industrial and Engineering Fundamentals*.

In his teaching career, George taught courses ranging from a sophomore course in Material and Energy Balances to graduate courses in Numerical Methods and Computer-Aided Design. The latter course was introduced by George in 1980. On many occasions he taught the “meat-and-potatoes” courses of chemical engineering—heat and mass transfer, separations, and, of course, his first love, fluid dynamics. When chemical engineering first offered summer courses in the Engineering Cooperative Program in 1977, it was George who taught the fluid dynamics course. He continued to teach it almost every summer for the next 15 years.

Early in his teaching career, George established an easy rapport with students which made him an excellent teacher and advisor. Even when he was teaching a rigorous course in fluid dynamics, students recognized his combination of ability and conscientiousness. One result was his receiving the “Excellence in Teaching Award” sponsored by the Cornell Society of Engineers and Tau Beta Pi in 1970. Another kind of recognition came from students who were selected as Presidential Scholars (a campus-wide award). On several occasions George was named by awardees as the teacher and mentor who most influenced them. The summer Coop students in chemical engineering always had a team that competed in Cornell’s summer Softball league. George was an integral part of that effort which helped knit the Coop students into a kind of mutual support group.

Another aspect of George Scheele’s career was that of the “good citizen.” He served as member or chairman of numerous committees. He became associate director of the School of Chemical Engineering starting in 1982. In that post he ran most of the day-to-day operations at a time when administration was becoming quite complex. The undergraduate program became his primary responsibility. At the University level, he served several terms on the Faculty Council of Representatives including some key committees (Chairman of the Executive Committee, for example). In the Engineering College, he served at one time or another on almost every committee including those that established and administered the freshman and sophomore requirements. This gave him a superb knowledge of the life and governance of the University. George’s rapport with students and his common sense, along with

his knowledge of the University were called into action from time to time. On one occasion, the President of the University chose George to moderate discussions with student activists who had taken over a campus building. President Rhodes recalls that George successfully completed his mission with “fairness, strength, and grace/”

As a proud member of the chemical engineering profession, George was active in the American Institute of Chemical Engineers. Besides publishing in the AIChE Journal, he was Cornell’s main representative in the group that established the Twin Tiers Local Section. He was the faculty advisor for the Student Chapter several times and always took a great interest in their activities. At national meetings of AIChE, George (and his wife Carol) often supervised the reception which was an important link to our alumni throughout the United States. Recognition for his activity came in 1985 when he was honored as a Fellow of the AIChE. This signified “professional attainment and significant accomplishment in engineering.” In the endorsements accompanying his nomination, the admiration and esteem of his colleagues and students was very evident.

George was a sensitive and perceptive counselor to many students over the years. In addition to his formal duties as an assigned advisor, he listened to the problems of those who found him to be the most approachable and sympathetic person on the faculty even when he was not their official advisor. He was a good listener. His faculty colleagues also found him to be understanding and responsive. We miss his insight, humor, and genuine concern for the students.

Michael L. Shuler, Julian C. Smith, Ferdinand Rodriguez

Rudolf Berthold Schlesinger

October 11, 1909 — November 10, 1996

Rudi and his wife Putti Schlesinger, as they were known to each other and to the world, died together in San Francisco on November 10, 1996 facing in each case suffering, illness, and death. But their lives with each other and among us were an affirmation of the triumph of humanity over the disaster that occurred in Germany in the 1930s. And their triumph was not one of merely surviving and enduring, but a triumph of high achievement even in the face of horrendous moral and social failure.

Rudi Schlesinger was born in Munich in 1909. His parents were comfortably well off and he had a large, extended family that owned a bank in Munich. The family enjoyed a happy bourgeois life in pre-war Germany, and like many successful families, they watched the unfolding of the Nazi nightmare with incredulity and with a hope that it stop. But eventually Rudi's mother became convinced that it would not be stopped and in a breathtaking escape at the last minute after Krystalnacht to Switzerland, the family eventually landed in New York. Putti's family, which was acquainted with Rudi's, left somewhat sooner and their brief early acquaintance was renewed and flowered in New York in the 1940s.

On his arrival in New York, Rudi, who had the equivalent of a doctorate in law, remade himself as an American lawyer, attending Columbia Law School and then clerking for the eminent Irving Lehman on the New York Court of Appeals. During this period Rudi and Putti were married.

In 1948, Rudi was interviewed by Robert Stevens, long-time Dean of the Cornell Law School and offered a job. It seemed like an unlikely match at first, the worldly Jewish Rudi and the insular upstate New York law school but it proved to be a relationship of mutual transformation. Rudi transformed the Law School into a center of international and comparative law. His meticulousness and his vivacity charmed law students and helped move the school to be a world class law school. But in so doing, Rudi did not want the school to be a factory or to ignore the beautiful Ithaca surroundings. He told the story of how he and Putti stayed up late one night considering a job offer from another eminent law school and then the sun came up, splendidly, and landed on Lake Cayuga which they could see from their home. They turned the offer down.

Rudi and Putti were both scholarly. Putti was an eminent critique of art and became, in their post-Cornell existence, the art consultant to the University of California at Hastings Law School. Rudi was a detail-a-phile collecting stories and facts and insights into law and related social phenomenon.

Rudi and Putti have three children and several grandchildren whom they loved. They had high standards for them as for everything in their life and left a legacy of parental commitment and affection. Many students were admitted to this same circle over the years and also labored for the family as gardeners, dog watchers, and child care workers.

Rudi and Putti both faced serious declines at the end, but they were active physically and mentally right up to their decision to leave us together and at peace. We are grateful to them for what they gave us and also mindful of how their escape, along with their families, must remind all of us of the enormity of the Holocaust but the triumph of humanity even over it.

John J. Barceló III, Roger Cramton, Gray Thoron, Russell K. Osgood

Andrew S. Schultz, Jr.

August 14, 1913 — March 13, 1998

Andrew Schultz, the Spencer T. Olin Professor of Engineering, Emeritus, died on March 13, 1998 at his home in Ponte Vedra, Florida. He was 86. He is survived by his wife, Mary; his children, Susan and Andrew III (Toby); and by hundreds of Cornell Engineering alumni for whom Andy made a tremendous difference.

Andy was the ultimate Cornellian. There cannot be many individuals who have experienced Cornell as completely as he did. He entered as a freshman, stayed for graduate work, progressed through each faculty rank, served as department chairman, and served as the Joseph Silbert Dean of the College of Engineering during a critical period of change for the college. Nor are there many that can match the impact Andy had upon his college, his university, and his students. Andy had a unique combination of the vision to foresee trends and needs, and the ability to lead his colleagues and his students in promising directions.

Andy was one of the founders of the academic discipline of Operations Research. His experience at the War Production Board during World War II led him to foresee the need for quantitative analysis in logistics. He returned to the Cornell faculty and began a campaign that led to the separation of industrial engineering from mechanical engineering and the development of a world-renown Department of Industrial Engineering and Operations Research. Andy's doctoral students during this era became the missionaries and pioneers of this new discipline around the country, and many have been recognized by election to the National Academy of Engineering. Few of these had planned on an academic career before they ran into Andy.

Perhaps even more important for Cornell was his leadership in the explosive field of computer science. Andy was a member of the committee that brought the first computer to Cornell in 1953. He was instrumental in creating the first course in computing at Cornell in 1956. In 1964, as Dean of Engineering, he sponsored the creation of one of the first university departments of computer science. Cornell's inter-college Department of Computer Science became one of the best in the world. Andy was also a leader in creating the Department of Materials Science and Engineering, which became a stellar department in that vital field. He also played a significant role in moving the Department of Geology into the College of Engineering and expanding its scope. In addition to his contributions to his department and his college, he was very active in University Faculty committees and professional societies.

For a man whose career was spent in academia, Andy had an uncanny appreciation of the problems and opportunities of the "real world". He somehow imparted to generations of students some fraction of his unique

ability to identify the critical problem in a noisy, complex system. This has helped them become remarkably successful in many different fields. On his retirement, they expressed their gratitude by endowing a professorship in his name. Fittingly, the first appointment to the Schultz Chair was one of Andy's own students.

Richard W. Conway, Dale R. Corson, William L. Maxwell

Lillian Shaben

October 21, 1894 — May 3, 1997

Lillian Shaben lived for more than 100 years, a rare accomplishment today. She was born in Minneapolis, Minnesota and graduated from Iowa State University in 1921. Following work experience in extension in Iowa and in industry as a demonstrator for the Russell Miller Company, she was appointed to an extension position in Food and Nutrition at Cornell University in 1928. Her original appointment was signed by Martha Van Rensselaer in Home Economics and Dean Mann of the College of Agriculture. In 1932, she received a Master's degree from Columbia University. After 27 years of service at Cornell University, she retired in 1953 as Professor Emerita.

As an extension educator in the field of food and nutrition, Lillian Shaben was widely renowned as an exceptionally talented teacher and had a large following of devoted listeners. She repeatedly drew huge audiences for her presentations throughout the State of New York. She was meticulous in her demonstration preparations and she was known as someone who could reach a lay audience. Her publications covered subjects such as food preservation, the relationship of preparation procedures on the nutritive value of foods, and the importance of nutritious school lunches. Her presentation style was a model for 4H members and leaders to follow.

On Lillian Shaben's retirement, Ruby Greene Smith said, "In the retirement of Professor Lillian Shaben, the Cornell University Faculty and the homemakers of New York State lost a teacher who was loved and respected by many. In her career as an Extension specialist and as a Professor, she has proved to be scholarly and tactful, an inspiring teacher and leader, and a loyal friend."

She was a member of Phi Kappa Phi, Omicron Nu, Mortar Board, Theta Sigma Phi, and Epsilon Sigma Phi, the Cooperative Extension fraternity. At Iowa State, she helped to establish the Iowa State College chapter of Chi Omega, a social sorority. She belonged to a women's athletic fraternity and received her athletic letter while in college. In addition, as an undergraduate, she counted her most educational experience in college as being the women students' representative on a committee of faculty members who planned the building of Iowa State's Memorial Union.

While she lived in Ithaca, she owned a cottage on the west side of Cayuga Lake where she went in season to refresh her aesthetic interests. She shared this grand experience with many colleagues, as well as students.

Lillian Shaben moved to East Lansing, Michigan several years after her retirement to be near her sister, Irene. She continued to be active in the fields of art and design, the loves of her life. When her health began to fail, she moved into the Burcham Hills Health Center in East Lansing. She eventually lost her sight and died in May 1997.

Mildred Dunn, Gertrude Armbruster

Harold Shadick

September 30, 1902 — December 21, 1993

It has been said much more than once that Harold Shadick was a man of two cultures and two careers. Although he was born in London and died in Ithaca, he was in spirit Chinese. His first career took him to China, teaching Western history and literature at Yenching University, Peking; his second career as a Chinese scholar, teacher, and translator brought him to Cornell University.

Harold Shadick was educated at Westminster City School in London and studied philosophy at Wycliffe College, University of Toronto, where the Principal, Dr. O'Meara, took a personal interest in his development. So, too, did Dr. Hwang—also associated with the University of Toronto—who introduced Harold Shadick to the idea of working in China by identifying the educational needs of China as an appropriate challenge for Harold Shadick's talents.

In 1925, just fourteen years after the overthrow of the Manchu dynasty, Harold Shadick began teaching Western history and literature at Yenching University in Peking (Beijing). He also took every opportunity to study classical as well as colloquial Chinese, and made the acquaintance of many Chinese scholars and writers. Beijing was occupied by the Imperial Japanese Army in July 1937, after which Harold Shadick continued to teach at Yenching University. Following the attack on Pearl Harbor, Japanese military authorities entered the campus and closed the university, interrupting a lecture he was giving on Shakespeare's "Romeo and Juliet" and ordering him to dismiss his students. Subsequently, Harold and his first wife, Helen Lamkert Shadick, were interned at the Weixian Concentration Camp in Shandong Province for the duration of World War II.

After the end of the war, he resumed teaching at Yenching University during 1945-46, before becoming a Visiting Professor at Cornell, where he was given a regular appointment as Professor of Chinese Literature in June 1946 to the then Department of Far Eastern Studies (renamed Department of Asian Studies in 1962). He taught Chinese language and literature and in 1952 published his translation of the novel, *The Travels of Lao Ts'an*. The Introduction to the Columbia University Press edition (1990) provides his recollection that he began the translation in 1934 after a train trip from Beijing to Tianjin during which he happened to meet Dr. Hu Shih '14, the scholar who first called critical attention to *The Travels of Lao Ts'an* and became the patron of its author, Liu Tieyun. Another of Harold Shadick's most notable works is the three-volume textbook, *A First Course in Literary Chinese* (Cornell University Press, 1968), which is still in use at Cornell and other universities. Harold's interest in Chinese literature led to the

formation of the Conference on Chinese Oral and Performing Literature (CHINOPERL), which meets annually. For eighteen years, until 1987, he served as editor of the journal, *CHINOPERL Papers*, on the study of all types of spoken or sung performance in Chinese.

When Harold Shadick joined the Cornell faculty in 1946 he worked with the chair of his department, Knight Biggerstaff, to plan a center for Chinese studies in upstate New York. China and Chinese language were then still regarded as exotic subjects, and no center of Chinese studies existed anywhere, with the exception of Harvard. In 1950, Harold Shadick founded the China Program and served as its director until 1966. During this time, with generous grants from the Ford Foundation and the Rockefeller Foundation, he established Cornell as one of the major centers of Chinese studies in North America. Together with a succession of able curators, he made the Wason Collection one of the five best Chinese collections in America at that time, knowing well that to attract a distinguished faculty to an isolated location such as Ithaca, Cornell must provide an excellent Chinese library. Among the distinguished scholars he helped recruit as Cornell faculty were Liu Ta-chung and John Fei in Economics, William Skinner and Arthur Wolf in Anthropology, John Lewis in Government, and Nicholas Bodman in Linguistics. As a result, while Harold Shadick was Director of the China Program, Cornell became pre-eminent in the social sciences in subjects related to China. One of his most memorable achievements in teaching programs was his collaboration with the eminent linguist Y.R. Chao '14, with the support of the American Council of Learned Societies (ACLS), to establish the Inter-University Program for Chinese Language Instruction in Taipei, first administered through the China Program at Cornell.

After his retirement in 1972, Harold Shadick continued to be involved actively in the China Program (today the East Asia Program) and CHINOPERL. In 1986, he revisited China for the first time since 1946 and reestablished contact with several of his numerous friends there, many former students among them. At the invitation of Peking University, he there delivered two lectures, one of which he presented as the conclusion to his lecture on "Romeo and Juliet," interrupted by the Japanese Imperial Army forty-five years earlier. Several years after the death of his first wife, Helen, who had also served Cornell teaching her native Russian language, Harold married Wu Hsin-min (Lydia), who had been his student at Yenching University in 1929-30 and later came to Cornell as his Teaching Assistant (1947-52). He is survived by his sister Winifred Woodgate.

Knight Biggerstaff, Edward Gunn, Tsu-lin Mei

Sanford Reuben Shapley

October 15, 1906 — March 12, 1997

Blessed with curiosity and a mind that loved knowledge, combined with the practical skills required for application, S. Reuben Shapley made significant contribution to Cornell and to New York State agriculture. He did it with confidence and with a thoughtful manner, recognized both on and off campus.

Born on October 15, 1906 in Hamilton, New York, he was the son of Sanford L. and Minerva C. Shapley and was raised in South Otselic, New York. His formal training began when he enrolled as an undergraduate in the College of Agriculture at Cornell University in 1924. While a student, he was a member of Alpha Zeta Honorary Fraternity, Ho-Nun-De-Kah and winner of the first Farm Life Challenge Contest (now Rice Stage Debate). The application of his acquired knowledge was made available via the Extension Service starting in 1928 and extending through 1939.

He was then appointed District Agricultural Agent in Land Use Planning. Recognition of his dedication to public service and his skill in delivering agricultural knowledge to his clientele led to positions of leadership from associates and Extension administrators. In 1943, he was appointed Associate Professor in Extension Service and Assistant Leader of County Agricultural Agents. During the trying years of World War II (1943-45), Professor Shapley gave unique leadership to the State's Farm Labor Program in the capacity of Supervisor.

In 1945, Shapley was named Professor of Farm Practice for the college. In this role, he guided the diverse Farm Services of the college and in addition developed farm practice opportunities for literally thousands of students so that they might meet their work experience requirements for graduation. Being able to assist students gain essential experience with recognized successful practitioners was a high point for many of our students and a personal delight for "Reub". For many, this became a life-long association and a valuable part of their Cornell experience.

In 1958, he was named Professor in Personnel Administration in the Office of Resident Instruction. During the 1960s, Professor Shapley expanded the operations in the work experience area to encompass an intern program with interested agri-business organizations, an innovation well received in a period where relevancy was becoming a key goal of students. He also wrote several articles and other publications regarding the work experience requirement of the N.Y.S. College of Agriculture.

After serving Cornell for 44 years, Reuben retired in 1972. In recognition of his many duties and responsibilities with the Cooperative Extension Staff, with fellow faculty and with undergraduate students in particular, Professor Shapley retired as Professor Emeritus.

In addition to his career at Cornell, Professor Shapley was an active community leader. He was a member of the First Presbyterian Church and a trustee and elder in the church. He helped establish and was a charter member of the Ellis Hollow Community Center, Inc. From 1950-56, he was member and chairman of the Ithaca area school study committee that led to the consolidation of 44 school districts. In 1958, he was presented a citation by the Ithaca Teachers Association for services to education. He was a member of the Rotary Club and a local 4-H leader.

Reub enjoyed gardening, growing Christmas trees, raising Airedales, traveling, photography, refinishing furniture, hunting, fishing, making wine and playing bridge. Through 1991, he lived in his country home in Ellis Hollow. Later he moved to Concord, New Hampshire to live at the New Hampshire Odd Fellows Home in Concord to be near his daughter, Judy. He died March 12, 1997.

He was survived by two sons, S. Philip Shapley, Owen Sound, Canada; Bruce D. Shapley (deceased, 7/25/97); a daughter, Judith Waterman, Bedford, New Hampshire; eight grandchildren; four great-grandchildren; and a sister, Esther S. Day, Bainbridge, New York. He was predeceased by his first wife, Elizabeth D. Coon, April 1955; his second wife, Mildred R. Coon, November 1991; and a brother, Charles S. Shapley.

A man of substance, integrity and honesty, each of us who knew him did profit from the encounter. To be called an associate was an honor.

Herbert L. Everett, Leonard W. Feddema, Richard A. Church

R. Lauriston Sharp

March 24, 1907 — December 31, 1993

In November 1926, Lauriston Sharp, nineteen years old, published a prize winning essay in the undergraduate *Wisconsin Literary Review*. He wrote: "...perhaps on the whole, the greatest happiness throughout life...is given in...the lasting contentment of the quiet man rather than the stormy passion of him who is susceptible to the emotions." Many who knew Lauri Sharp might agree that he embodied the "quiet man" in his demeanor, not given to displays of "stormy passion". But Lauri's long life, his professional career, service to his discipline, to academe, to his university, to his students, colleagues, family and friends demonstrate that this "quiet man" was also a person of prodigious energy and notable accomplishments.

Born after the turn of the century, son of Professor of Philosophy, Frank Chapman Sharp and Bertha Pittman Sharp, and raised in the university town of Madison, Wisconsin, it is not surprising that Lauri decided to be an academic. However, his choice of anthropology as his discipline is remarkable, for there were few trained professional anthropologists in those days. Not long before his death, Lauri recalled that he may have "been nudged toward anthropology" when he studied *The Iliad* in a Greek course as a junior in high school. He remembered wondering if the "manic" qualities of the ancient Greeks reflected a distinctive attribute of their culture, or whether it was a universal characteristic rooted in human nature. He suggested this question was a precursor of anthropology's subsequent interest in "culture and personality". This same curiosity may also have led Lauri to several summer horseback trips with a number of peers (and later colleagues), traveling through the American Southwest, visiting archaeological sites and the Indians living there. If Lauri was already cultivating the bearing of the "quiet man", it may have concealed not only an underlying curiosity but also, perhaps, an enduring youthful quest for adventure and fascination with the unfamiliar.

After earning a B.A. degree in Philosophy (1929), Lauri spent a year at Wisconsin as a Freshman Dean while he explored his career options. He eventually chose anthropology as his profession and the then little known region of Southeast Asia as his area of special interest. Following an archaeological dig and ethnographic encounters with Berber culture in Algeria, Lauri went to study Southeast Asian ethnology at the University of Vienna with Robert Heine-Geldern, one of the few experts on the region at the time. Completing a Certificate in Anthropology at Vienna in 1932, Lauri entered the Ph.D. Program in Anthropology at Harvard. Senior mentors offered Lauri an extraordinary opportunity—funding for two years of dissertation research (1933-35) on Australian aborigines

(then the prototypic “primitives”). Although his research on the Yir Yoront postponed his plans for Southeast Asia, Lauri was proud to be one of a handful of researchers who had worked with aborigines in an area he characterized as “beyond the settlements” and “empty on the map”.

Except for eighteen months (1945-46) as Deputy Assistant Chief of the State Department’s Southeast Asia Division, Lauri’s personal life and professional career were closely tied to Cornell. He accepted an Instructorship in Anthropology here in 1936, the year before his Ph.D. degree was awarded. Holding the first specifically anthropology appointment at Cornell, Lauri was housed in the Economics Department until 1939 when a separate Sociology and Anthropology Department was established (which he chaired in 1942-45 and 1949-56). Lauri rose through the academic ranks and was Goldwin Smith Professor Emeritus of Anthropology and Asian Studies at the time of his death.

Emeritus Professor Urie Bronfenbrenner (B.A. ‘38) has recalled that he and his close friend John Clausen (B.A. ‘36), subsequently a distinguished Professor of Sociology at Berkeley, were students in the first anthropology course Lauri taught at Cornell. Bronfenbrenner reports that Lauri “brought to life for us a whole new world in his quiet, unassuming way...and changed forever our conceptions of what human beings and the world they lived in not only could be, but actually were”, a view of humanity and of the world that has informed Bronfenbrenner’s subsequent life and career. Professor Robert J. Smith (Ph.D. ‘53) recalls that Lauri’s graduate teaching, “drawing on philosophy, literature and an extraordinary range of anthropological knowledge, dazzled us all with his urbanity and wit.” Professor Paul Doughty (Ph.D. ‘63) also remembers that the graduate students of his generation vied with each other to serve as Lauri’s TAs to perfect their craft as scholars and teachers.

Professor Stanley J. O’Connor, Lauri’s long time colleague, vividly projects yet another image of Lauri in an *Arts College Newsletter* article (Fall 1981). O’Connor describes Lauri as “...a familiar figure crossing the Arts quad... charging through that space at such a clip that the air around him seemed lit with an overflow of energy.” That image evokes another aspect of Lauri’s life and career and adds a dimension that further modulates the tranquil image of the “quiet man”. Lauri was strongly committed not only to expand his discipline and enrich his University but also to have an impact on the lives of people in a rapidly changing world. In the post War era, Lauri and colleagues obtained support from various foundations (Carnegie, Ford, Rockefeller) to enlarge the infrastructure of the university and to address the needs of this changing world. This included a substantial increase in the anthropology faculty and founding a graduate program known as the “Cornell Studies in Culture and Applied Science” that emphasized Lauri’s vision of anthropology as an “applied” as well as a “pure” discipline.

Field research stations were established in the American Southwest and in India, Peru and Thailand. In 1947, Lauri at last realized his dream of research in Southeast Asia, founding the multidisciplinary Cornell-Thailand Project, a pioneering effort gathering baseline data in Bang Chan, a farming village near Bangkok. Lauri was also founder and first Director (1950-60) of Cornell's internationally renowned Southeast Asia Program which served as a model for area programs at Cornell and elsewhere. He took special pride in the number of non-Western scholars in diverse fields who received training and experience through these programs and became productive scholars and teachers in their homelands. He was also concerned that the results of research be made accessible for development programs initiated by local governments. Additionally, Lauri chaired the faculty committee which ushered in Cornell's Center for International Studies.

Lauri's professional career was multifaceted. Besides teaching generations of Cornell undergraduate and graduate students, he held numerous visiting appointments at universities in the U.S. and abroad. He was a founding member of several scholarly organizations, including the Society for Applied Anthropology and the Asia Society, and served on the executive boards of various organizations such as the American Anthropological Association, the Association for Asian Studies (President in 1961-62), and the National Research Council's Pacific Sciences Board. He had experience as a scholar-researcher with the indigenous cultures of four continents, most especially the diverse peoples of Southeast Asia. Several of his publications attained the status of classics, notably *Steel Axes for Stone Age Australians* (1952), *People Without Politics* (1958) and his presidential address to the Association for Asian Studies: *Cultural Continuities and Discontinuities in Southeast Asia* (1962).

On his formal retirement in 1973, Lauri was presented with a two volume festschrift by colleagues, students and friends. One volume (Robert J. Smith, ed. 1974) celebrated Lauri's contributions to studies of cultural change and applied anthropology, the other (G. William Skinner and A. Thomas Kirsch, eds. 1975) honored his contributions to Thai Studies. Even after retirement, Lauri remained active. He attended meetings of the Southeast Asia Program, held office hours, contributed lectures, and supervised courses. Although increasing health problems made field research difficult, he continued to work on his earlier research materials. Thus, the extensive files of the Bang Chan Project have been deposited in the University Archives. Lauri also worked on his field notes from his Yir Yoront research and guided an anthropological linguist in preparing a linguistic sketch and lexicon of this unwritten tongue (Alpher 1991). These materials are also accessible to interested scholars in the Cornell Archives.

Lauri's achievements as scholar, researcher and administrator were recognized in a variety of ways. In addition to the two festschrift volumes, a group of his former Thai students established a Lauriston Sharp Essay Prize in

1967 and a Lauriston Sharp Scholarship Fund to promote social science research in Thailand. The Southeast Asia Program similarly established a Lauriston Sharp Prize awarded annually to an outstanding student completing his or her degree program. In 1989, Lauri received the Bronislaw Malinowski Award from the Society for Applied Anthropology for his lifelong contributions to that field. And, in April 1993, Lauri was honored by the Anthropology Department, the College of Arts and Sciences and the University by having an Anthropology seminar room in McGraw Hall named in his honor (shared with Allan Holmberg). On this occasion, Provost Nesheim cited Lauri's contributions as teacher, scholar and humanitarian to improving the quality of education and the quality of life at Cornell.

Many facets of Lauri's life—scholar-researcher, teacher-advisor, administrator-official—were played out in the public sphere. There was, of course, a private sphere as well, centering on his home and family, his wife, Ruth; children, Alexander (Zander) and Susannah (Suki) Sharp Starnes; grandchildren; and brothers, Malcolm and Eliot. Lauri's public and private lives complemented each other in various ways. Lauri and Ruth Burdick Sharp married in 1936, the year he began teaching at Cornell. This was the first and longest of their joint odysseys. Ruth shared in the overseas research experiences as well as the teaching assignments elsewhere. The children also participated when possible. More than a companion, Ruth's interest and self-acquired knowledge of ceramics made its own contribution to the scholarly work in Southeast Asia. Theirs then was a synergistic relationship at many different levels.

Lauri built their house on Highland Road in 1951 following designs of Cornell's noted architect John Hartell. (Vladimir Nabakov briefly lived there while teaching at Cornell and describes the house in his novel *Pale Fire*.) The living room is furnished with family heirlooms and mementos of the Sharps' Asian experiences. Books and periodicals stacked here and there testify to its residents' voracious reading habits. Visits with a few friends or colleagues and lively cocktail parties were held here. The Sharps often hosted gracious dinner parties. These occasions, simultaneously simple and elegant, brought together colleagues from all over the University, local professionals, distinguished (even princely) visitors, renowned academics from abroad and others. Such gatherings were memorable for their congeniality, urbanity and charm.

Though age brought more infirmities, Lauri maintained his lively interest in scholarship, happenings on campus and world affairs. Problems with his legs and back reduced but did not halt his mobility, and dimming eyesight, which he tried to overcome by various reading aids, limited his reading ability. While colleagues marveled at his indomitable spirit, none of these problems diminished Lauri's enduring curiosity and enthusiasm for life itself.

But, as 1993 drew to a close, our colleague, mentor and friend quietly embarked on another adventure into the unfamiliar and unknown. In farewell we can do no better than echo the words of Dean Fred Kahn in 1972 on the occasion of Lauri's assuming the Goldwin Smith Chair: Lauri Sharp was "a learned diplomat, a cultivated scholar, a remarkable teacher and a great man."

Stanley J. O'Connor, Robert J. Smith, O.W. Wolters, A. Thomas Kirsch

R. William Shaw

July 7, 1904 — March 14, 1995

Professor Emeritus of Astronomy, R. William Shaw, who had been confined to his residence on Halycon Hill in Forest Home due to a long siege of arthritis and declining health, died following a short hospitalization on March 14, 1995, at the age of 90.

Born July 7, 1904, he was raised on a farm near Meadville, Pennsylvania. Primary schooling took place in a one-room school near the farm; high school was in town necessitating a long walk and trolley ride. Farm chores demanded his time outside school hours, so he was trained early in discipline and hard work. He graduated from Allegheny College in 1926 and went to Purdue for graduate study, earning a Master's degree in 1929. He came to Cornell and earned his Ph.D. degree under Professor R.C. Gibbs in 1934. He became thereafter an Instructor in the Physics Department, teaching spectroscopy in the Advanced Laboratory course. One of his students in 1934 was Charlotte Throop, granddaughter of the Department's venerable one-time head, Edward L. Nichols. A year or so later, Shaw and Miss Throop were married. He was appointed an Assistant Professor of Astronomy in 1939, serving with Professor Samuel L. Boothroyd who earlier had been named by the School of Civil Engineering to head an Astronomy Department in the Arts College at Cornell. Boothroyd's forte was on positional or practical astronomy. Shaw served to bring some physical astronomy to the small Department. At Boothroyd's retirement in 1942, Shaw was named Director of the Fuertes Observatory and Chairman of the Astronomy Department.

Astronomy remained a small Department with Shaw as its Chairman until expansion was undertaken during the late 1950s. The Department played an important role in navigational instruction during World War II. Following the war, augmented with an added Assistant Professor and Instructor, the Department was quartered in a barracks type structure behind Rockefeller Hall until construction of Clark Hall necessitated its removal. Inspection of the laboratory manual he wrote shows a broad diversity of subject matter and a nice approach to some fairly sophisticated techniques. His interest in all aspects of the subject never lapsed; he subscribed to the astronomy magazine, *Sky and Telescope*, until his last year, holding a complete sequence of issues beginning with Vol. 1, No. 1, 1941. He retired and became Professor Emeritus in 1971.

Shaw's main interest was in teaching, and his laboratory manual reflects this. For many years, under the auspices of the National Science Foundation, he ran one of the first summer institutes in graduate studies for earth science teachers.

In the early thirties, Shaw and Boothroyd mounted an observational expedition to San Francisco Peaks near Flagstaff in Arizona to test the relative efficacy of aluminum coating for telescope mirrors compared to the conventional silver coating. The process of coating glass with aluminum had been worked on in the Physics Department. Shaw was essentially the chief scientist, while Boothroyd handled the logistics, and two or three graduate students served as “sherpas.” The expedition was a distinct success; for stellar spectra into the ultraviolet, aluminum turned out to be quite superior to silver and remains the coating of preference today even for the largest reflectors.

Also in the thirties, Shaw conceived the idea of building a 24-inch telescope to be used in Arizona for obtaining stellar spectra. A glass disc was obtained, ground, polished, and tested here in Ithaca. The War intervened and the project was put on hold. The telescope never did make it to Arizona; a mounting was built by the local BOCES and the assembly was installed where it now resides in the Hartung-Boothroyd Observatory on Mt. Pleasant. It is used in advanced laboratory courses in Astronomy.

Shaw was a very private person. He was committed to his teaching and it was done well, eliciting much praise from students. He was devoted to home and family, which included three sons, all of whom graduated from Cornell. His last years were rather lonely, his wife having died a few years earlier.

He is survived by a sister near Philadelphia; sons, Robert (Ph.D.) of Potomac, Maryland, Montgomery (Ph.D.) of Mansfield, Connecticut, and James (M.D.) of Hummelstown, Pennsylvania; as well as five grandchildren.

James R. Houck, Yervant Terzian, Paul L. Harttman

Dennis G. Shepherd

October 6, 1912 — January 9, 1994

The loss of Dennis G. Shepherd, the Joseph Edson Sweet Professor of Mechanical Engineering, Emeritus, is mourned by his colleagues and friends at Cornell, and the many Cornell students for whom he was such a devoted teacher. We remember and honor, too, the accomplishments of his career, and his dedicated service to the Sibley School of Mechanical Engineering.

Following his birth in England, Dennis came with his family to the United States in 1930. He attended the University of Michigan, and received degrees in mathematics and physics. During World War II, he returned to England, where he participated as a young engineer in the epochal development of the aircraft gas-turbine engine. He was in charge of combustor and turbine design as a member of the elite team which, under Sir Frank Whittle, developed the gas turbine that preserved our air superiority then, and which defines the world of flight today. He never told “war stories” about those years, which seems a great pity, given his talent for historical exposition. No doubt, his strong sense of modesty deprived us of some interesting and technically instructive stories!

Passage of time has made our victory in WWII seem inevitable, but one should remember those, like Dennis Shepherd, whose strivings were crucial to our success in that desperate struggle. During that time, he suffered the hearing damage of which we all became aware in later years.

In 1948, when he was 36, following a brief time as an engineer at A.V. Roe in Canada, he came to Cornell as an Assistant Professor. From that time until his retirement, and thereafter until his death, he was one of the World’s most notable teachers of engineering. It is important to note that Dennis was first an engineer, and then a teacher – being an engineer, he was able to teach about real machines. One of us has heard an old grad of the fifties tell about launching rockets at the (then) East Hill airstrip, under Professor Shepherd’s anxious supervision!

Dennis Shepherd’s fame as a teacher is, of course, in the memories of Cornell Students, but also, around the world, in the appreciation of his carefully-constructed, beautifully-written textbooks. *Introduction to the Gas Turbine* first appeared just after his arrival at Cornell. It was revised nine years later, and in that same year, his *Introduction to Turbomachinery* came out. A bit later, he completed his textbook *Elements of Fluid Mechanics*. Later still, his *Aerospace Propulsion* appeared. One realizes that these fine books are the legacy of a long career in engineering education; they were of a new type; they incorporated the underlying sciences of fluid mechanics, thermodynamics

and heat transfer into engineering analysis in a scholarly but lucid way. His books on Fluid Mechanics and on Turbomachinery remain in especially wide use, in industry and in academia.

In 1976, the American Society of Mechanical Engineers recognized these contributions to the technical literature by awarding him the Worcester Reed Warner Medal, and in 1984 by electing him Fellow of the ASME. During his career, he was honored by invitations to be Visiting Fellow at Imperial College (London), Technische Hogeschool (Delft), the University of Cardiff (Wales), and Jilin University of Technology (Jilin, China). Dennis Shepherd was modest and self-effacing; he appreciated the honors (too few) that came his way, but would certainly never solicit them. Never did he, in the midst of our self-absorbed academic culture, ever ask anything for himself or make personal complaint. And never did he fail to respond when some service was asked of him.

Dennis also expressed his love of engineering in a love of its history. In his mid-sixties, he became interested in wind turbines, and at his death he was writing a new book on wind power. His interest in this subject was in the understanding of principles and the appraisal of options for today. By way of introduction, he had completed a fascinating and thorough historical treatise covering 900 years of wind-power development. Despite the ecological enthusiasm for wind power, and despite his own enthusiasm for the subject, Dennis' professional integrity did not allow him to play promoter or advocate. No doubt, many students were disappointed by the limitations and difficulties he so carefully set forth concerning the prospects for wind power.

As a teacher of Engineering, Dennis Shepherd has a unique place in the story of Cornell. He was thorough, and quite strict, but students loved him anyway; he was fair and kind, and they knew he was devoted to their progress. In 1968, he received the "Excellence in Teaching" award of the Cornell Society of Engineers. He won that same award for an unprecedented second time in 1975! These teaching awards were not just nice for Professor Shepherd, but they signify a lifelong satisfaction and happiness on the part of numberless Cornell Alumni concerning their educational experience here; that is Dennis Shepherd's ongoing, one may say perpetual, gift to Cornell, one which we will always honor.

Dennis served as Director of the School of Mechanical Engineering for seven years beginning in 1965. During that time, he developed a Master of Engineering program which entailed design projects supervised cooperatively with Industry. After a few years, this initiative faded because his vision was not shared by the School's faculty at that time. But his vision was in fact prophetic, because such cooperative, interdisciplinary projects are now considered the mark of a forward-looking engineering curriculum! Also during his Directorship, he oversaw a major revision

of the undergraduate curriculum, one that streamlined and broadened the foundation courses of the field which, for twenty years, have provided a smooth transition to higher-level studies in modern technology.

In 1979, Dennis Shepherd retired, and during the first eleven years of his //retirement,./ continued to teach a course each term, and for two of those years was in charge of modernizing the Senior Laboratory of Mechanical Engineering, a remarkable assignment for an emeritus professor!

Dennis Shepherd was a deeply devoted husband and father; his wife, Gertrude, his son, Julian, and his daughters, Joanna and Barbara, survive him. With them, his colleagues and students will always hold this good and faithful man in fond memory. Each year hereafter, the Sibley School will especially remember Dennis Shepherd, the great teacher, by making a teaching award in his name, from a special endowment established for that purpose.

Edwin L. Resler, Jr., Kenneth E. Torrance, Franklin K. Moore

Benjamin M. Siegel

March 26, 1916 — March 22, 1990

Dr. Benjamin Siegel, professor emeritus of applied and engineering physics, died on Thursday, March 22, 1990, four days before what would have been his 74th birthday. While Ben was one of the earliest (1949) appointments to the faculty of the then-new and experimental Engineering Physics Department at Cornell and had a distinguished career in electron microscopy as a scientist, he will also be remembered for the personal example he set and the life he led.

Ben taught—by example, not precept—that it was possible to be deeply moral, deeply virtuous and deeply serious without being self-righteous, priggish or solemn; that it was possible to make judgments without being judgmental, and to have opinions without being opinionated. He never said an uncomplimentary thing and could always be counted on for good advice on the right way to proceed in a moral dilemma. No matter how competitive the environment, he demonstrated that it was possible to be good, kind and gentle. At least one former department chairman remembers this aspect of his life with deep gratitude.

His scientific career was devoted to the art and practice of electron microscopy and particle optics. At the beginning of his career at Cornell in 1949, use of this technique was very much in its infancy. Through special summer courses, he introduced it to a large number of researchers (including at least one future Nobel laureate and two future presidents of the Electron Microscopy Society of America) in both the physical and biological sciences. His influence on modern electron microscopy continues to be felt through the successes of his many former students and research associates. Indeed, his most significant contribution to teaching came through the one-on-one situations involved in his research programs.

Ben became interested in achieving the highest possible spatial resolution with the microscope. In a timely paper with Claire Eisenhandler, he explored theoretically the phase contrast mechanisms of imaging single atoms. Following this, he established a program identifying various elements of the theoretical and experimental steps necessary to make this a reality. This required work with field emission electron guns, superconducting electron lenses, digital image acquisition, and image processing and ultrahigh vacuum techniques. Many of the ideas Ben was working with in the seventies appear likely to be widely exploited in the nineties. Transmission electron microscopes with field emission guns are now available commercially, and the proposals to exploit the coherence of this electron source will build on the image analysis procedures developed by Earl Kirkland while working with

Ben. Vastly improved vacua are now available, reducing the propensity of the instrument to cover the specimen with some unknown contamination layer.

The program he established had a grand design which probably did not come to fruition in the way he hoped. It nevertheless was a success in that many of the features he saw as necessary to achieve high-resolution have indeed been seen as solutions to problems and have become available to the community. His students and associates went into programs in which they were unique and badly needed. In recognition of his contributions to attaining high resolution, the Electron Microscopy Society of America awarded him the EMSA Distinguished Scientist Award in 1982. He had served as president of the Society in 1973, and an issue of the international journal, *Ultramicroscopy*, was dedicated to him in 1984.

Ben was a key member of the Cornell faculty team that prepared the proposal that brought about what is now the National Nanofabrication Facility. Following this, he carefully reviewed the prospects for particle-based lithographies and initiated work on high brightness gaseous field ion sources for ion beam lithography. This work started a flurry of research activity in this area in Japan that continues to the present day, and he was actively engaged in attempting demonstration of such a tool up to the time of his death.

The personal example Ben set in his life stemmed from a deep faith. He was active in the affairs of the Temple Beth-El of Ithaca, its Rabbi Felix Aber Hebrew School, and in the activities of the Ithaca Jewish Welfare Fund. He served on the Cornell Hillel Foundation Board and for some years on the Cornell United Religious Work Board. In addition, he identified himself with the Zionist movement through his membership in the American Jewish League for Israel.

Ben Siegel was truly a gentleman and truly a scientist. We are the lesser for his passing, but his family, students, friends, and colleagues are much the better for his life.

Milton Konvitz, David Saxon, John Silcox

Robert Hermann Siegfried

January 19, 1899 — December 23, 1992

Robert H. Siegfried died after a short illness on December 23, 1992. Bob was born in Pittsburgh, Pennsylvania and attended high school in Asheville, North Carolina. From 1917 through 1920 he was in the machinist apprentice program at the Norfolk Naval Yard. In 1921, he entered the Sibley School of Mechanical Engineering—as a special student because of the need to fulfill missing entrance requirements before a degree could be awarded. He completed the program of courses in mechanical engineering in 1925, but he had not found time to complete making up the missing entrance requirements. This circumstance had a major influence on the direction of Bob's career in engineering, in that he was hired as an instructor in engineering drawing during the time he was completing the entrance requirements. He received the M.E. degree in 1926.

Bob accepted a position as a test engineer with the Duquesne Light Company in Pittsburgh. After one year there, he moved to the Jones and Laughlin Steel Company. In 1928 he joined the faculty of the Mechanics Institute in Rochester, New York, to teach mechanical drafting, mathematics, and physics. Three years later he was drawn back to Ithaca to be a draftsman in the City Engineer's Office. In 1937, Bob moved over to C.S. Robinson Aerial Surveys, where he was a draftsman and laboratory technician.

In 1941, the opportunity again arose to teach, and in March, he joined the Trumansburg Central School National Defense Training Program, to teach in the areas of blueprint reading, sketching, shop mathematics, shop theory, and machine shop work.

In September 1941, Bob accepted the position of instructor in the Department of Engineering Drawing in the Sibley School of Mechanical Engineering at Cornell, where he taught mechanical drawing and descriptive geometry until his retirement in 1964. From 1942 until 1961 he was in charge of the engineering drawing courses for students in the School of Chemical and Metallurgical Engineering, with offices in both East Sibley and Olin Halls. During the period 1943-55 he also served as consultant/draftsman for the U.S. Nutrition Laboratory at Cornell in relation to drawings and charts for publications. He was promoted to assistant professor in 1946, to associate professor in 1952, and to professor emeritus in 1964.

Bob Siegfried is remembered as a dedicated family man, a competent engineer, a gifted and conscientious teacher, and a loyal Cornellian. He was admired and respected by both his students and colleagues.

Bob was a member of the American Society for Engineering Education, the American Association of University Professors, the New York Society of Cornell Engineers, the First Church of Christ Science, and he was active in the Boy Scouts of America and Masonry.

Upon retirement, the Siegfrieds moved to Hendersonville, North Carolina.

Professor Siegfried is survived by his wife, Edith Harris Siegfried of Hendersonville; a daughter, Judith Licht of Cincinnati, Ohio; two sons, Robert of Cincinnati, Ohio and John of Cleveland, Ohio; sixteen grandchildren and three great-grandchildren.

Bart Conta, Robert L. Wehe, Richard M. Phelan

Walter Slatoff

March 1, 1922 — February 16, 1991

Walter Slatoff was a gentle and reflective person whose belief in the importance of all human beings frequently made him an eloquent and impassioned supporter not simply of principles of justice and freedom but of oppressed individuals and groups. His concern for people was crucial to his interest in literature, and made him an unusually effective teacher of both undergraduate and graduate students. His lecture classes as well as his seminars were filled to capacity—and sometimes beyond. His gifts as a teacher, which included the ability to listen as well as to speak, brought him the Clark Distinguished Teaching Award in 1978, and were the same gifts that made him an unusually able, if reluctant, English Department chair in 1973-74.

Throughout the 36 years of his association with the English Department as assistant, associate, and full professor, Walter taught courses both in American literature and creative writing, and served in a number of editorial capacities—including terms as editor and co-editor—of *Epoch*, the nationally-distributed magazine of new fiction and poetry published by the department as part of its creative writing program.

Walter was the author of three books. The first, *Quest for Failure: A Study of William Faulkner* (1960), has been referred to in recent years as a precursor of deconstruction, because of its central concern with the ambiguities, ambivalence and antithetical elements to be found in Faulkner's prose; and the second, *With Respect to Readers: Dimensions of Literary Response* (1970), sometimes has been classified with books dealing with reader response theory. His last, and most remarkable, book, *The Look of Distance: Reflections on Suffering & Sympathy in Modern Literature—Auden to Agee, Whitman to Woolf* (1985), makes evident, though, his personal distaste for both theories. That book is a compendium of quotations from works of poetry, fiction, and non-fictional prose that are organized and illuminated in a new way by a mind as generous as it is skeptical. Literature itself deeply mattered to him, and he took it seriously as a manifestation of human thought and behavior. He entered into a kind of dialogue with any text that he valued or scorned, and that dialogue sometimes resulted in a confrontation, a verbal battle. Disliking theory, suspicious too of detachment and spiritual remove, he brought to his reading his own humane judgments, based on personal experience and a lifetime as a reader. He disliked hypocrisy and personal cruelty as well as social injustice, and to find them casually accepted in literature or life aroused his indignation and sometimes his anger.

At Cornell, he served on committees seeking to end racial and other forms of discrimination, and remained in passionate disagreement with the university's continuing refusal to divest its holdings in South Africa. One of his last public acts before his retirement was an address to the large audience participating in, or simply watching, the construction by Cornell faculty of a shanty on campus, one built in protest of university investment in corporations doing business in South Africa; one of his last private acts as a citizen was a letter written shortly before his death to the nation's president, appealing to him—for the sake of those who would suffer or die on both sides of the conflict—to find another solution than war for the problems in the Persian Gulf region. The unique contribution he brought to his classes, his editorial work for *Epoch*, and everything he wrote was a sensibility that combined matters of conscience with a sensitivity to language—to the implications of structure and style. Some texts immediately won his admiration; but if a text contained a whiff of corruption, he sniffed and tossed it about, trying to get at the source. “We always turned to him when we had a particularly troublesome story” a fellow editor of *Epoch*, who once had been a student of his said, following the news of his death. “I think he was the wisest man I ever knew.”

As serious as he was about ethical concerns, Walter enjoyed banter and recreational activities with his family and friends. He liked gardening—but weeding his flower beds never took precedence over poker or the race track. Winning—either at cards or the races—never concerned him much; what he liked was the playing itself, and the company of good friends. It is agreeable to note that the concluding chapter of *The Look of Distance*, those pages of Walter's in which—as he told an old friend—he managed at last to put into print what he always had most wanted to say about literature and life, contains a reference to poker.

Walter's immediate survivors are his wife, Jane (Jimmy); his daughter, Joan; and his son, Don. His friends want them to know that they, too, miss the presence of one they continue to love.

Glenn Altschuler, W. Donald Cooke, James McConkey

Fred Slavick

July 2, 1923 — August 5, 1999

Fred Slavick joined the faculty of Cornell's School of Industrial and Labor Relations in Fall 1953, following study for the Ph.D. degree in Economics at Princeton University and employment there as a Research Assistant in the Industrial Relations Section and as a Teaching Assistant in its Department of Economics. Except for two years at the Bureau of Labor and Management at Iowa State, Fred served Cornell until his retirement in 1978.

Fred was born in Milwaukee, Wisconsin and was educated in its public schools until he entered the University of Wisconsin at Madison. Like many of his generation, his undergraduate education was interrupted by military service during World War II. After special training at Kenyon College and in England as an interpreter of German, he served in that capacity in prisoner-of-war camps in France.

After discharge from the U.S. Army, Fred returned to the Madison campus to complete his B.A. degree in 1946 and an M.A. degree in 1947. There as a Graduate Assistant, Fred studied with Professor Edwin Witte, one of the leading scholars in the field of social insurance and one of the architects of the Social Security Act. That influence continued at Princeton where he matriculated for his Ph.D. degree in Economics, serving as a Teaching and Research Assistant to J. Douglas Brown, also a major figure in the legislative development of the Social Security Act. Fred received his Doctorate from Princeton in 1953, with a dissertation on disability and medical care insurance through collective bargaining. He joined the ILR faculty in that year as a Research Associate, and was promoted to Assistant Professor in the following year. He became an Associate Professor in 1960, and received his promotion to full Professor in 1966.

Fred's teaching and research from his student days onward were consistently in the field of income security and protective social legislation. During his tenure at Cornell, his research in that field ranged broadly, though perhaps with most emphasis on aging and retirement policy. Fred's approach to issues in the field invariably was to test the validity of the underlying policy assumptions. For example, in his monograph on retirement policies (*Compulsory and Voluntary Retirement in the American Economy*, 1966), he exposed the heterogeneity in the provisions of formal pension plans, whether unilateral or collectively bargained. In another study of eligibility for unemployment insurance of voluntary quits, Fred's research challenged the inflexibility of the prevailing policy of disqualification in most state plans. Other important research efforts included an assessment of unemployment insurance under prolonged economic recession, and a study of the employment problems of older workers.

Both as teacher and a “citizen” of the academic community, Fred cheerfully fulfilled his obligations with distinction. He was admired for the quality and content of his course offerings, and respected for the rigor and impartiality of the performance standards he expected from his students.

No less important in his life than his devotion to professional interests was music. Trained as a boy on the violin, later switching to the viola, Fred’s capability on the instrument and his knowledge of the string quartet repertoire well exceeded that of most amateur and even some professional musicians. His friend, Professor John Hsu of Cornell’s Department of Music, told us that “(Fred). . . reached such a high level of proficiency that he was able to play all the great works in the string quartet repertoire.” After his return to Milwaukee at retirement, Fred played regularly in several string quartets and quintets. There and during his travels abroad to Great Britain and Israel, playing music and attending concerts was often his principal interest. These activities brought him great happiness.

During the last several years of his life, Fred was afflicted by Alzheimer’s disease. His devoted brother, Monroe Slavick and sister-in-law, Florence, cared for him during these last years. He died in Milwaukee on August 5, 1999 at the age of 76.

Ronald G. Ehrenberg, Duncan M. MacIntyre, Robert L. Aronson

Helen Powell Smith

September 1, 1899 — February 6, 1997

Professor Helen Powell Smith died on February 6, 1997, at the age of 97. She was born in Washington, D.C., in 1899 and attended high school there. She received her B.S. degree from Pennsylvania State University in 1921. After graduation, she co-managed a tea room and inn at Ormond Beach, Florida, during the winter months and supervised the Lake Placid Tea Room during the summers of 1922 to 1923. In the summer of 1924, she supervised the dining room at Canyon Camp, Yellowstone Park.

In 1925, Professor Powell Smith became a home demonstration agent in Bergen County, New Jersey, and the following year became an Associate Clothing Specialist for the New Jersey Extension Service. In 1929, she left the extension service and began working in private industry, first as a promotion advisor for Hahne Company and then as Director of the Color Research Bureau and the Educational Bureau of the Spool Cotton Co. of New York, selling agents for J and P Coats and Clarks threads. During this period, she was a resource person for both college home economics programs and the extension services of New England and southern states. In this capacity, she developed teaching materials, bulletins, clothing kits, and educational services.

While in New York City, Professor Powell Smith began taking courses at Columbia University, primarily in art, and later in summer programs in Maine and North Carolina. In 1937, she married Culver Allan Smith. He was hired by Cornell in 1935 as Assistant Director of Placement Services. In 1946, he became Director of the University Placement Service and by 1953, he was the University Employment Counselor in the Office of the Dean of Men.

Professor Powell Smith joined the faculty of the College of Home Economics as Acting Assistant Professor and Extension Specialist in clothing in 1937. She was appointed Assistant Professor in 1939 and Associate Professor in 1943. In 1952, she became head of the Department of Textiles and Clothing, a position she held until her retirement in 1958. As an administrator, she was very interested in the development of educational resources, and she was able to allocate a fund for the purchase of a valuable collection of ethnic clothing and textiles, which was acquired from a professor of Art History at Columbia University. This collection is now one of Cornell's most valuable. While serving as head of the department, she was also the Extension Clothing Project Leader.

Professor Powell initiated a radio program "Let's Make a Dress," a set of 15 discussions about how to cut, fit and sew a dress. The series was an experiment in the effectiveness of teaching a technical subject over the radio. It was also a way to reach rural homemakers who could not attend local home demonstration meetings. She

conducted live presentations for Extension audiences that were recorded for use at various stations around New York. Listeners registered for the program and participants over the five years of the program exceeded 15,000. Registrants received lesson helps so that they could keep abreast of the presentations over the radio.

Professor Powell Smith was a member of Phi Kappa Phi, National Honorary Scholastic Fraternity and Epsilon Sigma Phi, National Honorary Extension Fraternity. In 1947, Epsilon Sigma Phi awarded Professor Powell Smith its Certificate of Highest Achievement for the radio program she developed. She also received an Award of Merit from WHCU as a result of the radio program originated and produced at WHCU.

After her retirement, she and her husband moved to Black Mountain, North Carolina. They continued their interests in gardening and traveling. She also enjoyed spending time weaving on her own loom. In 1983, Professor Powell Smith moved into Highland Farms Retirement Community, where she was active in the center's activities, including the thespian group. She also enjoyed reading, playing classical music on the piano, and walking around the campus. Professor Powell Smith spent her remaining years at Highland Farms, and was there when she died. She is survived by her sister-in-law, Dora Powell, of Ashville, North Carolina; her niece, Sarah Wall, of Black Mountain, North Carolina; and her grand nephew, Douglas Powell III, of Long Beach, California.

Jennifer Gerner, Jean Robinson, Francille Firebaugh

Laura Lee Whitely Weisbrodt Smith

July 16, 1903 — February 28, 1993

This past February the Hotel School lost one of its best known and most loved faculty members, Dr. Laura Lee Smith.

Laura Lee was born in Georgetown, Ohio in 1903. She graduated from the St. Bernard, Ohio public schools and was the only female to receive a B.S. degree in chemistry from Miami University of Ohio in 1925. Laura Lee continued her education earning an M.S. degree in chemistry from Iowa State University in 1927 and the first Ph.D. degree in nutrition from the University of California at Berkeley, in 1930.

In June of 1927, Laura Lee married Ora Smith in the Rose Gardens at Iowa State University. They spent the next 65 years together, both enjoying outstanding careers at Cornell.

Laura Lee began her Cornell career in the Home Economics Department, teaching from 1937 to 1942. After some time away and the birth of her son, James Stanley, and daughter, Sarah Jane (Burton), she returned to Cornell as professor of food chemistry in the School of Hotel Administration, teaching there from 1956 to 1972.

During this time Laura Lee became the quintessential expression of the concept that “good things come in small packages.” Although small of stature, she rose to become one of the University’s best lecturers and perhaps the most energetic and revered faculty member at the Hotel School. Laura Lee made chemistry come alive for her students. She played a major role in creating a generation of hotelmen and restaurateurs who were not only technically competent but strong decision makers as well, due in part to Laura Lee’s teaching that the scientific method applied to life as well as chemistry. She was well known in the Hotel School for expecting disciplined excellence, and her students’ commitment to excellence carried well past their days in chemistry class.

Laura Lee was quite active outside the classroom. Professionally, she was author and editor of *Food Service Science*, published in 1974. Her research interests addressed the uses of modified starches in packaged food products as well as the breakdown of cooking oils in the frying process. She was a member of the American Chemical Society, the Institute of Food Technologists, and a fellow of the American Institute of Chemists and the New York Academy of Sciences. She also served as a nutrition consultant to the Inter-American Institute, Turrialba, Costa Rica, from 1946-48.

In the community, Laura Lee was an active volunteer for the American Red Cross, the Girl Scouts, and Sampson Air Force Base Hospital during World War II. She was a charter and life member of the Finger Lakes Kennel Club and authored its history. She served as chairperson of the Bethel Grove School Board, was founding treasurer of the Ithaca Ballet Company and taught math and science in the Ithaca public school system.

Laura Lee had a tremendous affinity for the out-of-doors, devoting time to her garden and grounds. She had one of the largest oak trees in New York in her front yard, and her flowers and white picket fence were a landmark on Route 79. She and Ora donated fourteen acres around the Six Mile Creek drainage area to the Finger Lakes Land Trust in order that the land's natural beauty be preserved.

Laura Lee Smith—student, scholar, writer, wife and mother, beautifier, disciplinarian, teacher, artist, conservationist. These talents, interests and commitments created a legacy of appreciative alumni at the School and of grateful admirers in the community.

Robert M. Chase, Peter Rainsford, Thomas John Kelly

Ora Smith

April 13, 1900 — February 4, 1993

Dr. Ora Smith, who lived to be 92, was one of the world's most productive and best known potato researchers. Dr. Smith was born in Freeburg, Illinois. He received a B.S. degree from the University of Illinois, an M.S. degree from Iowa State University, and a Ph.D. degree in plant physiology from the University of California in 1929. The following year Dr. Smith joined the Department of Vegetable Crops at Cornell University, where he devoted more than 50 years to research, teaching, and writing about the potato. During this time he was author or co-author of more than 500 popular and scientific articles, numerous contributions to encyclopedias and handbooks, and two books.

Dr. Smith's career by no means ended upon his appointment as professor emeritus in 1967, for he continued his writing as long as his health permitted. The fourth edition of the popular book *Potato Processing* appeared in 1987, and he had almost completed a third edition of *Potatoes: Production, Storing, Processing* to update the edition that appeared in 1983. Both books are well known by potato growers, processors, and researchers around the world.

Although Dr. Smith carried out research and teaching on many aspects of potato production and storage, he was best known for his work on potato quality, especially quality for processing. After World War II, when he began to give major attention to processing quality, only 2% of the U.S. crop was processed. Dr. Smith anticipated the growing popularity of potato chips and french fries and pioneered studies on how to grow, store, and evaluate potatoes that would have acceptable quality for these uses. He was the first director for research of what was then the Potato Chip Institute International (now the Snack Food Institute International), carrying out these duties for 26 years while continuing to serve as a member of the Cornell faculty.

Dr. Smith stressed the importance of tuber specific gravity for processing quality and developed the "potato hydrometer" that is still used widely to measure specific gravity. Another aspect of potato quality emphasized by Dr. Smith was the role of reducing sugars in producing the browning of chips and french fries. He was a pioneer not only in quick methods to measure quality for processing, but also in finding cultural and storage practices that would lead to better quality. Dr. Smith was a forceful spokesman for his views and effectively used both the written and spoken word to persuade others to change.

Under Dr. Smith's supervision, 27 students received the Ph.D. degree, many of whom have led prominent careers in research institutes, universities, and agricultural and food industries. These included three members or former

members of the Cornell Faculty: W.C. Kelly, Professor Emeritus of Vegetable Crops; R.S. Shallenberger, Professor Emeritus of Food Science and Technology; and R.L. Sawyer, former Professor of Vegetable Crops and founder and first Director General of the International Potato Center.

Dr. Smith himself had a strong international interest. During 1946-47 he was a member of the staff of the Inter-American Institute of Agricultural Sciences in Costa Rica. In 1938 Dr. Smith visited 75 colleges and experiment stations in 18 European countries. Dr. Smith was the only U.S. delegate to the Northwest Europe Potato Association Meeting in 1955; and he regularly attended meetings of the European Association for Potato Research, to which he belonged from the time of its founding.

Dr. Smith was an active member of the Potato Association of America, serving as its secretary for four years and as its president. He was awarded a plaque and cited for his outstanding service to the potato industry in 1959 by the National Potato Council, the first member of the academic field to be so honored. In 1967 and again in 1970, Dr. Smith was cited by the National Potato Utilization Conference for outstanding contributions to the meetings of that organization from its inception in 1947. He was the only person who has ever been made both an Honorary Life Member of the Potato Association of America (1960) and an Honorary Member of the European Association for Potato Research (1972).

Other honorary and scientific societies to which Dr. Smith belonged included the New York Academy of Sciences, American Association of University Professors, American Society for Horticultural Science, Soil Science Society of America, American Society of Agronomy, American Oil Chemists Society, Canadian Institute of Food Science and Technology, Institute for Food Technologists, American Institute of Biological Sciences, and the American Association for the Advancement of Science (of which he was a fellow). He was a member of Alpha Zeta, Alpha Tau Alpha, Phi Sigma, Phi Kappa Phi, Phi Tau Sigma, and Sigma Xi fraternities and scientific organizations. He was a member of President Eisenhower's Commission on Utilization of Farm Products and a member of the Advisory Board of Food Technology International, Inc. Dr. Smith also contributed many hours of voluntary service to youth and educational organizations in the Ithaca community.

Dr. Smith was married for 65 years to Dr. Laura Lee Weisbrodt Smith, Professor Emeritus in the Cornell School of Hotel Administration. Mrs. Smith died a few weeks after her husband. They are survived by a son, Dr. James S. Smith; a daughter, Sarah Jane Burton; a brother; nine grandchildren; and one great-grandchild.

W.C. Kelly, J.B. Sieczka, E.E. Ewing

Sedgwick E. Smith

April 4, 1914 — February 11, 1990

Sedgwick E. Smith, known to his colleagues and friends as “Sedg,” died on February 11, 1990, after devoting over 41 years of loyal, scholarly service to Cornell University. He contributed immensely to the development and character of the present Department of Animal Science.

Sedg was born in Elkins, West Virginia, in 1914 and studied animal husbandry at Pennsylvania State University, graduating with the B.S. degree in 1935. In that year, he enrolled as a graduate student at Cornell, with an assistantship in animal husbandry, for majors in animal breeding, and minors in biochemistry and physiology. He received the Ph.D. degree in 1939 under the direction of Professor Sydney A. Asdell.

After completing graduate studies, Sedg was appointed in 1939 as animal physiologist with the Plant, Soil and Nutrition Laboratory, U.S. Department of Agriculture, located on the Cornell campus. At the same time, he held an appointment as research instructor of animal husbandry for two years and assistant professor for four years on the staff of the Department of Animal Husbandry at Cornell. In 1946, he was appointed to the Cornell faculty as associate professor of animal husbandry and resigned from the Federal Laboratory. Sedg was promoted to professor in 1951. He retired from the department in 1977 with the title professor of animal science emeritus.

Professor Smith served eminently in his teaching and student advising. He advised over 350 undergraduate students and was major professor for 23 graduate students. He taught “Livestock Nutrition” 36 times to a total of 5,308 students. In that effort, 131 graduate assistants benefitted from his guidance in teaching techniques. Professor Smith also taught a graduate course, “Special Topics in Animal Nutrition,” for 12 years and the course, “Advanced Nutrition of Dairy Cattle,” during three summer sessions.

At various times, Sedg served on one of these committees of the College of Agriculture and Life Sciences: Educational Policy, Petitions, Scholarship, Library, and Nominations. As a member of the Committee on Revision of Graduate Requirements, Sedg was instrumental in establishing the undergraduate distribution of required courses in the College of Agriculture and Life Sciences.

In addition to his formal teaching, Sedg also taught on an informal basis. He was an outdoorsman and hobbies and extracurricular activities included hunting, fishing, gardening, and wood carving. He was knowledgeable of the habits of animals and gave excellent advice for success in hunting and fishing; he was an excellent fisherman

himself. He loved trout fishing, and his advice in this area gained him much esteem and respect. He taught many others the art of good fly tying and was a member of the Cornell Fly Tying Club and worked with the Adirondack League Club.

Professor Smith's research covered a wide range of subjects, with special emphasis on mineral nutrition and metabolism, in several animal species. Perhaps his greatest contribution was the hypothesis that cobalt is utilized by rumen bacteria to synthesize an unknown metabolically active compound—eventually proven to be vitamin B₁₂. He and his colleagues were the first to demonstrate that dietary cobalt deficiency in ruminants is primarily a metabolic deficiency of vitamin B₁₂.

In all of his research, Sedg was noted for the thoroughness with which he attacked problems. A good example was his comprehensive and definitive investigations of the sodium chloride requirements of high-producing dairy cows, which are recognized as classic. Special contributions were made by Sedg in his Ph.D. thesis, "Functional Sterility in Dairy Cows," which served as a major base for practical recommendations in New York until 1960.

In other research, Sedg examined the genetics and physiology of "lethal anemia" in the rat, the composition of urinary calculi in fur-bearing animals, the hematology and vitamin A and D, and thiamine requirements of foxes and mink. Other studies included hereditary cataract and the "black-blue" mosaic in Dutch rabbits. Sedg's work added greatly to the knowledge of iron, copper, zinc, manganese, calcium, phosphorus, magnesium, sodium, chloride, and molybdenum in animal nutrition.

Throughout his career, Sedg faithfully served his department, the College of Agriculture and Life Sciences, and the university. He was acting head of the department for a period of 15 months in 1954-55, and again for 6 months in 1959, and for shorter periods on several other occasions. He was chairman of the Departmental Planning Committee for Morrison Hall, 1953 to 1961, Graduate School Field Representative in Nutrition, 1960 to 1964, and in the Graduate Field of Animal Science, 1965 to 1975. Also, Sedg was the chairman of the Graduate Selection Committee in the Department of Animal Husbandry (later Animal Science) for 23 years, 1952-1975.

For many years, Professor Smith was a member of the National Research Council Committee on rabbit nutrition, and the feed survey committee of the American Feed Manufacturers Association. He was an active member of the American Society of Animal Science, American Dairy Science Association, American Institute of Nutrition, and the Cornell Research Club. He was a member of the scholarly and scientific societies of Sigma Xi, Phi Kappa Phi, Gamma Sigma Delta, and Alpha Zeta.

Sedg is survived by his wife of 50 years, Margaret Gainey Smith; two sons, Edward J. and Mark F., of Ithaca; one daughter, Eileen S. Kinsey, of Flanders, New Jersey; two grandchildren; his mother, Annie Lothes Smith, of Ridgway, Pennsylvania; three sisters; several nieces and nephews; and many friends and associates.

Douglas E. Hogue, George W. Trimberger, Kenneth L. Turk

Leland Spencer

April 25, 1896 — June 12, 1990

Dr. Leland Spencer, professor emeritus of agricultural economics, died June 12, 1990, at the age of 94. He was a dominant figure in the area of milk marketing throughout his career and was instrumental in making this area a recognized specialization for agricultural economists. He was a pioneer in the study of market institutions and the role of government in market regulation for perishable products.

Although there were earlier studies that related to milk markets, during the 1920s he was one of the first to conduct comprehensive, formal research in the field of dairy marketing and the first to develop and teach a course in this specialization. At the time, there was very little statistical material pertaining to the dairy industry. Dr. Spencer's careful and painstaking work was to be a model for later research and gained him the respect of industry leaders. His personal characteristics contributed to that respect. He was meticulous in dress, speech, and personal habits; careful and kindly, but strong in convictions and moral principles. He opened many doors in the dairy industry that helped others, particularly his graduate students, to obtain needed statistical data to carry on research work.

Leland Spencer was born April 25, 1896 on a dairy farm in northern Pennsylvania, the beginning of his lifelong association with milk marketing and the dairy industry. For most of his youth he lived in Elmira, New York, near Ithaca. His long and distinguished research, teaching and public service career began with his graduation from the College of Agriculture, Cornell University, in 1918. He entered military service in February 1918 and served in France and the Meuse-Argonne offensive and in the allied occupation of Germany. Following his discharge in 1919, he taught a course in farm management for two semesters at the Massachusetts Agricultural College. He returned to Cornell for his Ph.D. program in 1920 under the supervision of Dr. George Warren and Dr. William Myers. His dissertation, "The Use of Store Credit by Farmers," completed in 1923, was the first study of this growing practice. Subsequently he was offered a position in the Economics Department at the University of Illinois-Urbana. In recommending Dr. Spencer for the appointment, Dr. James Boyle spoke of him as "the strongest of the younger men now available for accepting a position outside of this department."

Dr. Spencer chose to stay at Cornell. After a year serving concurrently on the research staff of the College of Agriculture at Cornell and as an agent of the U.S. Department of Agriculture, he accepted an appointment as an assistant professor of marketing in 1924. He was promoted to professor in 1926 and taught the first milk marketing course in 1928. Despite increasing research and extension responsibilities during the 1930s, Dr. Spencer

supervised the work of a number of graduate students in the department. He took a personal as well as a professional interest in his graduate students. He expected the same painstaking care in their work that characterized his own research. He followed the careers of his graduate students throughout his lifetime, and carried on voluminous correspondence with them as well as with other research workers in the field, and with dairy industry leaders.

Dr. Spencer attended the First International Conference of Agricultural Economists held in Devon, England, in 1929. Already the recognized leader in this area, he presented a paper at that conference entitled, "Method and Results of Research in Dairy Marketing in the United States." The contacts made at that conference and those that followed increased his interest in dairy marketing research and industry problems throughout the Western world. He maintained contact with international colleagues through correspondence and exchange of research results. As a result, he attracted graduate students from many foreign countries, and he continued his contacts with them after they returned to their homes. His own research took on more international dimensions around the time of World War II, and continued thereafter. In 1949, Dr. Spencer served as a U.S. delegate to the World Dairy Congress in Stockholm, Sweden. He was active in international dairy marketing activities during the 1950s, with studies of cooperative dairy marketing in Sweden in 1950 and rationalization of milk marketing and marketing boards in Great Britain in 1953.

Dr. Spencer's work in milk marketing was highly regarded by public policymakers. It became the basis for New York legislation and affected the evolution of U.S. policies. When a joint legislative committee was formed in New York in 1932 to investigate the rapidly-worsening conditions in the dairy industry and to recommend corrective legislative action, Dr. Spencer was appointed its research director. Dairy farmer testimony at the many public hearings held by the so-called Pitcher Committee convinced legislators of the seriousness of the situation and led to the passage of the first state milk price control law in the United States. Dr. Spencer wrote most of the final report of the committee and helped in the drafting of the legislation which, among other things, provided for the government administration of milk prices on a classified pricing basis by the state. The legislation, a drastic departure from existing pricing practices, was conceived as a temporary emergency measure, but the regulation of milk prices by the state and U.S. governments evolved to become an ongoing and dominant feature of milk markets.

Dr. Spencer's interest in public intervention in the pricing of milk continued throughout his career. After the breakdown of state regulation of milk prices in the New York City market, Dr. Spencer assisted in several attempts

to develop a federal milk order, and in the eventual promulgation of a federal-state order in 1938. He presented testimony as a public witness at many New York milk order amendment hearings, and served as a member of several committees that dealt with pricing problems in New York and other markets.

The 1932 New York Milk Control Law also sought to strengthen dairy cooperatives as a countervailing force to the economic power of milk dealers in the milk pricing process, which was the original objective of the Pitcher Committee. Dr. Spencer continued his interest in the role of dairy cooperatives in pricing milk long after his work with the Committee was completed. From 1934 to 1939 he served part-time as a marketing specialist for the U.S. Farm Credit Administration during which time he conducted a study of the surplus milk problem in northeastern milksheds. During the decade of the 1930s, a majority of Dr. Spencer's research dealt with cost analysis at the farm, processor, and retail level.

Dr. Spencer's research interests in the 1940s focused principally on pricing policies and supply and demand analysis. He was particularly interested in effects of the war on milk marketing, including U.S. war-time rationing, the establishment of price ceilings, and the increasing demand for milk and dairy products coupled with a dwindling milk supply. His research activities in the 1950s were not limited to international studies. He began a project that extended through the remainder of his professional career that involved recording the history of distribution and pricing of milk. In the 1960s, he served as a member of the Federal Milk Order Study Committee appointed by U.S. Secretary of Agriculture, Orville Freeman, and as a member of a New York State Committee on Milk Marketing appointed by Governor Rockefeller.

Dr. Spencer was a lifelong member of the American Farm Economics Association and one of its national officers in 1935. He was also elected to Phi Kappa Phi and Sigma Xi.

Dr. Spencer retired in 1964 after more than 40 years of devoted service to Cornell and the dairy industry. His professional activities, however, did not end with his retirement. Working regularly through 1967, he completed eleven departmental publications after his retirement, and, with the assistance of Dr. Charles Blanford, a former graduate student and a former market administrator of the New York milk order, published five books. Six of the department publications and all of the books were histories of milk marketing in the New York market.

Dr. Spencer is survived by his wife, Ruth; two sons, Gordon and John; two grandchildren; and two great-grandchildren. He was an active Rotarian throughout his life in Ithaca and a participant in community affairs. His long-time colleagues in agricultural economics remember him with fondness and great respect as an

unequivocating gentleman, a distinguished scholar, and a true public servant who left an enduring mark on the field he did much to fashion, and sought to serve with compassion and unswerving principle.

Bernard Stanton, Robert Story, Andrew Novakovic

Frank L. Spitzer

July 24, 1926 — February 1, 1992

Frank Spitzer was one of the most original probabilists of his generation. He was born in Vienna, Austria on July 24, 1926. Fleeing from the Nazis, he spent the second world war in Sweden and finished high school there. He came to the U.S. after the war, did a stint in the U.S. Army and became a student at the University of Michigan. He received a B.A. degree and then a Ph.D. degree in 1953 from this same university.

After receiving his Ph.D. degree, Frank Spitzer was an Instructor at the California Institute of Technology from 1953-55, an Assistant and Associate Professor at the University of Minnesota from 1955-60, and then came to Cornell University as a Full Professor in 1961, where he stayed for the rest of his life, except for sabbatical leaves. He spent a year at Princeton University on an NSF Senior Postdoctoral Fellowship in 1960-61 and a year in Strasbourg, France on a Guggenheim Fellowship in 1965-66. He also participated in a special probability year at the Mittag-Leffler Institute in Djursholm, Sweden in 1972-73. Frank retired from Cornell in 1991 because his struggle with Parkinson's disease for a number of years had made teaching and doing research very difficult for him.

Apart from the Fellowships named above, Frank received a number of honors. He was elected a Fellow of the Institute of Mathematical Statistics in 1971, was invited for a lecture in the probability section at the International Congress of Mathematicians in Vancouver, Canada in 1974 and was the Wald Lecturer to the Institute of Mathematical Statistics in 1979. Frank was elected to the National Academy of Sciences in 1981. For about twenty years Frank was an editor of one of the principal probability journals, the *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete* and its successor, *Probability Theory and Related Fields*.

Frank Spitzer's main contributions to probability theory were in the area of Brownian motion, fluctuation and potential theory of random walks and Brownian motion, and interacting particle systems. He discovered remarkable combinatorial identities which give expressions for the characteristic function of the maximum of a random walk, as well as for the ladder heights. By delicate estimates Frank proved the existence of the potential kernel for an arbitrary random walk on the d -dimensional integer lattice. This result has led to much further work, and has been generalized to random walks on groups. Interacting particle systems are perhaps the most exciting and active subfield of probability these days, and Frank Spitzer is widely regarded as the father of this area. It is closely related to statistical physics and Frank contributed greatly to the rigorous study of statistical mechanics models which is a joint activity of probabilists and statistical physicists nowadays. His work was instrumental in

bringing about a strong interaction between these two groups. Several of Frank's most influential articles have been reprinted in a recent Festschrift in honor of him, which was edited by Rick Durrett and Harry Kesten (*Random Walks, Brownian Motion and Interacting Particle Systems*, Birkhauser-Boston, 1991).

Frank Spitzer had a strong sense of elegance and a feeling for which result was beautiful and worthwhile. He would show great enthusiasm for such results, be they his own or due to others. All this comes through very well in this 1964 book, *Principles of Random Walks*, which is still one of the best sources for many properties of random walks. A second edition of the book appeared in 1976 and the book has also been translated into Russian and French. Frank's enthusiasm also showed in his lectures. He was an inspiring lecturer who taught with pleasure at some special summer schools such as the Mathematical Association of America in Williams College in 1971 and in St. Flour, France in 1973.

Frank was always very generous with his time. He was always available for all kinds of help, professional and personal, to his students and friends. He showed considerable concern for the well being of his students and knew how to stimulate and encourage them. This has led to thirteen Ph.D. students, several of whom are now well known probabilists in their own right. Frank was also generous with his ideas and loved to discuss his work with colleagues and to make them coauthors. The high regard in which he was held was apparent from the enthusiasm shown by the contributors to the Festschrift in Frank's honor last year and by the many sincere messages of condolence which were received.

At the time of his retirement, Frank was contemplating volunteer work, both in the local community and in the mathematical community. He tried to follow up a call for help from the Rumanian mathematicians to help them reestablish a functioning library system after the upheavals in their country; unfortunately, no effective help seemed feasible. Frank's principal hobby was a love of the outdoors. He greatly enjoyed hiking and skiing. He jogged regularly together with students and colleagues and kept this up till the end despite the fact that Parkinson's disease forced him to slow down. He was an avid mushroom hunter and one of his great but unfulfilled ambitions was to find morels in Ithaca.

Frank Spitzer is survived by his daughter, Karen of Rhode Island; his son, Tim of New Jersey; two granddaughters; and a sister. Frank Spitzer's death is a heavy loss for his family and friends as well as for probability theory.

Lawrence Brown, Harry Kesten

Frances Spratt

June 13, 1906 — July 9, 1997

Frances Marion Spratt, Associate Professor in the Department of Textiles and Clothing in the College of Human Ecology, died on July 9, 1997, at the age of 91 in Mt. Holly, North Carolina.

After her retirement on June 15, 1967, Frances returned to live with her sisters: Elizabeth Spratt and Mrs. George Hacker in the family home in Mt. Holly where she was born. The imposing homestead was a working cotton plantation when her grandfather brought her grandmother there as a bride. Union soldiers were stationed there during the Civil War and a union sword is evidence of their occupation. After her grandfather died, her father took a position in town, but maintained the home place as a country home with all of the advantages of a self-sufficient farm with orchards, vegetable gardens, farm animals and gardens so that very little else was needed. Entertainment was almost completely centered at home, with visits from friends and summer reunions with relatives from South Carolina. Frances was proud of her southern heritage and claimed a signer of the Declaration of Independence as one of her ancestors.

With this background, Frances and her sisters developed a strong family relationship, a love of the land and their home, and the homemaking skills, which influenced their lives and their careers.

After attending Mt. Holly High School, Frances graduated from Women's College in Greensboro (now the University of North Carolina in Greensboro). She taught home economics in several high schools in North Carolina including at Mt. Holly High School where she set up an innovative project of a model home in a vacant building. Her students learned how to shop, do banking and other home activities including taking a trip to Charlotte to lunch at a nice restaurant so they could learn how to order a proper meal. Many of her former students still remark about the wonderful experiences they had in Miss Spratt's classes.

During World War II, Frances was asked to head up a community project, "The Community Canning Center," where residents in and around Mt. Holly could bring their produce to be canned in a safe, easy, and quick manner. She received great praise from the community for this hard and confining work.

Frances attended summer school at Cornell in 1946 and later returned for her M.S. degree. She served as a teaching assistant in the Department of Textiles and Clothing in 1948-49 while working on her degree that she received in June 1949. After this, she taught for four years at the University of Texas until she returned to Cornell in 1953 as a faculty member of the College of Human Ecology (Home Economics).

Frances was exceptionally knowledgeable in her field. She also had great skill in disseminating this knowledge to her students through her courses in apparel design. In 1964, she was selected as “outstanding professor in the College for her superior teaching ability, her warm and friendly personality and her helpful attitude in all matters in the College.”

In addition to her regular academic responsibilities, she also served as advisor to Omicron Nu, a scholastic fraternity, chair of the college undergraduate awards committee, and a member of the college student-faculty committee. She was a member of Pi Lambda Theta, The American Home Economics Association, and membership chairman of the southern region of the N.Y. Home Economics Association.

Frances enjoyed travel and developed an especial fondness for Denmark, where she lived for several months. Frances and her two sisters spent considerable time in restoring and refurbishing the old homestead. The large, high ceilinged gracious rooms were furnished with family antiques and mementos and many examples of exquisite embroidery lovingly executed by Frances, her sisters and past generations as well as by her three nieces. Frances’ special pride was the elegant dining room with its crystal chandelier, which Frances had found in Ithaca, Swiss tambour embroidered curtains and her collection of blue and white Royal Copenhagen porcelain displayed in shell carved corner cabinets.

Frances and her sisters were excellent cooks in the old southern tradition, and true southern hospitality was always a way of life. Frances was famous for her delicious home baked bread, and her old-fashioned spoonbread was a toothsome delight along with Southern fried chicken, garden vegetables and ambrosia dessert. Not to ignore the garden, Frances loved her roses and peonies. The home was surrounded by huge southern magnolias, azaleas, live oaks and a tremendous beech tree, which shaded the front lawn and was planted by her grandfather.

Frances will always be remembered for her gracious manner, her beautiful prematurely snow white hair and her petite well-tailored style. She epitomized the very best of the southern gentlewoman.

W. Jean McLean, Elsie McMurry, Raymond T. Fox

Adrian M. Srb

March 4, 1917 —May 24, 1997

Adrian Morris Srb, Jacob Gould Schurman Professor of Genetics, Emeritus, died in his Cayuga Heights home on May 24, 1997. He was 80 years old. Adrian was born in Howells, Nebraska on March 4, 1917. He graduated with High Distinction from the University of Nebraska in 1937 with a major in English Literature. He remained at the University of Nebraska to obtain a Master's degree in Agronomy in 1941.

Srb entered Stanford University in 1941 to begin graduate studies in the laboratory of George W. Beadle, also a Nebraskan, who had received his Ph.D. degree from Cornell in 1930. At Cornell, Beadle had been a member of a group of students who worked on the cytogenetics of maize under Rollins A. Emerson of the Department of Plant Breeding. Srb began his studies at Stanford thinking he would work on the eye pigment system of *Drosophila*. Beadle, in collaboration with Boris Ephrussi, had developed techniques for transplanting eye discs among larvae as a means of probing the nature of gene action in determining eye colors. By the time Adrian arrived at Stanford, Beadle had recognized that an entirely different approach was needed to examine the problem of gene action. He had selected the bread mold, *Neurospora*, as an organism that could be grown on a chemically defined synthetic medium, a decided experimental advantage for studies designed to elucidate the role of genes in metabolism. Thus began Adrian's attachment to *Neurospora*. Beadle and his students were busily engaged in producing and characterizing what were called biochemical mutants. These mutants showed that the biosynthesis of substances essential for the growth and maintenance of *Neurospora* is under the control of genes, each gene responsible for conferring specificity on a single enzyme that in turn controls a single step in the biosynthetic pathway. These studies helped usher in a new era of genetics that culminated in the advent of modern molecular genetics. The pioneering studies of Beadle were recognized in 1958 when he shared the Nobel Prize with Edward L. Tatum and Joshua Lederberg.

After completing his graduate studies in 1946, Srb remained at Stanford for one year as an Assistant Professor. In 1947, he began his Cornell career when he accepted a position as Associate Professor in the Department of Plant Breeding. This career lasted 39 years until his retirement in 1985. He was named Professor of Plant Breeding in 1951. With the formation of the Division of Biological Sciences, Adrian's title changed to Professor of Genetics, and in recognition of his distinction in teaching and research he was named Jacob Gould Schurman Professor of Genetics in 1976.

No account of Adrian's contributions to Cornell would be complete without recognition of the central role that he played in the formation of the Division of Biological Sciences in the mid 1960s. Srb was a leading member of a group of distinguished biologists at Cornell who convinced the newly appointed Cornell President, James Perkins, of the need for Cornell to take steps to enhance its efforts in the basic biological sciences. The result was the formal establishment of the division in 1964. Srb's advice and counsel were critical in the early days of the division as it discussed and debated the organizational structure that would best serve basic biology at Cornell. The revitalization of biology at Cornell that establishment of the division brought about is in no small measure a tribute to the insightful advice that Srb and his colleagues provided.

One of Adrian's greatest contributions to Cornell, and to the academic world in general, was his dedication to research and teaching. He understood, and was a strong advocate for, the need to develop a variety of experimental model systems including yeast, ciliates, fruit flies, and plants. In his own laboratory at Cornell, steady and significant contributions were made to the genetics, physiology, and development of his favorite experimental organism, *Neurospora*. Graduate students and post-doctoral fellows in his group investigated cytoplasmic inheritance and other epigenetic phenomena, quantitative inheritance, the nature of dominance, and the genetic and biochemical basis of differentiated phases of the fungal life cycle. In later years, Adrian's interests shifted towards the study of morphogenesis, an area that he foresaw with his usual insight as being at the intersection of molecular genetics, cell biology, physiology, evolutionary biology, and systematics. As a result, his research program became focused on the genetic and cellular basis of ascus and ascospore development, an investigation that was based on the generation and analysis of a large number of mutations that disrupted normal morphogenesis and its underlying orderly pattern of meiotic and mitotic divisions. Adrian's publications were models of clarity and lucidity as were his verbal accounts of his research. In reading his papers, those who knew Adrian had the sense that they were engaged in a conversation with him. Few achieve this felicity of expression.

In 1952, Adrian and Ray Owen published the textbook, *General Genetics*, that was not only widely adopted throughout the world, but served as well for years as the model that other authors sought to emulate. It is interesting to note that an advertisement for a new genetics textbook that was published twenty-eight years later still made comparison to the original Srb and Owen text.

Adrian was an extraordinarily gifted teacher. His course in physiological genetics, which was given from 1947-71, was for generations of Cornell graduate and undergraduate students one of their most challenging and significant exposures to an advanced biology course. Even the required term paper for the course is fondly recalled as a labor

of love because every student knew the paper would receive Srb's careful scrutiny and would benefit from his detailed comments on style as well as content. After the division was formed, Adrian collaborated with Gerald Fink and Peter Bruns in offering a course on the Genetics of Lower Eucaryotes, with Srb responsible for the component dealing with fungi. For many years, he taught a course in Human Genetics, intended to highlight the relevance of genetics to medicine and human health biology. His mastery of teaching was clearly demonstrated in this course as he communicated difficult material to a non-specialist audience in a lucid, logical and interesting manner. Srb's teaching talents were recognized by his being named Cornell Professor of Merit by his students, and receiving the Edgerton Teaching Award upon nomination by his colleagues.

Adrian was a devoted and conscientious citizen of Cornell. He served as a faculty trustee on the Board of Trustees. He chaired the Interim Executive Committee for the formation of the Division of Biological Sciences. He was a member of numerous important university committees. Among these were the Music Committee, the University Press Board, the Committee for the Revision of Faculty Procedures and the Committee for Andrew D. White Professorships.

Adrian received many honors for his scholarly contributions. He was elected a Fellow of the American Academy of Arts and Sciences and elected to membership in the National Academy of Sciences. He was named an Honorary Foreign Fellow of the Botanical Society of Edinburgh and an Honorary Member of the Chilean Genetics Society. He was elected a Fellow in both the American Association for the Advancement of Science and the American Society of Naturalists. In 1969, he was awarded an Honorary D.Sc. degree by his alma mater, the University of Nebraska.

Adrian enjoyed two sabbatical leaves in France, and one in Scotland. Working with his long time colleague, Boris Ephrussi, at the University of Paris, he extended his interest in fungal genetics to include baker's yeast. There can be no doubt that Adrian's experiences in France were highly stimulating and productive scientifically. His French experiences also contributed greatly to his joy of living, for he knew full well how to take advantage of the good food and wine that France offered. In the laboratory of Robert Brown at the University of Edinburgh, Scotland, Adrian became interested in exploring mutations that affected the morphology of *Neurospora*, an interest that he developed further upon his return to Ithaca.

Perhaps it was as a colleague and friend that Adrian is most admired. He maintained a lively interest in the world about him, catholic in his interests that ranged from literature to art, to current events, to music, to politics, to gardening, to religion, to stamp collecting, to sports. He was a most engaging and informed conversationalist with

a delightful sense of humor. He held a special place in the minds and hearts of his graduate students. He gave them freedom to develop their own ideas, and expected them to take responsibility for their research and to be able to defend their interpretations. The respect his graduate students felt for him was abundantly evident during the celebration that honored him upon his retirement in 1985.

His colleagues at Cornell and elsewhere will always admire and respect Adrian for his intellect, his contributions to genetics, his superb teaching talents, his loyalty in friendship, his companionship, and his zest for life.

Srb was married to Jozetta Helfrich, a fellow graduate student, in 1940. His wife completed a Master's degree at Stanford in Sociology and Economics at the same time that Adrian received his doctorate. The Srbs had two daughters, Rosalind (Mrs. Robert W. Mayberry) and Katherine (deceased); and a son, Jerome.

Royse P. Murphy, June B. Nasrallah, Harry T. Stinson, Jr.

Frederick Campion Steward

June 16, 1904 — September 13, 1993

Frederick Campion Steward FRS, better known as “Camp” or F.C., died at age 89 at his home in Tuscaloosa, Alabama, after several years of poor health. He came to Cornell as Professor of Botany in 1950 and subsequently became Charles A. Alexander Professor of Biological Sciences and Director of the Laboratory for Cell Physiology, Growth and Development. Steward was one of the most vigorous, productive, persuasive, and scholarly faculty members in the New York State College of Agriculture and Life Sciences at Cornell University. A Symposium held at Cornell in May 1973 on the occasion of his retirement was entitled “Historical and Current Aspects of Plant Physiology: A Symposium Honoring F.C. Steward”.

Dr. Steward was a leading figure in the development of modern plant physiology, cell biology, and plant tissue culture, and his research in the late 1950s reshaped scientific knowledge of how plants regenerate. He is perhaps best remembered, certainly most cited, for his demonstration that cells cultured from carrot roots can give rise to embryo-like structures, and eventually to entire plants. This showed that individual plant cells are totipotent—they retain all the genetic information necessary to regenerate and regulate a mature plant, with all its specialized cells.

This finding revolutionized the world of plant cell biology. It established for the first time that the cumbersome process of cultivating plant cuttings and shoots was no longer required to increase clones. Instead hybrids can be propagated and mutants discovered much faster in the laboratory. His discovery of the means to obtain such regeneration has provided a foundation that supports much of modern plant molecular biology.

Steward was always concerned with broad concepts and he took pride in the breadth of the work undertaken in his laboratory. In addition to his findings on plant regeneration, he also made important contributions in other areas. His work and that of his associates provided major insights into plant cell physiology, nitrogen metabolism and protein synthesis, ion uptake and nutrient accumulation, morphogenesis, growth and development, where he recognized the significance of hormonal regulation in cell division. The importance of liquid endosperm in providing plant growth substances led some of us to regard coconut water as the “elixir of life”.

From his Cornell classrooms and laboratories, Steward was responsible for creating and inspiring a generation of botanists. Former students said that his lectures in advanced plant physiology were the high point of their education, and he taught this distinguished course to a large number of students for eighteen years. Over thirty

advanced students from various nations completed the Ph.D. degree under his direct supervision, and his laboratory attracted many postdoctoral scientists from the United States and abroad. He could be a spellbinding lecturer, and his classroom and seminars became a kind of international salon for visiting scientists from all over the world. He spoke by invitation to audiences on every continent, and it would be difficult to find a major university in the United States or Canada where he did not give one or more exciting reports of work carried on in his laboratory.

F.C. Steward, was born in London on June 16, 1904, and received a B.Sc. degree in Chemistry with First Class Honours from the University of Leeds. He completed the Ph.D. degree in Botany, also at Leeds, in 1926 under the direction of J.H. Priestley, a scientist with innovative and unconventional views, who instilled in him a strong sense of independence. From the outset of his career, Steward was often associated with scientific controversy and he often tended to be at its epicenter. He believed that one could be, and maybe should be, a “majority of one” if scientific convictions dictated it.

A Rockefeller Foundation Fellowship brought Steward to Cornell in 1927 and then to the University of California at Berkeley to work with Dennis R. Hoagland in plant mineral nutrition, and this led to his interest in ion uptake in plant cells. A second Rockefeller Fellowship in 1933 took him again to work with Hoagland and then to the Dry Tortugas, where the Carnegie Institution of Washington maintained a Marine Laboratory. Here he worked on the large coenocytic alga, *Valonia*. After returning to Britain he was appointed in 1934 as Reader in Botany at Birkbeck College, University of London, where Dame Helen Gwynne-Vaughan was Head of the Department.

During World War II (1940-45), he served Britain in the Ministry of Aircraft Production as Director of Aircraft Equipment and Assistant Secretary of the Ministry. His administrative and organization skills were crucial to the task and were further honed at this time. He returned to the United States after the war, holding appointments at the University of Chicago and the University of Rochester, where he was Professor and Chairman of the Department of Botany and where he began his work using paper chromatography to study nitrogen compounds. He came to Cornell as Professor of Botany in 1950. He was a tireless worker on University and College committees, and many major committee reports carry the stamp of his incisive thinking and literacy. His renown in research brought industrial consulting contracts with Beech Nut Packing Company, the DuPont Company, and the United Fruit Company, each of which contributed financially to his research over various periods of time. In his later years he held forth eloquently against the overspecialization and fragmentation of scientific research.

Among many honors, FCS was elected Fellow of the American Academy of Arts and Sciences in 1956, and Fellow of the Royal Society of London a year later. In 1961 he received the Merit Award of the Botanical Society of

America, and three years later the Stephen Hales Award of the American Society of Plant Physiologists. He also received several Honorary Doctorates. He wrote several books and more than 200 articles in scientific journals, and he was editor and contributor to the 10 volumes and 15 books of *Plant Physiology: a Treatise* (Academic Press, 1959-91). He had the gift of communication, both in speech and in the written word, and a very personalized style, with an intense feeling for the historical continuity of plant science.

He is survived by his wife of nearly sixty-four years, Anne Temple Gordon, whom he met when he was a Postdoctoral Fellow in the Department of Botany at Cornell; by his son and daughter-in-law, Frederick Gordon and Muir of Tuscaloosa; and two grandchildren.

Abraham Krikorian, Pamela Ludford, John Thompson, Charles Uhl, Harlan Banks

Laurence D. Stifel

August 29, 1930 — April 19, 1995

Laurence D. Stifel, Visiting Professor with the Cornell International Institute for Food, Agriculture and Development (CIFAD) and the Southeast Asia Program (SEAP) from 1991 until his untimely death in April 1995, had devoted his life to economic and agricultural development in Asia and Africa. His international career began in 1960, when he spent a year at the University of the Philippines as a Fulbright research scholar, doing research for his doctoral dissertation. He returned to the U.S. to teach economics at Willamette University for a year while finishing his thesis, and then he joined the U.S. Agency for International Development (USAID), which assigned him to Rangoon, Burma, 1962-64, as a program economist. From there he went to Bangkok, Thailand, for three years, 1964-67, to the National Economic Development Board as an economic advisor for USAID. Larry joined the Rockefeller Foundation in 1967 as a Visiting Professor at Thammasat University in Bangkok where he managed the Foundation's Social Science Project to nurture the development of young academic professionals in Thailand.

Larry viewed these years in Thailand as among the most rewarding in his career. During this time, he did some path-breaking research and superbly crafted writing on Thailand's economic history, which together with the quality of his personal interactions and guidance made him a loved and influential figure among a larger number of Thais. He established the English-medium program in Economics at Thammasat, and several of the students whom Larry worked with and selected to go abroad for further study have become national leaders.

With this knowledge of the problems of developing countries, Larry was brought back to New York to serve first as Associate Director for Social Sciences for a year and then over the next seven years, as Secretary of the Rockefeller Foundation, as Secretary and Vice President, and finally as Vice President for Program. During this time, he took a year off (1969-70) to spend as a Visiting Fellow at the Economic Growth Center of Yale University.

In 1985, Larry took on a major challenge, becoming Director-General of the International Institute for Tropical Agriculture (IITA) based in Ibadan, Nigeria. This was one of the international agricultural research centers operating within the system overseen by the Consultative Group for International Agricultural Research. IITA had made some significant research contributions in previous years, but had become too overgrown and ingrown according to knowledgeable observers. Larry's task was to reorganize and redirect this institution, and he carried out this responsibility with firmness, deftness and fairness. IITA as a major actor in the effort to reverse Africa's agricultural decline was reinvigorated through his leadership and strategic skills. When Larry stepped down as

Director-General of IITA in 1990, an appreciative staff and local villagers had him inducted as an honorary Yoruba chieftain.

Searching for an opportunity to return to academia for writing and teaching, Larry was immediately attracted to Cornell with its unparalleled reputation in agricultural development and Asian studies. He could bring a wealth of experience in administering and evaluating programs of agricultural and rural development and an extensive and intimate knowledge of Southeast Asia to the Ithaca campus. In 1991, he became a Visiting Fellow with CIIFAD, and in 1993, he was appointed as a Visiting Professor with both CIIFAD and the Southeast Asia Program. His concern for students' own intellectual developments was much appreciated by them and his faculty colleagues. He joined in teaching a graduate course on the Administration of Agricultural and Rural Development, and together with Thak Chaloemtiarana, he took over the introductory course on Southeast Asia. His knowledge and teaching skills helped to make this course a showcase for Southeast Asian Studies to undergraduates, and he had a particular knack for working with students and whetting their appetites to do further work in Southeast Asia.

During 1993, the International Center for Living Aquatic Resource Management (ICLARM) located in Manila, encountered serious management problems. Following the resignation of the Director-General and the Chairman of its Board of Directors, Larry was called in to serve as interim Director-General and put the Institute back on its feet. This was to be his last extended visit to the country which he had first visited as a graduate student and to the Asia that he had grown to love. He returned to Cornell to resume teaching during the spring semester of 1994, and sadly, in June of that year, while hiking in the French Alps with his son, he sustained a serious fall that caused injuries leading ultimately to his death.

Larry Stifel received his B.A. degree in Economics from Harvard University in 1952, and his M.B.A. degree from the Harvard Business School in 1954. He earned an LL.B. degree from Cleveland Marshall Law School in 1959 and a Ph.D. degree in Economics from Western Reserve University in 1962. He was 64 when he died and is survived by his wife, Dell; a son, David of Ithaca; a daughter, Laura Murphy of Sarasota, Florida; and two sisters, Irene Smith and Gretchen Larson, both of Cleveland, which was the city where he grew up.

Larry is remembered by his colleagues for his full and fruitful dedication to solving the problems of economic poverty and agricultural underdevelopment. From 1975-80, he served as Secretary of the International Agricultural Development Service, based in New York. At the time of his death, he was serving as a trustee of the Thai Development Research Institute in Bangkok and as a member of the Board of Directors of the International

Institute for Rural Reconstruction, which is based at Cavite in the Philippines. His good sense and good humor, his unfailing modesty, and his eager engagement with the ideas and interests of old colleagues as well as new acquaintances made him a constructive partner in many ventures. We had been looking forward to many more productive years in which Larry would continue to contribute to our teaching and research programs at Cornell. He leaves behind many positive memories of what he had already contributed here and to the world beyond Cornell.

Norman Uphoff, John U. Wolff, Randolph Barker

Evelyn E. Stout

March 29, 1908 — November 6, 1991

Evelyn E. Stout was on the faculty of the New York State College of Human Ecology, Cornell University, from 1953 until her retirement in 1973. At the time of her retirement, she was the Acting Chairman of the Department of Design and Environmental Analysis. With the department reorganization in 1975, her status as Professor Emerita was in the Department of Textiles and Apparel.

Before coming to Cornell, she taught chemistry, physics, and home economics in high schools and junior colleges. She then taught textiles and clothing at Washington State College, and at Louisiana State University. At Cornell, Professor Stout was involved in numerous textile research projects, and was active in training graduate students. She published many articles on textiles and related subjects including a popular college text, *Introduction to Textiles*. With three editions, this book became one of the publisher's best sellers, and was reprinted for use in India.

Professor Stout received her doctorate from the University of Illinois in 1953. Her B.S. and M.S. degrees were from Kansas State University. She was a member of the American Association of Textile Chemists and Colorists, the American Home Economics Association, and the College Professors of Textiles and Clothing; also Omicron Nu, Sigma Delta Pi and Phi Kappa Phi honoraries. She served as president of the Cornell Chapter of Phi Kappa Phi.

Evelyn Stout was an active member of the Ithaca community, where she resided until her return to her native Kansas in 1989. She was an active member of St. Paul's United Methodist Church where she sang in the choir. She also took responsibility for the choir robes spending many hours each year mending, cleaning and replacing where necessary. An extraordinary accomplishment was the church chancel drapery. She not only selected the color and fabric, but did the cutting and sewing for this enormous textile, saving the church a major expense.

For a number of years, she was a medical aide in the Tompkins County Civil Defense organization. She was a member of the Tompkins Community Hospital Auxiliary, and for several years, served on the board. She was a dedicated volunteer at the hospital spending many hours at the front desk greeting and directing visitors and training other volunteers. She also was an active volunteer with Friends of the Library, serving one year as chairman of the annual book sale.

In retirement she used her knowledge and organizational skills for the benefit of church, community and family. Although living far from her family, they were much on her mind. She provided financial support for the education of nieces and nephews, encouraged family reunions and worked on the family genealogy.

Evelyn Stout enjoyed travel. In addition to her trips to many parts of the U.S. and Canada, she visited Egypt. She was also fond of classical music, opera and ballet and was an avid bridge player. She was a loyal colleague, friendly mentor to students and young faculty and a devoted friend to many. She will be remembered as a person of integrity who took life and her profession very seriously.

At Cornell, a graduate fellowship was established in her name in 1983. Major contributions were from her former graduate students, many of whom she had financially supported as an anonymous donor. The first recipient of the Evelyn E. Stout fellowship received her Ph.D. in fiber science in 1991.

S. Kay Obendorf, Hazel Reed, Nancy Saltford

George J. Suci

April 24, 1925 — February 11, 1998

George Suci was born and grew up in Gary, Indiana. He was the only child of Aron and Adela Suci, who immigrated from Romania early in this century. George's Romanian heritage shaped his character and his traditions — friends in Ithaca will remember the spring lamb roast he held for many years.

During World War II, George was stationed in the Aleutian Islands where he was responsible for the maintenance of communications equipment. In his spare time, though, he studied the art of boxing, which in later years appealed to some of his graduate students who, like George, had not grown up in an academic world.

After the war, George was educated as an electrical engineer and psychologist at Purdue University and the University of Illinois. He went on to hold positions at the American Institute for Research in Newport, Rhode Island, the Institute of Communications Research and the Department of Psychology at the University of Illinois, and the National Institutes of Health. He joined the Department of Human Development at Cornell in 1959.

George's research and scholarly writing was concerned primarily with language and the way it carries meaning. He did pioneering studies on the measurement of meaning (the semantic differential method) with Osgood and Tannenbaum at the University of Illinois. Later, at Cornell, he and his students developed psychological and psychophysiological methods to study early language development and the relations between thought and language in infants and children.

George served as adviser and mentor for many graduate students who went on to successful teaching, research, and administrative careers in universities and government agencies. He taught core courses in cognitive development at both the undergraduate and graduate levels. He served as Department Chairperson from 1986-91 and as Director of Graduate Studies from 1978-81 and again from 1993-94. He was appointed Professor Emeritus in December 1996, but continued to teach through the spring of 1997 and served as Acting Department Co-Chairperson during the summer of 1997.

George died at home on Wednesday, February 11, 1998, after a brief illness.

George meant a great deal to many people at Cornell. The comments that follow reflect the thoughts of a few of his friends and colleagues, written since the time of his death.

“When we first met, I was just beginning my professional career and George was on the home stretch of his, entering the stage of life Erik Erikson called ‘Generativity.’ George was very generous and was a valued professional advisor. I regularly sought him out for counsel because I could count on him to listen to my concerns and give me solid, sensible advice. I was often surprised when he would completely transform my perspective on a troubling issue. I didn’t expect to find such deep wisdom and professional sensitivity from this humble man.

“George was a colleague. We team-taught a course in cognitive development for several years and I came to admire his ability to be completely non-defensive when he lectured. He gracefully turned my interruptions into learning opportunities for the students, modeling for them the practice of scientific dialogue. George’s seminal research on the semantic differential gave him a impressive depth of appreciation for issues of scientific measurement. His lectures and readings on the philosophy and practice of operationally defining scientific constructs was unparalleled. I’m glad I was taking notes during those lectures, because I can now provide my students with George’s excellent lessons. It was always a pleasure to discuss science with George. He had an uncanny ability to look at research and immediately cut through the fluff to see what was valuable and what was not.

“George was a friend, a good friend. Despite the difference in our ages, we became fast friends. It was easy to be friends with George, mostly, I think, because I knew I could trust him and he knew that I did. He never treated me as just an ‘assistant professor.’ In fact, one of the nicest things about George was his nearly total disregard for a person’s social or professional status. Even in an academic setting where status differences are institutionalized, George treated everyone, students, junior faculty, and staff as individuals. I think that’s why so many people liked and trusted him.

“It was also easy to be friends with George because he was so much fun. He always made me smile. It could be something simple, like coming in to work wearing his Art Carney hat, or when he got tickled by something and would throw his head back in a wonderful snaggle-toothed laugh.

“My grief is alleviated a little because I have so many happy memories of George. In all their cacophonous variety, from the sacrilegious to the sublime, all these memories are George to me.”

“Sometime during the winter of 1997, I took advantage of the fact that George had just retired to finally tell him what I thought of him. I told George that there were two qualities of his that were most important to me as his former student, his colleague, and his friend.

“First, I admired his street smarts. He had a sense of what made individual people tick, what was most meaningful to them, what motivated them. He also had a strong and accurate sense of how things in the world really worked, whether it was the relation between thought and language in infants, or department politics.

“What he didn’t have was any grand illusions of control. This was one part of his street smarts – he worked the system for solutions to problems, instead of thinking he could dictate or impose them.

“And another part of his street smarts that I liked very much was that he had no particular respect for authority per se. He didn’t show disrespect. But respect was something people earned by their actions and their principles, not something that came along with power.

“Besides his street smarts, the other thing about George that was important to me was his big heart. His genuine interest in your well being. His ability to focus on people’s strengths and not their weaknesses. The open and supportive atmosphere that he created among the people he worked with — faculty, staff, and students alike.

“These two qualities – street smarts and a big heart – were even more valuable because, in George, they were combined. And it was that combination that I sensed 24 years ago when I joined other grad students in the east basement to work with George.

“That was a wonderful time. Having ideas, lots of them. Remodeling the lab on weekends and during breaks. Building our own apparatus and inventing Rube Goldberg solutions to the endless electrical and mechanical problems, trying to record heart rate from 12 month-olds while keeping the pens on the Grass polygraph unclogged, using an old blues tune as the lab’s theme song; the list seems endless. From those days until now, George was a model for me — and I know, for others.

“He was down to earth, unpretentious proof that someone from a background that didn’t have much money or education could go to college, get a Ph.D., and actually make it in this bizarre world of academics without losing his identity, his mind, or most of all, his heart.”

“George was a mensch. The general translation of ‘mensch’ is ‘honorable man’. More specifically, it refers to someone who is kind, merciful, righteous, and has integrity. Traditionally, a mensch is explicitly not a hero. Practically, living life as a mensch is often itself a heroic act.

“Traditionally, a mensch is not necessarily wise, but George was. He could cut through the cobwebs and see what the important issues were. His advice often seemed quirky, as though it were coming out of left field. However, it was his very quirkiness that often provided an entirely different, and invariably useful, way of seeing and understanding things.

“George was amazingly non-judgmental. It was possible for a colleague to confide in George about one’s anxieties without having to worry that at some point in the future, the information would be mentioned in a context that would make it hurtful or embarrassing.

“George was the person of choice to talk with about ideas that were only imperfectly formulated. He never treated them as evidence of intellectual inferiority; instead, he treated them as being first steps, and provided feedback to make them better. He had a clear, incisive mind and he was generous in sharing it. In the institution of academia, where worth is often equated at best with mere intelligence and at worst with glibness, George based his academic evaluations on the actual scientific quality of a person’s professional work; he based his personal evaluations on the integrity of a person’s actions. He was equally comfortable, and non-condescending, talking with janitors as with administrators.

“It was not surprising that George was chosen to occupy leadership positions, as director of graduate studies, and as department chair. People trusted George. Academia, like many political institutions, is frequently a hotbed of interest groups jockeying for power, often at other people’s expense. George, too, had interests and preferences and, in certain administrative positions, could have acted on them. However, one of George’s frequent expressions was, ‘Nah, I’m not gonna do that. I’d like to, but you do stuff like that, you lose your integrity.’

“George was entirely without artifice. He didn’t posture; he didn’t lie by omission; he didn’t promote himself. Those who didn’t miss the hoopla found a man of integrity, a listener, a source of wise advice, a loyal friend. George was a mensch.”

“The characteristics which always come to mind when I remember George as a long-standing colleague and friend are his high sense of personal and professional integrity, a sharpness of critical intellect combined with a generosity of spirit and personal modesty, and a capacity to appreciate the simple joys of life and to share them with others. He greatly enjoyed being helpful to others dealing with problems, be they graduate students or faculty colleagues, whether concerned with technical issues or interpersonal questions.

“In his administrative roles, his hallmark was a commitment to fairness and allowing for differing views to be heard and discussed on the way to group decision making. In essence, George seemed to be able to live his professional life, with its commitment to excellence and achievement, within the larger guiding framework of his personal life as a caring human being.”

Rick Canfield, Barbara Koslowski, Henry Ricciuti, Steve Robertson

Dean Lee Taylor

July 2, 1949 — July 31, 1997

Dean Lee Taylor, a Cornell University Professor of Mechanical and Aerospace Engineering and a leading researcher and educator in computer-aided design (CAD), died at home in Ithaca, July 31, 1997. He was 48 years of age.

Professor Taylor joined the faculty of Cornell's Sibley School of Mechanical and Aerospace Engineering in 1976 after graduate study at Stanford where he completed his Ph.D. degree in 1975. His undergraduate degree was earned at Oklahoma State University in 1971. He served as the Sibley School's Associate Director from 1991-96, leading a major curriculum review and revision. He was elected as a Fellow of the American Society of Mechanical Engineers in 1995, and was honored with the Cornell College of Engineering's Excellence in Teaching Award in 1989. He was a Visiting Research Fellow at the University of Birmingham, United Kingdom, in 1981 and a Visiting Scholar at the University of California at Berkeley in 1990.

He will be remembered as an effective researcher and educator in the fields of system dynamics, computer-aided design, design theory, micromechanical machines, and concurrent engineering. In addition, he made important contributions to the design of bone-implant systems by directing the development of software for determining the geometry and material properties of bones from CT scans. Dean developed important laboratories for research and education, including the Integrated Mechanical Analysis Project Laboratory and its successor, the Biomechanics Computing Laboratory, which is now used extensively for the analysis and design of orthopedic implants and other aspects of the musculoskeletal system.

His textbook, *Computer-Aided Design*, presented a new approach to using the computer for design and analysis. Whereas early computer-aided design systems concentrated on the design and graphical representation of individual components, Taylor sought to expand the capabilities of computer-aided design to represent assemblies of interacting parts and their function as an engineering system.

In addition to teaching in the College of Engineering, Taylor contributed to the continuing education of industrial executives through short courses taught in the Johnson Graduate School of Management at Cornell. He also was active in the Realization Consortium, a national engineering educational effort, and the Cornell Manufacturing Enterprise.

These are the basic facts. We, however, remember him more personally as a colleague who was an innovator, a servant, an innovative teacher, a family man, and a friend.

He was an innovator. Dean was curious and thirsty for knowledge; he wanted to learn about the next thing that would be important. He had a broad horizon and he was more interested in learning about new things than becoming the expert in a narrowly focused area. And so his students worked on the next thing too: on mesh generators for finite element structural analyses; on computer-aided modeling capabilities that enabled other students to analyze and design bone-implant systems; on imaging techniques that could be used to implement robotic orthopedic surgery; on magnetic bearings; on micro electro-mechanical devices; on design theory and product design. Dean wanted to bring the computer to bear on the analysis of mechanical systems and he did by creating the Integrated Mechanical Analysis Laboratory, which evolved into our Biomechanics Computing Lab.

He was a servant. Computer Science needed a computer graphics course and Dean taught one. He served the school during a time of transition. Dean was the Associate Director with three directors in five years, which must be some kind of a record. He served the College of Engineering as Director of the Computer-Aided Design Instructional Facility, one of those next things, in its early years. He served us all—we, his colleagues, always had someone to go to with our questions about computing and computer systems, and someone who more than likely could cut a deal with industry to get the equipment we needed.

He was an innovative teacher. He thought of new ways to teach computer-aided design and produced a textbook to do it. He envisioned new ways of teaching design and analysis to sophomores and moved a curriculum to include it and developed a design studio, “The Design Studio of the Future”, to implement it. “We as engineers”, he said to a colleague only a few weeks before he passed away, “have a lot to learn from the professional schools—business, law, veterinary medicine”—and he worked with architecture to develop the design studio and with the Johnson School to teach leaders from industry.

He was a family man. We knew that he was proud of his wife, Kathy, and his daughter, Lauren, and their many accomplishments. His ability to juggle the responsibilities of family and career was admired.

He was a friend. An avid sailor, he shared his enthusiasm for the sea by taking students and a colleague’s son with him on summer sailing excursions. He introduced friends to good books, technical and otherwise, and his easy way with students was appreciated by those of us who are more introverted.

He was away from the Sibley School during the 1996-97 academic year. He came back to Cornell toward the end of the summer of 1997 after his sabbatical leave, after a family vacation in Europe and England, eager to innovate, ready to teach, ready to advise members of the Class of ‘01, full of energy, and ideas, and enthusiasm, and great

joy. We shall miss him. The design studio of the future now bears his name. We are grateful for the reminder it provides of his contributions to Cornell and to those of us privileged to know him as a colleague and friend.

Now finale to the shore!

Now, land and life, finale, and farewell!

Now Voyager depart! (much, much for thee is yet in store;)

...Depart upon thy endless cruise, old Sailor!

From Now Finale to the Shore, Walt Whitman, Leaves of Grass

Albert George, Frank Moon, Donald Bartel

Cyrl Waldie Terry

July 15, 1905 — April 25, 1994

Cyrl W. Terry was born in Brooklyn, Pennsylvania, and during his early years he worked there with his father in a hardware and farm machinery business. He came to Ithaca in 1922 and earned all of his degrees at Cornell University, the M.E. in 1926, the M.M.E. in 1929, and the Ph.D. in 1948.

With the exception of nearly four years during World War II, Dr. Terry, Emeritus Professor of Agricultural Engineering, served Cornell University continuously for thirty-six years. He began his teaching career as an Instructor in 1926 and retired as a full Professor on July 31, 1962.

From 1926-36, he was an Instructor in the College of Engineering, teaching materials testing, experimental engineering, kinematics, and machine design. During the summers of 1928-29, he served as Assistant Technical Director of Product Testing for Sears Roebuck & Company. In 1936, he was in charge of instruction in mechanics, aerodynamics, and shop processes for Luscombe Airplane Company. From 1936 to 1941, he was Assistant Professor in charge of the Aero option courses, including aerodynamics, aircraft engine design and flight test methods. He also taught diesel engine courses for the U.S. Navy.

In the fall of 1941, Professor Terry left Cornell to become Ground School Instructor for Plains Airways. During World War II, he was the Director of Flight Research for Ryan Aero Company and was in charge of the flight test program for the FR-1 Ryan "Fireball".

Dr. Terry returned to Cornell in 1945 as an Associate Professor and Acting Head of the Aero Engineering Department. He joined the faculty of the Department of Agricultural Engineering in 1946 as a Research Associate and Ph.D. candidate, with thesis research on hay drying. He was promoted to full Professor in 1948. He continued in this capacity until his retirement in 1962. His research interests were in pesticide application equipment, tractor stability and effective braking systems. His teaching was in farm power, agricultural machine design and special problems for seniors and graduate students.

Dr. Terry's broad experience in the application of the physical sciences and engineering theory made him a valuable consultant to members of the staff and faculty of the Department of Agricultural Engineering. Cy often suggested simplified solutions to perplexing problems and greatly enjoyed the variety of challenges that agricultural applications posed.

Dr. Terry was active in professional and honorary societies, including: American Society of Agricultural Engineers, Institute of Aeronautical Sciences, Society of Automotive Engineers, American Society for Advancement of Science, Sigma Xi and Phi Kappa Phi.

He obtained his license to fly in 1932 and was an enthusiastic member of the Cornell Glider Club in the 1930s.

An active Mason, Professor Terry was Master of the Hobasco Lodge 716 in 1948 and President of the Tompkins County Shrine Club in 1955. He also held the post of Thrice Potent Master for the Ithaca Lodge of Perfection, Scottish Rite Masons.

Upon retirement in 1962, Dr. Terry became Assistant to the Head of Mechanical Engineering at the Navy Civil Engineering Laboratory at Port Hueneme, California. This position required his presence on numerous projects in Antarctica.

Cy was an avid square dancer and in recent years was an active member of the Men's Group of the Senior Citizens of Tompkins County.

W.F. Millier, E. Stanley Shepardson

Frederick Kwai Tuck Tom

September 9, 1920 — June 17, 1993

Frederick K.T. Tom was a master teacher and internationally famous teacher educator. Well-known for his sensitivity to the needs of his students and associates alike, he flourished in the roles of counselor, adviser, and team player. He was a true believer in “learning by doing/” and problem-solving, and used them as approaches to his teaching, learning, and everyday life. His influence as an international educator spanned his entire career.

Born in Honolulu, Hawaii, on September 9, 1920, he graduated from Lahainaluna High School in 1938 and was the Maui recipient of the University of Hawaii Territorial Scholarship. He was graduated in 1942 with a Bachelor’s degree from UH-Manoa, where he was president of his class and the student body. That same year, he married Nancy Yun Wah Wong. During World War II, he was stationed in China as a U.S. Technical Sergeant. Fred served for eight years as a teacher of vocational agriculture at various secondary schools in Hawaii. And, he earned both the M.S. and the Ph.D. degrees at Cornell University.

Fred was a faculty member of the New York State College of Agriculture from 1955-75. As a teacher educator in agriculture, he worked with hundreds of undergraduates preparing to teach agriculture at the high school level, and with scores of graduate students from various parts of the world who were preparing for leadership roles in teacher training, administration and supervision, and earning masters and doctoral degrees in agricultural and occupational education. At Cornell, he became well-known for both his expertise as a master teacher and his research on the improvement of college teaching.

He was co-author of *The Cornell Diagnostic Student Observation and Reporting System for the Improvement of College Teaching*. The research report describing the development of this computerized system was selected for publication in 1975 by the American Vocational Association as one of five model research projects in the field of vocational education. The system has been used by thousands of college teachers to improve their teaching over the past twenty years.

After retiring from Cornell, he became the first dean of the College of Agriculture at the University of Hawaii-Hilo. He was responsible for planning the first buildings. He established the 110-acre agricultural farm laboratory where students translate theory into practice. He hired the initial faculty and assisted them in developing the curriculum.

Throughout his professional life, Fred Tom maintained a strong interest in international agriculture. He served a total of eight years as a consultant, visiting professor, and team leader for various Cornell, USAID, and United Nations projects including: acting dean, Teachers College, University of Liberia, Monrovia, 1963-64; professor, agricultural and extension education, University of the Philippines at Los Banos, 1966-68; principal, South Pacific College of Tropical Agriculture, Western Samoa, 1973; team leader, USAID Project, Feasibility Study, Western Samoa, 1978; consultant, World Bank Evaluation Study of Assam and Bihar Universities, India, 1983; consultant, Food and Agriculture Organization, Papua, New Guinea, 1983; team leader, USAID, South Pacific Regional Agricultural Development Project, 1984-86; and member, USAID Evaluation Committee, University of Peshawar, Pakistan, 1987,

Following his retirement from the University of Hawaii, Fred remained active in people-related activities; teaching reading, helping people prepare income taxes, and leadership in projects of the Chinese community and the United Community Church in Hilo. He developed a spectacular backyard garden, densely planted with both local and exotic fruits, vegetables, and flowers. In 1992, Fred and Nancy celebrated their 50th Wedding Anniversary at a surprise family reunion.

Frederick K.T. Tom died on June 17, 1993, at Queen's Medical Center in Honolulu after a brief illness. He is survived by his wife, Nancy Y.W. Wong Tom; three sons, Stanley Y., Edward W., and William M.; one daughter, Marilyn W.C. O'Riordain; mother, Kalani Ah Kee; three brothers, Richard, Harry, and Lawrence; four sisters, Gloria Hashimoto, Ednette Chandler, Shirley Woo, and Moni Comara; and six grandchildren.

In an interview with the Honolulu Star Bulletin, following Fred's death, his youngest son, William, characterized his father this way:

"Frederick K.T. Tom loved growing things, nurturing his family, his students, and his plants. . . The Tom house was not only full of his family, but he always invited stray students over for holidays, and we always took in at least one foreign student each year."

Harold R. Cushman, William E. Drake

Harrison Miller Trice

May 25, 1920 — December 5, 1994

Harrison Miller Trice was Professor Emeritus in the Department of Organizational Behavior at the School of Industrial and Labor Relations, Cornell University, where he had been a member of the faculty since 1955. Professor Trice's major contribution to his discipline has been the integration of the study of alcohol and drugs with the study of the workplace. More than any other social scientist, he was responsible for integrating occupational and organizational sociology with the study of alcohol and drugs. For example, his book with Janice Beyer, *Implementing Change: Alcohol Policy in Work Organizations*, which was published by the Free Press in 1978, was an important addition to alcohol studies and continues to be a major contribution to the theory of social change in organizational sociology. His other books include such classics as *Alcoholism in America*, published by McGraw Hill in 1966, and *Spirits and Demons at Work: Alcohol and Other Drugs On the Job*, which was first published by the ILR Press in 1972 (co-authored with Paul Roman). In addition, he was the author of numerous monographs, book chapters, and articles on the relationship between work and substance abuse. In 1984, for example, he received the Mark Keller Award from Rutgers University's Center of Alcohol Studies for his outstanding article, "Work-Related Outcomes of the Constructive Confrontation Strategy in a Job Based Alcoholism Program" *Journal of Studies on Alcohol*.

In addition to his many scholarly contributions, Professor Trice also led an active life of public service. He held numerous professional offices, which included chairman of the Committee on Drinking Behavior of the Society for the Study of Social Problems and of the Section on Occupational and Industrial Programs of the Alcohol and Drug Problems Association. He served on many editorial boards including the publications committee of the Society for the Study of Social Problems, the *International Journal of Addictions*, *Sociological Forum*, and the *Journal of Drug Issues*. His many public service activities included serving as member of the Board of Trustees of Alcoholics Anonymous, the New York State Governor's Task Force on Alcohol and Drug Problems, and the Initial Review Group for the National Institute of Alcohol Abuse and Alcoholism.

Professor Trice was also a popular teacher. His courses on occupational culture, deviance in the workplace, and employee assistance programs were always popular. Until his retirement, he conducted a large course in which each student was required to carry out a specific field study. Among the most popular of these studies were those concerned with alcohol and drugs. While committed to research and public policy, Harrison Trice was also committed to teaching.

Prior to his retirement from teaching in 1991, Professor Trice also played the pivotal role in securing an endowment to establish Cornell's R. Brinkley Smithers Institute for Alcohol-Related Workplace Studies at the School of Industrial and Labor Relations. After his retirement, he kept up an active research program, completing two books in 1993 on organizational culture— *The Cultures of Work Organizations*, co-authored with Professor Janice Beyer, and *Occupational Subcultures in the Workplace*. Both books have received great acclaim from reviewers. At the time of his death, he and Professor Paul Roman were revising *Spirits and Demons at Work: Alcohol and Drugs on the Job*, and he was co-editing with Professor Paul Steele a special issue of the *Journal of Drug Issues* on workplace programs for the prevention and treatment of alcohol and other drug problems.

In 1994, Professor Trice was the recipient of two awards which recognized his lifetime contributions to the field of alcohol and drug studies. In August, he received the Distinguished Career Award from the American Sociological Association's Drinking and Drugs Section. In November, he received an award from New York State's Office of Alcoholism and Substance Abuse Services for his many contributions to the area of employee assistance programs, particularly his efforts to deliver rigorous training and education programs to practitioners.

Professor Harrison Trice touched many lives, and without qualification, it may be said that he had great impact on legitimating the social scientific study of alcohol and drugs. He was a sociologist who changed both his discipline and the specific area of his research concern.

Samuel B. Bacharach, Pamela Tolbert, William J. Sonnenstuhl

Sho-Chieh Tsiang

June 27, 1918 — October 21, 1993

Professor Sho-Chieh Tsiang, a world renowned authority in macro-economics, monetary theory and international finance, joined the Economics Department in 1969 and taught until 1985 when he was elected an emeritus professor on retirement.

Born in Shanghai, China, he studied at Keio University, Japan, until the war intervened. He then enrolled in the London School of Economics where he received the B.Sc. (1941) and Ph.D. (1945) degrees. Even as a graduate student of 24, his critique of Keynes (*Economica*, 1942) marked the beginning of a stream of influential contributions which have spanned half a century. His dissertation under Hayek won him the Hutchinson Medal, awarded to authors of the best thesis at L.S.E. in a two-year period.

While he offered many criticisms against the imperfections of the Keynesian theory which foreshadowed many of the recent developments, his principal concern was the harm which may be caused to developing economies by the unqualified acceptance of the views of Keynes in inappropriate contexts.

He taught at the National Peking University, 1946-48 and the National Taiwan University, 1949. Interestingly, his proposal of indexed saving bonds made at the Peking University was not implemented by the Nationalist government but adopted after the Communist takeover.

He served as an economist at the International Monetary Fund. While at the Fund, he established himself in a series of articles as a major participant of the debates in macro-economics and international finance. It was also during this period that he and the late Professor T.C. Liu formulated the proposal for reform of the exchange rate and interest rate policies for the economy of Taiwan, China. The adoption of that proposal in 1958 and its full implementation in the next two years made possible the economic miracle of Taiwan.

He then accepted a professorship at the University of Rochester in 1960 before he was induced to join Cornell by T.C. Liu in 1969. In his visits to Taiwan, he helped Liu in setting up the tax reform in Taiwan. This provided the finance for the expanded education system. He further utilized his prestige in public policy debates. Under his leadership, the interest groups were prevented from appropriating the development gains in Taiwan for private benefit. As an acknowledged leader in development policy, he was invited to Chile, Mexico, Switzerland, Japan, Korea, and China to discuss his views.

He was a principal force in promoting the education and research in economics in Taiwan. By his prestige, influence and personal leadership, he played a major role in the founding of the Graduate Institute of Economics of the National Taiwan University, and the Institute of Economics in Academia Sinica, and he was the founding President of both the Taiwan Institute of Economic Research and the Chung Hua Institution of Economic Research.

He was the author of one book and more than fifty scholarly articles in his field. During his illustrious career, he was a Visiting Lecturer at Johns Hopkins University; member, Academia Sinica; the Rockefeller Visiting Professor of the University of the Philippines; Visiting Fellow, Nuffield College, Oxford University; and Visiting Lecturer of Keio University. He served on the Editorial Board of the *American Economic Review*, 1974-76; and was a Guggenheim Foundation Fellow, 1966-67.

Japan Mitra, Erik Thorbecke, Henry Y. Wan, Jr.

Kenneth L. Turk

July 14, 1908 — December 16, 1990

Farm animals lost a friend and his multitude of students, colleagues and employees lost a mentor and skilled associate. Dr. Kenneth L. Turk died December 16, 1990 after participating in the Cornell community for fifty-three years as a graduate student, instructor, professor, department head, director, and professor emeritus.

Born on a livestock and grain farm in the shadow of the Ozarks on July 14, 1908, Ken received a B.S. degree in dairy and animal husbandry from the University of Missouri in 1930, and M.S. and Ph.D. degrees from Cornell in animal husbandry in 1931 and 1934 respectively. He began his career as an extension specialist in dairy husbandry at Cornell in 1934. During that year he married Bernice Francis Stockier who had been an undergraduate at Missouri and a graduate student at Cornell. (Mrs. Turk died on October 20, 1988.) In 1938, he moved to the University of Maryland, later to become department head. He returned to Cornell in 1944 and was head of the Department of Animal Husbandry from 1945 to 1963. During his tenure the faculty expanded from 28 to 35, including 23, whom he hired; the budget increased nine-fold; the internationally recognized Cornell-Los Banos Philippine project evolved; and Morrison Hall came into being. For many of those years he taught an undergraduate course in dairy husbandry. In 1987 he completed a remarkably and characteristically well documented, illustrated book, *Animal Husbandry at Cornell: A History and Record of Development From 1868 to 1963*.

Ken left the Department of Animal Science in 1963 to become the Director of International Agricultural Development at Cornell, the first such position in the country. The program grew from a fledgling effort in a number of departments to a unified and vital cog in the total program of the College of Agriculture and Life Sciences including professorships established in many departments. He laid the foundation and set an example for many of today's international agricultural programs worldwide.

He wrote profusely, authoring or co-authoring 70 scientific publications and over 300 articles for the popular press. He was associated with a number of scientific societies, and served as president of the American Dairy Science Association and the Association of U.S. University Directors of International Agriculture Programs. He received honors and awards from these organizations as well as from the American Society of Animal Science and the University of Missouri for his significant contributions to the field of dairy husbandry and international agriculture.

Dr. Turk's leadership of the Los-Banos Cornell Philippine Project is legend. The College of Agriculture at Los-Banos had been decimated during World War n and Cornell was called to restore it to productivity. Ken led the project. He went with a cadre of the best qualified Cornell personnel available. The project flourished and stands today. Dr. Turk summarized this effort in the book, *The Cornell-Los Banos Story*, published in 1974.

He was frequently in demand as an agricultural consultant and served on the boards and panels of the Rockefeller Foundation, Latin America Science Board of the National Academy of Sciences, FAO, National Livestock Centre for Africa, Agricultural Research for the US-USSR Joint Commission on Science and Technical Cooperation, and the U.S. Agency for International Development. In retirement he accepted a number of international consultancy assignments in Latin America, Africa, Asia, Southeast Asia and the Middle East.

Ken and his wife Bernice were a kind and caring team. No one knows how many babies they acknowledged in their own inimitable fashion; no one knows how many flowers appeared at hospitals, along with visits; no one knows how many brunches or dinners they supervised or how many students, foreign visitors, faculty or friends came under their spell. An invitation to the Turks was a trip to a never-never land which no one ever forgot. To the young folks they were an inspiration that the fantasy of living "happily ever after" could be a reality, that marriage could be team work. Their home was a veritable oasis of refreshment, relaxation, and *joie de vivre*.

Ken and Bernice's dedication to students, to the Department of Animal Science, and to International Agriculture is reflected by their generous legacy to the College of Agriculture and Life Sciences and the College of Veterinary Medicine which will be used to support Animal Science graduate students with an interest in international agriculture and for visiting foreign academicians.

In recognition of his accomplishments, Cornell University, the College of Agriculture and Life Sciences, and the Department of Animal Science dedicated the Kenneth L. Turk Seminar Room in Morrison Hall in 1986. A paraphrase of part of that dedication statement says, "With all his manifold contributions to teaching, research, extension and administration, we suspect Ken relished as much as anything the recognition that he was a darn good cow man".

Robert H. Foote, William G. Merrill, Richard G. Warner

Ferdinand Hinchley Butt Van Cleve

August 5, 1899 — December 11, 1993

Professor Emeritus Ferdinand Hinchley Butt Van Cleve died at home in Friday Harbor, Washington on December 11, 1993 of natural causes. He was predeceased by his wife, Gladys, who died on December 20, 1992. He is survived by a brother, Dr. Donald Van Cleve of Voorheesville, New York. He was appointed an Instructor in Entomology in 1930; promoted to Assistant Professor of Insect Morphology, October 1, 1944; Associate Professor, July 1, 1948; and Professor on July 1, 1959. He became an Emeritus Professor of Entomology, August 16, 1959.

He was born on August 5, 1899 in Spokane, Washington; Ferd and his brother grew up in the Seattle area and developed an early love for boats. No boat advertised for sale was too expensive to inspect. Ferd's philosophy was that if one is just looking, price is no object. He brought his love of boats to Ithaca where he soon acquired a handsome sailing auxiliary vessel. But, upon retiring to Friday Harbor in 1959, he went back to power boats.

He received his B.A. degree from the University of Washington, Seattle, Washington in 1923; his M.A. degree from the same school in 1925 and his Ph.D. degree from Cornell in 1934.

Ferd and Gladys acquired the John McGraw home in Dryden located at 8 Library Street; the house was built in 1835. John McGraw was an early benefactor of Cornell University and the donor of McGraw Hall. After they had studied the history of the house, they renovated it in its original style. They frequently entertained their colleagues and students; there were Sunday teas and picnics. If new guests found the house interesting, Ferd was delighted to take them on a tour and demonstrate its interesting features.

He taught courses in insect morphology and embryology. A number of graduate students worked with him and produced theses under his direction. Ferd's lectures in entomology were informal, pleasant but often accompanied by difficult quizzes. The lectures were stimulating and his fine sense of humor was always present. He inspired students to perform beyond their expectations in making scientific pen and ink drawings. He was co-author and illustrator of *Embryology of Insects and Myriapods*, written with O.A. Johannsen and he was author of a number of articles on the morphology of insects. He was author of a booklet entitled, *Friday Harbor Then and Now*. It is profusely illustrated with his sketches of scenes of Friday Harbor.

Ferd was ever the optimist. At the age of 77 and having two major health problems, he was planning on putting into book form more than 100 eight by ten inch photographs of well-known old sailing vessels, "sometime in the

next ten years". His greatest concern at this time was his inability to take his guests on a cruise in Puget Sound on his thirty-six foot diesel cruiser because he had broken a leg due to a fall and could not fit the immobilized leg behind the pilot wheel. He and Gladys were planning yet another trip to the Orient via freighter the following year; a trip which they subsequently made.

George Eickwort, Dick Pendleton, John G. Franclemont

Gladys Loraine Peterson Butt Van Cleve

November 23, 1896 — December 20, 1992

Professor Emerita Gladys Loraine Peterson Butt Van Cleve died at home in Friday Harbor, Washington, on December 20, 1992. She is survived by her husband, Professor Emeritus Ferdinand H. Butt Van Cleve, and by a sister, Ruth Windsor of Friday Harbor, and numerous nieces and nephews. An associate professor in the Department of Textiles and Clothing of the New York State College of Home Economics, she retired in 1959. She and her husband moved to Washington State to be near to their families in Seattle, adopting the name Van Cleve, Professor Butt's Mother's family name.

Born in 1896 in Wadena, Minnesota, Gladys grew up on a farm, a member of a family of nine brothers and sisters, several of whom went to college, making it necessary for her to earn her way. She did this by selling encyclopedias in the backwoods and rural areas of Washington and Oregon. She was treated well by farm families who frequently took her in out of concern because she was so tiny and so young. But life to Gladys was an adventure. It wasn't so much what happened to you that mattered, it was what you did about it that counted—a philosophy which she shared with students, colleagues, homemakers, community groups, friends and family throughout her life. Most of these can tell stories of her solutions to problems— some hilarious, but all both imaginative and pragmatic.

Gladys graduated from the University of Washington, Seattle, in 1928, one of the three top students in the University. She earned a Bachelor of Science degree in home economics, with a strong background in chemistry, which she later put to practical use at Cornell with the emergence of synthetic fibers. Her M.S. degree was from Columbia University in 1945 with a major in philosophy of education.

As a newly married couple, Mr. and Mrs. Butt came from Washington State to Cornell University in 1928, where Ferd became a candidate for the Ph.D. degree in the College of Agriculture (Entomology) and Gladys was appointed clothing specialist in Cooperative Extension. They arrived on campus in the depths of the Depression. No one had ever heard of "Welfare" and most families had little money and were "making do". Gladys's assignment in Cooperative Extension was "to extend the resources of the Department of Textiles and Clothing to the people of New York State." Extension at that time was organized into community groups of homemakers by the county home economists. The latter identified needs of families by interaction with them. In those Depression days, American women sought to lift themselves by their bootstraps, and Gladys was equipped to help. Through her bulletins and her demonstrations she taught them how to use what they had. Her Cornell Extension bulletins

were classics. *Keeping Clothes Wearable*, #536, and #984, *Home Methods of Stain Removal* could not keep up with demand, and long after her retirement the College was still receiving requests from Alaska for #838, *Make Your Furs Wear Longer*. Our present day concepts of health and fitness were low on the scale of conscious concerns of these Depression families, but Professor Butt saw the need to lift spirits by introducing lessons in posture, in fitness, and in ways to become physically more attractive, especially for candidates for jobs outside the home. In these days of women's magazines and of women's liberation, it is difficult for us to imagine how innovative these programs were. But the women knew, and they blocked the corridors of Martha Van Rensselaer Hall during "Farm and Home Week" hoping that she would repeat her lectures to the overflow crowds.

In 1937, Mrs. Butt was appointed assistant professor for the resident undergraduate program in the College of Home Economics. She was one faculty member who really knew the families of her students. She had first hand understanding of those who sacrificed to send their daughters to Cornell University when there was little financial aid and few scholarships. These students sought Mrs. Butt's counsel in managing wardrobe problems and personal appearance standards. Most of all, through her teaching, based frequently on her knowledge of chemistry, and her involvement with honorary societies such as Omicron Nu and Iota Sigma Phi, she encouraged scholastic achievement. In addition to courses in textiles and in apparel design, she taught the departmental core course required of all students in the College. Attentive students were treated to a cultural richness and a joy in learning and living. She was responsible for a well-equipped textile laboratory.

In 1938, Gladys and Ferd purchased the historical home of John McGraw on 8 Library Street in Dryden, about ten miles from the campus. Built in 1835, this Greek Revival style house had a two story central core with one story sections flanking the north and south sides and beautiful grounds. John McGraw, the donor of McGraw Hall at Cornell, was the father of Jennie McGraw Fiske, who gave Cornell its first set of chimes now in Library Tower, also the Southworth Library in Dryden in memory of her Mother, Rhoda Southworth. Ferd and Gladys were always active supporters of this library, Ferd serving on the Board and keeping the clock wound. Together they studied the history of their home which looked out on the Library. They renovated it in the original style. They opened its doors to colleagues and to their students who absorbed the hospitality, the perfection of the Greek proportions inside and out, the carefully selected library, the art, music, pottery shop in the barn, and the Franklin stove in the kitchen so often the center of lively conversations. A treasured memory is Cinnamon the cat picking his way among colored glasses in the dining room window. Some of these glasses dated back to Rembrandt's time, and were hand carried from the Netherlands in one of Gladys and Ferd's frequent travels.

The interest in travel to Europe and Asia continued into retirement. Boats were a life-long passion, including ocean liners, tramp steamers, sailboats and power boats on Lake Cayuga and in the San Juan Islands where Ferd's historical investigations and sketching and Gladys's pottery making could continue. Winters were frequently spent on the island of Penang in Malasia.

Among the many contributions of Professor Gladys Butt to New York State and to Cornell University, it should be noted that Professor Butt's pursuit of science and textiles provided a base for the future of those areas of specialization in what is now the reorganized Department of Textiles and Apparel in the New York State College of Human Ecology.

Natalie Crowe, Elsie Frost McMurry, Vivian White

Ethel Landau Vatter

October 22, 1909 — June 1, 1996

Professor Emerita Ethel Landau Vatter was a dedicated social scientist in the broadest sense of the term. Her professional interests spanned economics, research design and statistics. She combined technical competence with a strong commitment to helping the disadvantaged.

Born and brought up in Ohio, Professor Vatter left for Washington, DC in search of a job. Growing up in the depression gave her an enduring concern for economic and social issues. While in Washington, she began to attend part-time courses at George Washington University.

Professor Vatter did not obtain her first academic degree until she was in her thirties. Her academic career began in 1947 when she became an Instructor in economics at Oregon State University. She subsequently returned to the University of California at Berkeley where she had earned her bachelor's degree and completed her Master's program in 1952. She returned to Oregon State, serving not only as an Instructor, but also as a Researcher and Editor in the Department of Agricultural Economics. She resigned her faculty position there in the late 1950s to pursue a Ph.D. program at the University of Iowa. She obtained her doctorate in economics from that institution in 1962.

Professor Vatter joined the Department of Household Economics and Management at Cornell in 1962. At Cornell, she initially had a three-way appointment in teaching, research and extension. She became an Associate Professor in 1966 and a full Professor in 1970. From 1966-69, she was Coordinator of Research for the College and Assistant Director of the Cornell Agricultural Experiment Station. In 1969, she was named Associate Dean for Graduate Education and Research for the College and served in that role until 1971. She was named Professor Emerita in 1974.

Within the College, Ethel Vatter was noted for bringing the insights of the various social science disciplines to bear on humanitarian issues. Her strong personal commitment to achieving justice and concern for the disadvantaged led to her research interests on poverty and to service on numerous college committees dealing with social issues. She was a member of the Executive Committee on Operation Hitchhike, a pilot effort of the three Statutory Colleges at Cornell and the U.S. Department of Labor on rural manpower development. She was active in the development of women's studies on campus.

One of Ethel Vatter's major contributions to the College was her work with both graduate and undergraduate students. Professor Vatter was an excellent teacher presenting material clearly and challenging her students to take on individual projects. She gained the confidence of graduate students and was strongly supportive in their professional activities. Her concern for their personal welfare led her to interact with her students both socially and professionally.

Professor Vatter made significant contributions to the study of family income, including work on private pension plans, the allocation of family resources and the economic status of women in the world of work. Her publications included *Women in the World of Work*, *The Affiliated Family: A Device for Integrating Old and Young*, *Income Maintenance in the 1970s*, and *Experiment and Evaluation in Reaching Those in Poverty*. While on sabbatical leave in 1970, Professor Vatter was a Visiting Professor at Temple University. Her work there led to the publication of joint research with Sylvia Claven and Joseph Kennedy.

In 1972, Professor Vatter was diagnosed with a massive brain tumor which was surgically removed. The physicians were amazed at her stamina and recovery. The following year she returned to teaching having made a remarkable recovery. Her courage during this period was inspiring to her colleagues.

Professor Vatter was active in several professional societies. She was a member of the American Economics Association, American Home Economics Association, American Council on Consumer Interest, American Association of University Women, American Association of University Professors and the Grove Conference on Marriage and the Family.

Professor Vatter will be remembered for her concern for the less fortunate. It influenced her research and her teaching. Her generous gift to the college in 1987 supports mature students who experience financial stress. She had encountered difficulties while pursuing her own education and hoped to smooth the way for students similarly situated. She also demonstrated her concern for others through participation in activities in the community. She was a person of strong convictions, determination and courage; she also had an unusual tolerance for all points of view and was particularly effective in chairing committees and mediating conflicting views.

Professor Vatter married Harold G. Vatter in 1944; they were later divorced. They had two daughters: Theresa Vatter, now a high school mathematics teacher in Ithaca; and Rita Vatter Jett, an attorney in Portland, Oregon. Professor Vatter died on June 1, 1996 at the age of 86. In addition to her two daughters, she is survived by three grandchildren.

Kathryn Elizabeth O'Malley Visneyi

December 3, 1916 — December 23, 1991

Professor Emerita Kathryn Elizabeth O'Malley Visneyi died December 23, 1991 in Naperville, Illinois. She was born in Perry, Iowa, on December 3, 1916. She and her husband, Dr. George Visneyi, lived in Ithaca until May, 1991.

A graduate of Iowa State University, Professor Visneyi completed a dietetic internship at University Hospitals, Western Reserve University, Cleveland, Ohio. Then she worked at the University of Chicago Clinics and Cook County Hospital in Chicago and subsequently was director of dining services and instructor in dietetics at St. Joseph's Hospital and the College of St. Francis respectfully, in Joliet, Illinois. Her M.S. degree in institutional management was earned at Cornell in 1966.

Professor Visneyi had a long and productive association with Cornell, beginning in 1942 as assistant manager of Martha Van Rensselaer cafeteria. She took time off from campus life to rear a son and daughter. She rejoined Cornell as an extension specialist in the Department of Institutional Management in 1963. After completion of the M.S. Degree, she was appointed assistant professor in 1966. Professor Visneyi became associate professor in 1971 and retired from the Division of Nutritional Sciences in 1978.

Professor Visneyi was instrumental in the smooth integration of the Institutional Management Department into the Human Nutrition and Food Department when the College of Home Economics was reorganized and became the College of Human Ecology. She spent many hours as a member of the committee that planned the reorganization of the curriculum and helped establish the undergraduate program in the new department. When departmental councils became operative with reorganization, she was elected repeatedly to serve on the council. There she was a valuable and contributing member, one whose ideas were well received by student representatives and other faculty. Professor Visneyi also served on the newly established committee for Public Service and Continuing Education and was chairperson in 1969 and 1970.

Her professional career centered on administrative dietetics. This emphasis included the interpretation and translation of new state and federal legislation concerned with delivery of dietary services to vulnerable population groups. In particular, her efforts focused on the elderly in nursing homes and other long-term health care facilities as well as on children in school lunch, Head Start, day care and camp settings. In 1971, David Knapp, Dean of the College of Human Ecology, wrote in promotion documents that Professor Visneyi "provided a remarkably active

leadership in the program of administrative dietetics as it related to public needs. Most especially, she has worked assiduously in developing programs which related to a number of vulnerable population groups and in these efforts has done much to implement recent directions of the college.”

Professor Visneyei was frequently called upon to speak before professionals on topics related to dietetics and institutional management and to write articles for professional and lay publications. In her writings, she contributed numerous articles concerning solutions to food service operational problems, as well as articles on layout and design of dietary departments. As an editor of the *Bulletin of the New York State Dietetic Association*, her many articles and writings provided authoritative, practical information to all health care institutions in New York State.

With extension and public service as her major focus, Professor Visneyei developed and carried out workshops for administrators of nursing homes and health related facilities throughout New York state. She frequently presented off-campus courses on sanitation in food service to dietary personnel in health care facilities, school lunch programs, day care centers, camps and Head Start Centers. These efforts were reinforced by her editorship of *Highlights*, a quarterly publication sent to nursing home and health care facilities throughout the state.

Professor Visneyei served as director of the annual Cornell Institutes of Administrators of Nursing Homes and Health Related Facilities. She brought to this role not only a broad understanding of administrative dietetics but also her expert knowledge of the complex interrelationships among administration, governmental health care regulations, and patient problems. In addition, she provided leadership in curriculum development for the training of food service supervisors and consulting dietitians working in nursing homes and health care facilities. Off-campus, Professor Visneyei was for many years a member of the Education Committee of the New York Association of Long Term Health Care Administrators and also served on the Health Code Committee of the New York State Health Department, which revises the dietary section of the State Hospital Code.

Professor Visneyei held membership in the American Dietetic Association, the New York State Dietetic Association, the New York State Nutrition Council, and the Association of Schools of Allied Health Professions. She was also a member of the Honorary Society, Psi Chi.

Both in her private and professional life, Professor Visneyei exhibited profound interest and concern for other people. Graduate students and her children’s friends were “adopted” as part of the Visneyei family. In her quiet, unassuming way, Professor Visneyei enhanced individual growth through her genuine respect, careful listening, and generous support.

Friends and colleagues remember Professor Visnyei as a gracious hostess and a caring, fun-loving person. Early jazz music, travel, and sports were among her special interests. As an avid sports fan, she kept abreast of winners and losers and thoroughly enjoyed “replaying the games” with family and friends. Professor Visnyei’s broad interests, keen wit and dry sense of humor always added zest to the lively discussions she stimulated and enjoyed. Her personal and professional contributions to the lives of others are appreciated and cherished.

Professor Visnyei is survived by her husband Dr. George Visnyei (B.A. ‘36) DDS, formerly of Ithaca and now of Naperville, Illinois; a daughter and son-in-law Margaret (M.B.A. ‘80) and Jerry Burton of Naperville; a son and daughter-in-law, George (M.B.A. ‘76) and Ellen Visnyei of Redding, Connecticut; and three grandchildren, Catherine, Douglas, and Benjamin Visnyei, all of Redding. She was predeceased by two brothers and one sister.

Marjorie M. Devine, Marcia H. Pimentel, Jerry M. Rivers

Robert Jeffrey Wagenet

August 10, 1950 — July 31, 1997

Robert Jeffrey “Jeff” Wagenet was born in Pittsburgh, California, on August 10, 1950. Following graduation from the University of California at Davis (1971) with a Bachelor of Science degree in Soil Science, he continued his education at the University of Oklahoma where he earned a Master of Science degree in Environmental Health in 1972. He returned to UC Davis for graduate studies and completed his Ph.D. degree in Soil Science in 1975. In 1976, he accepted a position at Utah State University, where he obtained the rank of professor within six years. Twice at Utah he was named Professor of the Year in the College of Agriculture. In 1982, Jeff and his family moved to Cornell University, where he began as Associate Professor and was soon promoted to full Professor in the Department of Agronomy.

Jeff Wagenet was recognized internationally for his work on the fate and transport of chemicals in soil, especially the transport and transformation of nitrogen fertilizers under irrigated conditions, the displacement and chemical reactions of inorganic salts in saline soils, and the movement of pesticides through soil. He cooperated in the development of analytical and numerical mathematical models describing these processes. He and his friend and collaborator, J.L. Hutson, developed a family of comprehensive numerical models with the acronym LEACHM that describe the fate and transfer of nitrogen fertilizers, inorganic salts, pesticides, and organic manure in soil. LEACHM has been used by numerous research and regulatory groups both within the U.S. and internationally. The models also have been extended for use with geographic information systems, soil survey databases and for climatological data to estimate pesticide leaching at a larger geographic scale. He published over 100 refereed papers and six book chapters. He was a member of the National Research Council’s Committee on Long-Range Soil and Water Conservation. During the course of his career, he was appointed visiting professor at Ecole Polytechnique Federale de Lausanne (Switzerland), Katholieke Universiteit (Leuven, Belgium), Department of Land, Air and Water Resources at University of California at Davis, Institute for Soil, Water and Climate (Pretoria, South Africa), and the Institute of Soil and Water of the Volcani Center (Bet Dagan, Israel).

Perhaps Jeff’s greatest contribution to Cornell was through his role as department chair from 1987 through 1995. Jeff was well respected by both his colleagues and CALS administrators for the open, organized and efficient manner in which he chaired the department. During his tenure as chair, Jeff oversaw a broadening of the scope of the department to include environmental concerns and modern information technology. As part of this change, the

Department of Agronomy was renamed the Department of Soil, Crop and Atmospheric Sciences. At the same time, Jeff will be remembered for his commitment to upgrading the department's agronomic research infrastructure, including major improvements to the Musgrave Farm at Aurora, New York. In addition, he successfully steered the department through a difficult financial period for the college.

Jeff was a great teacher and mentor. While at Cornell, he taught undergraduate and graduate courses on transfer processes in soils, as well as an interdisciplinary course of the fate of chemicals in soil. He was major professor to 17 M.S. and 10 Ph.D. students.

Jeff was a fellow of the American Society of Agronomy and the Soil Science Society of America. He received the Honor Award of the Soil and Water Conservation Society. He was Editor of the *Journal of Environmental Quality* (JEQ) from 1990-95. During this time, the journal was expanded from four to six issues per year and it became one of the premier environmental journals in the world. Jeff helped to broaden the journal's scope by implementing publication of papers under subject matter categories, which greatly increased the visibility of various environmentally related topics in the journal.

In addition to his professional work, Jeff was a merit badge counselor for Troop 4 Boy Scouts of America, served on the Science Center Board, and attended the First Congregational Church of Ithaca. He was a loving husband and father and good friend.

Jeff died peacefully at home on July 31, 1997 at the age of 46 after a seven-year struggle with brain cancer. He leaves behind his wife of 26 years, Linda; his son, T.R.; and his daughter, Kylie.

Susan Ernst, Gary Fick, John Hutson, Harold VanEs, Linda Wagenet, Susan Riha

Robert John Walker

May 5, 1909 — November 25, 1992

Robert John Walker, professor of mathematics emeritus, died November 25, 1992 at St. Clair's Hospital in Pittsburgh, Pennsylvania. He was born May 5, 1909, in Pittsburgh, a son, with three elder sisters. He attended Duquesne University High School and then obtained a bachelor of science degree from Carnegie Institute of Technology in 1930. Robert Walker held fellowships at Princeton University from 1931-33 after which he was a part-time instructor at Princeton from 1933-35. He was awarded a Ph.D. degree in 1934 with a dissertation, "Reduction of the Singularities of an Algebraic Surface".

In the summer of 1935, Bob traveled to Europe returning as an instructor at Cornell University starting September 26, 1935. He was assistant professor from 1938-46, associate professor from 1946-48, and professor from 1948-74, when he retired. World War II intervened, but Bob was classified 1B because of defective eyesight. He obtained occupational deferment and was assigned to doing rocket research at Aberdeen Proving Ground in Maryland from 1942-45. In August 1945 Bob wrote Chairman Agnew "I would not object to a couple of months vacation—the first in three years..." Agnew wrote back saying o.k., noting the fall term ran from November 2, 1945 to February 23, 1946.

In 1950 Agnew had been chairman for ten years. Bob became the next chairman and served two terms from 1950-60 broken by a sabbatical leave from 1954-55. During this leave Barkley Rosser acted as chairman. In retrospect Bob felt being chairman for two terms was the wrong decision.

Barkley Rosser succeeded Bob as chairman but resigned in 1962. Then Bob acted as chairman until Paul Olum was appointed.

Bob's dissertation was an important contribution to the subject of algebraic curves. He had a number of conversations with S. Lefschetz of Princeton University about material for a book. In March 1946, Lefschetz offered Bob a lectureship at Princeton during 1946-47 to help him finish the book. *Algebraic Curves* was published by Princeton University in 1950 and remains in print today. It showed how to compute things about algebraic curves and this subject has become important in design considerations in computer science today.

By the early 1960s Bob had lost interest in his original subject of algebraic geometry. A colleague recently offered the opinion that Bob was at heart a geometer and as the subject became more algebraic and less geometric, he

lost interest. Emerging was a deep growing interest in computers. He had studied aerodynamics and had worked in the Ballistic Research Laboratory at Aberdeen. Part of the sabbatical in 1954 was spent at UCLA working with SWAC (Southwestern Automatic Computer). A newspaper clipping says “SWAC...is rigged to play Seventeenth Century musical games in the interest of solving mathematical problems.” Bob had programmed SWAC to play sequences of changes over the speaker wired into the SWAC circuits. Early in the 1960s he was involved in the decision to purchase a Control Data mainframe for Cornell. The computer was located in Rand Hall. The time was ripe for a computer science department and Robert Walker, Richard Conway, and Anil Nerode helped found the Computer Science Department and persuaded Juris Hartmanis to leave General Electric and become head of the new department. Bob held a half-time appointment in the new Computer Science Department until 1968.

Bob was a member of the Mathematics Association of America Committee on the Undergraduate Program in Mathematics. In 1960 the NSF granted \$350,000 to the Mathematics Association “to wipe out a . . . lag in American mathematics teaching.” In pursuit of his interest in computers, numerical analysis, and the teaching of mathematics, Bob took two sabbatical leaves to Florida State University, first in 1961-62, the second in 1968-69, to “study and research in the role of computers and computer science in the undergraduate curriculum. . .” In 1964 Barkley Rosser, now at the University of Wisconsin, offered Bob a professorship in the new department of computer science, but he refused. The second leave resulted in the book, *Calculus — A Computer Oriented Presentation*, 1968, under the sponsorship of CRICISAM. The book was used several years at Cornell but the methods did not seem successful enough to continue to use.

Bob had always been interested in puzzles, games and problem solving. This fascination extended to combinatorial questions and resulted in papers in 1960 and 1963. The 1963 paper “Determination of Division Algebras with 32 Elements” required a computer to enumerate all possible structures, which was a major computation at that time.

Bob was a great friend to colleagues and their children. His office door was always open. He became godfather to two Rosser children who have fond memories of their fun with him, as does the Agnews’ son, who, after working many years for IBM now teaches computer science at Binghamton University. He was “Uncle Bob” to these children who prized his friendship and good-natured jokes with them. Unmarried, Bob and his sisters Clara and Francis really enjoyed each other and were great friends. Bob anchored a bachelor table evenings at the Statler Club which was a convivial meal for those who were single as well as for parents with children who treasured this pleasant relief on a busy day. Periodically he was a breakfast chef who served wonderful pancakes to these families and

friends in his apartment. Many enjoyed eating there to the powerful roar of water in Cascadilla Gorge, watching his birds come to his feeders and just enjoying the calm, well-organized style of his place.

He spent hours studying how best to attract and photograph birds and designed excellent feeders to avoid squirrels. Birding with Bob was great fun and after he retired he took trips to Big Bend and Utah, to the Galapagos Islands and to Africa showing enormous stamina for sunrise-to-sunset trips in the field. Many of his photographs went to the Audubon Society in Pittsburgh. Others became the picture of the yearly Christmas card that so many remember receiving.

He had a very select library likely to contain excellent books on subjects of special interest. Included were guides to Africa and important places to bird in North America. These books provided the foundation for a number of self-directed tours that Bob took with friends. Bob knew and recommended the best detective fiction and enjoyed discussing it in detail.

A large retirement party was held on May 11, 1974 at the Big Red Barn on campus—informal but beautifully arranged. The department secretary, Madelyn Keady, was also retiring after serving from 1928 to 1974. In the early years Madelyn was jointly the department secretary and librarian. The department was small and relationships often were very close, no longer true in a department four times its earlier size, which saddened Bob a bit.

After retirement Bob moved to Pittsburgh and shared a house with his sisters, Clara and Francis. The elder sister Martha lived in Florida, which inspired great birding trips and much good-natured joking. Clara typed braille and had contact with the blind. Bob read difficult science texts onto magnetic tape for blind students which was organized through a church in Pittsburgh. Subjects included economics, pharmacology, organic chemistry, finance, etc., each with its peculiar problems about verbalizing diagrams, pictures and equations, each text worked out in close consultation with the blind reader. Bob excelled at this type of problem solving and continued this humanitarian work until his health began to fail. His heart was in helping people to enjoy living intelligently.

Those of us who knew him well miss his spirit, intellect, wit, directness, honesty and lively interest in his friends of all ages and in the world about him.

Richard Conway, Juris Hartmanis, Roger Farrell

Jean Warren

April 17, 1909 — July 19, 1990

Professor Emerita Jean Warren died July 19, 1990. She received a B.S. degree from the College of Home Economics at Cornell University in 1929 and the M.S. and Ph.D. degrees from Cornell University in 1935 and 1938. Her professional career included service as a home demonstration agent in New York and Maine and faculty positions at the University of California, Davis, from 1938 to 1951, and at the College of Home Economics, Cornell University, from 1951 to 1965. After her retirement, she served as a visiting faculty member at the University of New Mexico, Oregon State University, University of Hawaii, Iowa State University and University of Guelph, Ontario, Canada.

Professor Warren was a leader in the field of family economics and financial management. As a productive scholar and director of graduate student programs, she had a profound influence on developments in both of these fields. Her major contribution was in research in the use of time and the value of household work; in this she carried on the original research of Helen Canon which has led ultimately to estimates of the value of household work as a component of the Gross National Product.

Professor Warren was recognized for her excellence in teaching, both at the undergraduate and graduate level. Her classes were popular, stimulating and demanding. In recognition of her work with undergraduates, she was designated Professor of Merit in 1955. She brought out the best in graduate students by her questions, demands, sharp-edged or chiding humor and infectious laugh.

Jean Warren played an important role in the international aspects of resource management and family economics. Her service included stays in Argentina, Uruguay, Mexico, Guatemala, Yugoslavia, Malaysia and El Salvador. Her fluency in Spanish facilitated her presentations of workshops in Latin America. She was sought as a consultant on consumer credit counseling, financial decision making in marriage, life insurance needs, financial requirements in retirement and the specific problems of low income women.

Dr. Warren's close working relationships with Professor Mabel Rollins, Chair of the Department of Household Economics and Management, were filled with respect and widely different approaches to most every topic and issue. The complementary effect was beneficial to faculty and graduate students.

She was a member of many honorary associations including Sigma Xi, Pi Lambda Theta, Phi Kappa Phi and Omicron Nu and such professional organizations as the American Council on Consumer Interests, American Statistical Association, the American Home Economics Association and the Joint Council on Economic Education.

She carried her interest in family resource management into community service with the Family and Children's Service and the Day Care and Child Development Council in Ithaca and similar organizations in the communities in which she has lived since retirement.

Gwen Bymers, Kathryn Walker, Francille M. Firebaugh

Stanley W. Warren

April 30, 1907 — January 10, 1994

Dr. Stanley W. Warren, who lived to be 86, was one of Cornell's most outstanding and visible professors. A native of Ithaca, he retired in 1972 after forty consecutive years of classroom teaching. His primary work at Cornell was teaching the basic course in farm business management to students who intended to work in agriculture as farmers, bankers and in agribusiness. Renowned for his teaching skills and his rapport with students, he received the first "Professor of Merit" award presented by the seniors in the College of Agriculture and Life Sciences in 1948.

He received his bachelor's degree in 1927 and his doctorate in 1931, both from Cornell. On completion of his graduate work, he went to Nanking, China where he served as statistician for studies of Chinese agriculture at Nanking University. He joined the Department of Agricultural Economics in 1933.

Awarded a Distinguished Life Membership in the Northeastern Agricultural Economics Council in 1973, he was cited for his continuing commitment to farming. Among the many honors he received were Honorary Life Membership in the Association of Teachers of Agriculture of New York (1967), the Distinguished Undergraduate Teacher Award from the American Farm Economics Association (1967), the Distinguished Service to Agriculture Award from the New York Farm Bureau (1969) and the Distinguished Service Citation of the New York State Agricultural Society (1970).

For seventeen years (1945-61), he served as Scoutmaster of Ithaca's Boy Scout Troup 4 and was instrumental in restoring the Eight Square School (on Hanshaw Road) during the bicentennial year. His purpose was to use the one-room building as a place to teach about early rural and school life. He was also the treasurer of the Alumni Association, College of Agriculture and Life Sciences, a director of Citizens Savings Bank and a Village of Cayuga Heights Trustee.

He touched many lives with his down to earth, homespun philosophy of management and life. His sense of humor and sense of purpose was always evident in everything he did. Stan shaped the careers of thousands of undergraduate and graduate students. He was a plain spoken, humorous, approachable man, loved by his students. He was devoted to them and taught his courses in a unique manner featuring field trips.

At his home on Warren Road, he kept a small museum behind the house that was quite an eye opener to anyone who had not grown up on a farm. He also loved to tend his garden.

He was a guiding light to thousands of students. He kept in touch with his students long after they graduated from Cornell. He kept a permanent file on every student he taught and devoted all his professional energies to teaching. In forty years, he missed only one scheduled class. Over those years, he taught more than 9,000 students farm management and farm real estate appraisal.

On the wall of his room was a painting of the Eight Square School, a drawing of a Scout leader given him by his scouts in 1955, a farm scene and a painting of him holding a grandchild and this summed up his good life.

At a tribute to Dr. Warren on Saturday, June 11, 1994, his former students and several of his children commented on various phases of his life.

He is survived by seven children, 16 grandchildren, 10 great grandchildren, two sisters and two brothers.

Wayne A. Knoblauch, Robert S. Smith, George J. Conneman

Thomas Cobb Watkins

October 1, 1909 — October 27, 1995

Dr. Thomas Cobb Watkins, a man of many talents, served Cornell well as research scientist, teacher, and administrator. He died after an extended period of ill health.

Tom was born in Calhoun, Missouri, to the Rev. Thomas Henry and Fannie Burton Watkins. During Tom's early years, Rev. Watkins' ministry took the family to several church locations in the Arkansas area. After Rev. Watkins' death, the family moved to Davidson, North Carolina where Tom enrolled in Davidson College. He graduated at the early age of 18 receiving a B.S. degree in biology in 1928.

Tom continued his education at the University of North Carolina, Chapel Hill, receiving a Master's degree in 1930. From 1930-33, he was Instructor of Biology at Washington and Lee University. The years 1933-36 were spent as teacher, coach, and principal at the high school in Dilwyn, Virginia.

Upon the advice and urging of a former colleague on the faculty of Washington and Lee, Tom came to Cornell in 1936 to continue graduate study. He was appointed to a joint research assistantship in the Departments of Entomology and Plant Pathology. He was assigned to research a problem that threatened the production of seed potatoes in New York State. A virus disease, potato yellow dwarf, transmitted by the clover leafhopper, was the culprit. Tom conducted an extensive study of the insect vector and devised methods to control the insect, thereby controlling the disease.

After receiving his doctorate in 1939, Tom joined the faculty of the Department of Entomology as a Research Instructor rising through the ranks to Professor.

From 1939-48, Tom was in charge of research projects dealing with insect pests of vegetable crops grown on the organic soils of the State. The results of his investigations were communicated to growers through Tom's extension activities. The field experience gave him a much needed acquaintance with agriculture. His contacts with farmers, farm organizations, and farm related business broadened his perspective of the importance of agriculture as an industry. These experiences would serve him well in his later work as a teacher and as an administrator.

In 1948, Tom changed direction in his career devoting full time to resident instruction. He taught the introductory course in entomology and two applied entomology courses. These courses became very popular. His skill as a teacher was acknowledged by the college faculty and the student body. Tom's dedication to excellence in teaching

was recognized by his election to the Petitions Committee and the Educational Policy Committee. In time, he chaired both committees. He was appointed to an ad hoc committee charged with evaluating resident instruction in the college. The committee made an exhaustive study of all aspects of teaching and recommended improvement for more effective programs. A well deserved honor was bestowed upon Tom by the College senior class of 1957; the award of Professor of Merit.

Tom moved to college administration in 1960 becoming Director of Resident Instruction, a post he held until his retirement in 1965. His wisdom and influence served to energize the college faculty to review instructional practices and make changes and innovations. As an administrator, he was highly regarded and praised for his attention to detail, and his wisdom and clarity of vision. He championed teaching as a catalytic and vital function of the College.

Through his leadership, Tom instituted a mutually gainful liaison with community colleges and agricultural and technical institutes to bring well qualified students to Cornell for further education. Reaching out to these two-year units contributed to a much needed working relationship for the transfer of students.

Tom's service to teaching reached beyond the campus. He was secretary and also chairman of the Northeast Region Deans and Directors of Resident Instruction and a member of several committees of the national organization. In 1964, he served on a review panel established by the National Academy of Sciences – the National Research Council to study curricula and organization of education in selected colleges of agriculture in the United States.

Tom took time off from his campus duties for two sabbatical leaves. The first sabbatical was spent at a research station of the University of Florida. He studied insect problems troubling the citrus industry. Later, he went further afield on a sabbatical to the Rome headquarters of the Food and Agriculture Organization of the United Nations as a technical officer. He was project leader for entomological work in the countries of the Mediterranean area. On assignments, he visited various countries of the region.

Tom held memberships in Phi Kappa Phi, Sigma Xi, Alpha Zeta, Entomological Society of America and the American Phytopathological Society.

In the community, Tom was a member of the First Presbyterian Church and served terms as deacon and elder. He was co-leader of the Boy Scout Troop in the East Hill Neighborhood for a few years.

Tom retired for health reasons in 1965, moving to a home in Fort Lauderdale, Florida, where he and his wife, Paige, resided for some years. They later moved to Warsaw, Virginia, Paige's hometown. She died in 1982. Tom remarried

to Margaret Wright Starr who survives. Surviving are a son, Thomas H., a Professor of History at Western Illinois University, and a daughter-in-law, Sharon; and granddaughter, Beth.

Tom leaves an enduring imprint as a leading educator in the halls of learning at Cornell. His civility and generosity of spirit, his work ethic and moral values, were hallmarks of his character.

Whether serving the farmer in the field, the student in the classroom, or shaping the college instructional program, his commitment was to the development of human potential through education. The University, the College, his colleagues, and family have been enriched by his unique combination of intellectual and personal qualities.

James E. Dewey, John C. Franclemont, W. Arthur Rawlins

Richard William Weires, Jr.

February 3, 1944 — November 20, 1990

Professor Richard Weires served as an entomologist studying the biology and management of insects and mites on tree fruit from 1974 until 1990 in Cornell's Hudson Valley Laboratory at Highland, New York. In addition to his skills and experience as a fruit entomologist, he had diverse interests in horticulture and was dedicated to the advancement and improvement of the fruit industry in Eastern New York. He enjoyed interacting with fruit growers individually and collectively at meetings and conferences, and worked tirelessly to ensure that the results from his research program were widely used by the fruit industry in New York and elsewhere in the Eastern United States.

Rick was born in Faribault, Minnesota. As a youth he maintained a large insect collection. He later became interested in agricultural entomology while he was employed as an inspector in a vegetable cannery in his home town. He earned a B.A. degree in political science at Bowling Green State University in 1966 and continued in this institution until obtaining an M.A. degree in 1968. He completed a Ph.D. degree in entomology under Dr. H. Chaing at the University of Minnesota in 1972, and subsequently conducted post-doctoral work as a research fellow investigating the ecology of arthropods in alfalfa planting systems.

He came to the Hudson Valley Laboratory in 1974 as a research associate with a joint assignment in research and extension. The general focus of his work was to study the biology and ecology of insects and mites attacking fruit crops in the Hudson Valley and to develop improved management programs that could be utilized by growers in the region. He was promoted to associate professor in 1981 and became a professor in October of 1990.

During his seventeen-year career at Cornell, Rick faced unique professional challenges because of the geographical isolation of the Hudson Valley Laboratory from both the Cornell campus and the New York State Agricultural Experiment Station at Geneva and the mandate of the laboratory to work closely with the fruit industry in Eastern New York. He was able to overcome these constraints and to develop an integrated research and extension program that was not only relevant to the fruit industry in Eastern New York, but became known throughout the other major fruit-growing regions in the United States and Canada.

In addition to his general studies of the biology and ecology of arthropod pests and important parasites and predators, he excelled in conducting large-scale research trials on arthropod control and management in commercial apple orchards. He was particularly adept at designing these trials so that the results were particularly useful to fruit

growers. One of his earliest contributions to the apple industry in Eastern New York was to develop an improved management program for two leafminer species that had become serious pests in apple orchards in the Hudson Valley because they had become resistant to commonly used insecticides. He initially conducted laboratory tests to formally confirm this resistance and followed this discovery with additional laboratory and field tests to identify insecticides that could be used to effectively control this pest. He was also involved in basic ecological studies to compare the biology and damage caused by the two species and worked cooperatively with other scientists in the Northeastern United States to map the geographical distribution of the two species in major apple production areas within the region. Finally, he worked cooperatively with other scientists to develop sampling and monitoring techniques that could be used to detect the pest in commercial orchards and to define damage levels of this foliar pest that would require treatment to prevent economic damage. Because of his pioneering research efforts, apple growers in the Hudson Valley were able to effectively manage this pest and prevent serious losses of their crop during the late 1970s. Subsequently, as insecticide-resistant populations of these leafminer species were detected in other apple-growing regions, the results from his pioneering research efforts were widely used by other tree fruit entomologists to develop improved management programs for this pest in other parts of New York State and in many apple growing regions throughout the Eastern United States.

Another of his most important research contributions was the study of economics of insect damage on the packout of fruit from commercial apple orchards. He was one of the first scientists to set up large-scale management trials against multiple species of insects damaging fruit and he examined the economic impact of different levels of this pest damage on the percentage of fruit that is acceptably marketed as fresh fruit. Such information is vital to the development of realistic treatment threshold levels for insect pests that directly damage apple fruit. Because of his early work in this research area, many other fruit research and extension personnel throughout the United States have recognized the importance of economic studies of pest damage on fruit packout and have also conducted similar studies on other pest species.

He was recognized as a world authority on the various kinds of leafrollers that damage fruit. He organized and hosted several regional conferences on this important group of insect pests. He also tested the mass release of sex attractants to prevent the mating and reproduction of leafrollers in orchards. This novel control technique could be used to reduce the use of conventional toxic insecticides.

In 1990, he completed a chapter on the biology and management of leafroller pests in orchards in the Eastern United States for a current book on the biology and management of the World's leafroller pests of fruit.

Rick worked tirelessly in his extension program to educate growers about the biology and management of insects and to communicate the results of his research in extension meetings and through various extension publications. He was always willing to take time to answer individual grower's questions over the telephone and make personal visits to diagnose problems in orchards in Eastern New York. Because of his warm sense of humor and ability to simplify results from complex research trials, he was probably asked to speak at grower meetings throughout the Eastern United States and Canada more frequently than any other tree fruit entomologist within the region. Certainly, this popularity at grower meetings resulted from his proficiency in communication, his attitude toward extension, and the importance of his research and extension activities to fruit growers within the state and elsewhere throughout the region.

He had a warm, outgoing personality and enjoyed interacting with all different types of people. His sense of humor was legendary and he could always be counted on to provide several good jokes at any gathering. He was very active in community affairs and particularly enjoyed working with youth. For many years he coached little league baseball teams and also coached basketball teams for the Catholic Youth Organization and the New Paltz Middle School. He loved fishing; enjoyed running and downhill skiing.

He is survived by his widow, Diane; and two sons, Rhett, a 1991 graduate of Cornell University, and Nathan, who will enter Cornell in the fall of 1991.

Richard W. Straub, Harvey Reissig, Wendell L. Roelofs

John West Wells

July 15, 1907 — January 12, 1994

Professor Emeritus of Geological Sciences, John W. Wells, died at his home on Brook Lane on January 12, 1994. His loving wife, Elizabeth (Pie), died at their summer home at Sheldrake Point on July 1, 1990. John is survived by his daughter, Ellen Baker Wells of Alexandria, Virginia; two granddaughters, Diane Elizabeth Hull and Linda Ann Wilson (both of San Luis Obispo, California); and two great grandchildren, Alan Scott Hull and Elizabeth Darlene Hull (also of San Luis Obispo).

John was born on July 15, 1907 in Philadelphia, but grew up in Homer, New York until he entered college. John did not do his undergraduate major in geology. He started as a pre-med student at the University of Pittsburgh, and then switched to chemistry, but he also took some geology courses with two professors who had studied at Cornell—Ransom E. Somers (Ph.D. '15) and Henry Leighton (A.B. '06, GRAD '06-'08). John became so interested in geology that he ended up with more courses in that subject than in his major. His is one of many examples of future Cornell faculty members who were influenced, early in their careers, by more senior Cornellians.

Leighton suggested that if John was interested in paleontology, as he seemed to be, he should study some biology. This John did during two summers at Cornell. Then he obtained an assistantship with Professor Gilbert Harris—it covered living expenses plus \$75 per term for tuition—and began working toward his master's degree, which he received in 1930. He completed the Ph.D. degree in 1933 from Cornell.

Almost from the beginning, John began specializing in corals, both living and fossil. His interest in corals led him to an instructorship (1929-31) at the University of Texas, where he published several papers on the fossil corals of central Texas. During 1933 and 1934, he was a National Research Council Fellow, studying at the British Museum in London, the Museum National d'Histoire Naturelle in Paris, and the Humboldt Museum in Berlin. From 1935-37, he worked with the noted coral taxonomist, T. Wayland Vaughan, in Washington, D.C. After one year (1937-38) at the State Normal School at Fredonia, New York, he joined the faculty at Ohio State University, where by the time he left for Cornell nine years later in 1948, he held the rank of professor. During World War II, he served in Europe as a geographer in the Office of Strategic Services, providing assessments of war damage and searching for looted library and art collections. One reason for John's return to Cornell was his interest in the paleontology and stratigraphy of the Devonian System in upstate New York.

From 1946 until well past his retirement, John, with his colleague, the late Professor W.S. Cole, was associated with the U.S. Geological Survey, working on various aspects of the Bikini Atoll Atomic Bomb Project. John also took part in the Pacific Science Board's expedition to Arno Atoll. Part of these studies involved examining cores from holes that were drilled completely through the coral cap of Bikini and Eniwetok to the underlying basalt. Some forty of his 173 publications concerned the Recent and Tertiary corals collected from these and other Pacific islands.

For most of his career, John was accepted worldwide as the authority on coral taxonomy. Hardly a week passed that he did not receive a parcel of specimens for identification. By his recollection, in 1971 alone, he identified over a thousand Red Sea coral specimens for Tel Aviv University in Israel.

In 1954, John was a Fulbright lecturer at Queensland University in Australia, and while there he took the opportunity to make an extensive coral collection from the Barrier Reef for the National Museum in Washington. His work with corals led to the publication of a small paper in *Nature* ("Coral Growth and Geochronometry", 1963, v. 197, pp. 948-50) that received major attention. He had discovered that, with careful observation, he could count very fine ridges (about 50 microns wide) between the coarser ridges on the outer surface of Palaeozoic corals that were believed to represent annual growth increments, and he interpreted these thin ridges as daily growth rings, suggesting that the number of fine lines between the coarse annual ridges indicated the number of days in the year at the time the fossil coral was alive. Allowing for a few cloudy days, the mid-Devonian year seemed to have been about four hundred days long, indicating that the earth was rotating much faster then. A slowing down of the Earth's rotational speed had been postulated for years, but this was the first actual evidence that the calculations and predictions were correct. At a time when huge sums of money were being spent for fundamental research, the British scholar, J.B.S. Haldane, commented in a *New York Times* article that major scientific advances could still be made with a simple hand lens and careful observation. It was this work, and the ensuing explosion of studies on daily, monthly, and season growth bands in fossils that followed, that led to current calculations of the changes in the orbital patterns of the Earth and moon over geologic time, and new evaluations of the chronology of cyclical deposition of sedimentary rocks and of climatic variability.

John was a private person but generous and loyal to his friends. A newly appointed professor of prior acquaintance was invited to occupy John's house, empty because John's summer residence was at Sheldrake, until the delayed furniture arrived for the professor's house. The invitation was supported by a bottle of champagne in John's refrigerator.

John was a delightful conversationalist and for many years enjoyed luncheon with a variety of free-speaking colleagues in the small alcove at the side of the Rathskeller, the old Faculty Club on the lower floor of the Statler Building. On Monday there was always *inter alia*, a review of the facility with which the Sunday *N.Y. Times* crossword puzzle had been completed. On each Thursday, he joined the more formally organized Wilcox Luncheon Group in a private dining room. He chaired that venerable group in later years.

John's interests were many and varied and frequently astonishing. He was a collector who generously passed on to his colleagues items which he found while searching for his interests. For example, he located a statement in 1877 by a British scientist about currents and jets of water at Niagara Falls which are no longer visible, but are important to the understanding of the retreat of the Falls. He was a collector of rare books with fine bindings, including all editions of Lyell's classic textbook of geology. He found oriental rugs worth collecting, and the walls of his house in Ithaca were covered with beautiful paintings of the scenic Finger Lakes landscape, many by his father-in-law, Professor W.C. Baker. A collection of more than 300 chamber-pot lids adorned the walls of his early 20th century cottage at Sheldrake. John was an extraordinarily interesting and delightful fellow.

John retired from Cornell in 1973 after twenty-five years of teaching. He received much recognition for his professional achievements and leadership; he was a Fellow of the Geological Society of America, and served as president of the Paleontological Society. He was president of the Paleontological Research Institute (1961-62) that was founded by his mentor, Cornell Professor Harris. He was honored by election to the National Academy of Sciences in 1968. He was awarded the Paleontological Society Medal in 1974, and the James Hall Medal of the New York State Geological Survey in 1987.

What do accolades like this mean on a personal level? One day, shortly after John had received notice of his election to the National Academy, he took a student along with him on an elevator ride to the fourth floor of McGraw Hall. John had picked up his mail and was looking through it during the slow ascent. Just as the elevator reached the top, the student heard him mutter, on opening an impressive-looking envelope, "Oh, dinner at the White House. The wife will like that."

William R. Brice, Shatter S. Philbrick, Arthur L. Bloom

John Hendrick Whitlock

September 10, 1913 — May 22, 1994

John Whitlock served the Veterinary College for fifty years (1944-94) in the role of parasitologist extraordinaire. He liked to quote Asa Chandler who compared a parasitologist to an orchid. “He requires long and careful nurturing, he develops slowly, and he is himself a parasite in that he is dependent on many other sciences for material aid. But when he comes to flower, he is a rare and beautiful object, scientifically speaking, and is usually slow in going to seed. He may not always smell like an orchid, but that might be a blessing in some circles/7

He also served the University as a Faculty Trustee (1971-76), a role of which he was very proud. He declared that the Board had treated both the University and himself with kindness and wisdom and upon his retirement, made over to the Board the choicest of his collection of verbal brickbats “The Academic Cynic’s Anthology”. One of his personal favorites came from Burns’, ‘To a Louse”.

Oh wad some Powr the giftie gie us To see oursels as others see us! It wad frae monie a blunder free us, An’ foolish notion:”

Laudable as this plea might be, it does present a grave temptation to the chroniclers of this complex and, by design, controversial genius.

John Whitlock received a D.V.M. degree from Iowa State University in 1934 and a Master of Science degree in Zoology from Kansas State University in 1935. His dual interests in the relative confines of veterinary medicine and the broad vistas of zoology characterized his academic life where his many writings (over a hundred journal articles and at least three textbooks) covered topics as narrow as “The administration of phenothiazine to sheep” and as expansive as “Parasitology, ecology and biometry” contained in four pages of the *British Veterinary Journal!* Throughout his career, he was unconcerned about fashion in science and pursued with equal vigor diverse topics which interested him, ‘Inherited eye defects in the guinea pig,’ “Feeder lamb loss in Genesee County”. He studiously committed to paper facts which he felt would be of value to other disciplines. His notation on new uses for oesophageal intubation for baby lambs (1954) was “rediscovered” in the 1970s and has become the universal method of administering emergency treatment to hypothermic lambs.

John Whitlock was a scientific prophet well before his time and he thoroughly enjoyed relating his works to homely origins. Thus his early (1958) study on the inheritance of resistance to trichostrongyloidosis in sheep was based on observations made in Ellis Hollow and involved a ram named, characteristically, “Violet”. This too was a landmark study in genetic resistance to intestinal worms.

Throughout it all, he enjoyed the company of distinguished scientists. He shared his parasitological studies with J.R. Georgi, J.V. Evans, L.Z. Saunders, P. Kennedy, S.J. Roberts, H.D. Crofton, J.O. Slocombe and his biometric calculations with M.R. Lynn, L.H. Ratcliffe, H.M. Taylor, W.T. Federer and D.S. Robson—he even diverted some of his efforts into those lesser parasites, the bacteria, in a paper with Julius Fabricant on the use of *Clostridium welchii* anaeroculture for the prevention of overeating disease in sheep. Given the catholic nature of his interests and published works, it is hardly surprising that one of John's later papers (1978) reflected his own career and interests "How to Live and Die with Ecologists".

In the Veterinary College of the times where teaching was didactic, authoritative and highly structured, John's instructional efforts were unorthodox, unusual and sometimes rambling. In lectures, he was somewhat less than organized in his approach and expansive in his content—none of your "Give us the facts, diagnosis and treatment", but rather a sporadic and ecological approach to the world of parasitism and certainly not confined to domesticated animals. Students in the practicum had their questions answered with a question in rebuttal. While generations of students flinched under this unusual tack, the Class of '53 invited John Whitlock to address their 25th class reunion as the professor who, in their experience, had taken an unusual and expansive ecological approach to the world of veterinary parasitology.

There was a cultivated Jekyll and Hyde aspect to John Whitlock's life—from humble beginnings on the Canadian prairie to Cornell Trustee. John kept his origins to himself and quietly enjoyed the contrast. In his extracurricular roles, he was an autocratic, outspoken Speaker of the University Assembly declaring that "the American University is a prototypic, organized anarchy where decision-making is a random activity". As a leader in the restructuring of Cornell to include a greater measure of student input, John was fond of quoting the *New York Times*, "Restructuring the self-governance of the University achieves, the same order of stewardship as the rearrangement of deck chairs on the Titanic".

In contrast, John Whitlock was a quiet and private supporter of many of the evolving and not necessarily popular movements of his time; student governance; women's rights and access of minorities to higher education. He declared during the troubles of the sixties "There is a weird modern idea that the University has somehow escaped standing in loco parentis to the students." He never subscribed to this "weird modern idea" and quietly pressed for many issues advantageous to our students; better nutrition, access to athletic facilities and better commonroom facilities. Most importantly, perhaps, he championed individual students whom he perceived were at a temporary disadvantage in our academic community. His support was not limited to well-intentioned advice but best

estimates suggest that a score of now veterinarians received from him financial support in time of dire need. This allowed them to finish on time and in good order. It is not surprising that his tangible legacy to the University is The Cornell Women in Science Fund to provide financial assistance to help women students improve the quality of their lives while at Cornell.

During his student days, John was an active thespian and a devotee of classical music. He was a competent double bass player and performed in the Cornell Symphony under Karel Husa. Later in life he was an ardent fisher and power boat captain. He was supported in it all by Pauline, his wife, and they reared two successful sons, Ward and John, in a rambling old house, formerly an inn, across the Ellis Hollow valley from his self-designed sheep barns. John was one of the founders of the Ellis Hollow Community Center, and supervised the rehabilitation of the old school house at the corner of Ellis Hollow and Turkey Hill Roads, the first home of the Center. For years he was the stentorian auctioneer at the Ellis Hollow Country Fair. John and Pauline liked big cars. They acquired President Day's used Lincoln Continental, which John proudly parked behind the postmortem room of Moore Lab. The Lincoln suffered a large dent when an ailing horse staggered over and fell on the prized car, much to the amusement of envious colleagues.

Following his retirement, Dr. Whitlock continued to bring his beagle, //Pelly,,/ to the Small Animal Clinic for weekly baths and routine health care. Receptionists and technicians became his friends and he enjoyed immensely meeting veterinary students and was moved by their attentive interactions with him. He told and retold familiar stories about his life in the profession, his favorites being hoary Cornell veterinary chestnuts. Often he shared candy with his listeners and he would leave, Pelly on lead, with a promise to revisit next week.

John Whitlock strolled through life, nattily dressed, possessed of a keen mind and a fine sense of humor. Mostly he chose to be outrageous rather than ordinary. He enjoyed wrestling with the large and small issues of ecology and university governance and left notable contributions thereto. A self-styled "academic cynic" he was, in fact a bellicose romantic engaged in a life-long courtship of Cornell and its contents. He had a notable weakness for the underdog and provided intangible and tangible support for same, an aspect of his life which he carefully downplayed but which will be a major legacy. He walked with intellectual kings and enjoyed the jaunt. His oldest friend and mentor at Cornell, a man of sparse words summarized it all. "John was smart and had some wild ideas." A worthy definition and epitaph for any academic. John Whitlock was indeed smart and many of his original ideas and ideals have already come to fruition.

Dwight D. Bowman, William E. Hornbuckle, S. Gordon Campbell

Elizabeth “Betsy” Wiegand

August 26, 1916 — July 30, 1995

Professor Elizabeth Wiegand was a lifelong Cornellian. After her high school education at Cascadilla Preparatory School, Ithaca, and Westtown School, Westtown, Pennsylvania, Betsy enrolled at Cornell in the College of Home Economics. Her curriculum included a semester of study at the prestigious Merrill Palmer School in Detroit. She graduated Class of 1938, worked several years as a Home Demonstration Agent in county extension programs in New York State, and returned to Cornell for graduate work in Economics of the Household and Household Management, receiving her Master’s degree (1949) and Ph.D. degree (1953). Her doctoral dissertation on the use of time by New York State homemakers provided not only descriptive data but the basis for quantifying their work contributions with current data.

Professor Wiegand’s career was primarily dedicated to extension, although she was involved in teaching and research at Michigan State University for three years following completion of her Ph.D. degree. Upon her return to Cornell, she moved through the ranks of Assistant Professor (1957) to Professor (1964) as an extension specialist in family economics and home management. She was named Professor Emerita in 1981.

Professor Wiegand’s professional career focused on serving the needs of people—from her early work as an Extension Agent in Cayuga County to her work as a specialist in economic problems of families. Betsy was dedicated to the Extension philosophy of helping people help themselves. She prepared educational materials, taught county Extension agents and lay leaders, and provided them with information and tools that families could readily use in planning and conducting their business affairs. For example, she and Professor C. Arthur Bratton in Agricultural Economics, collaborated on the preparation of the Cornell publication, “Do You Know Your Valuable Papers.” It has been used by New York State families for more than forty years and is still in use.

Betsy’s work was always carefully and thoroughly done. She was meticulous about details and accuracy. One of her guiding principles was to make material as simple as possible, easily understood, and generally useful. She was skilled in interpreting economic research findings and translating research results into forms that could be used by the general public.

Betsy had a quiet sense of humor and always enjoyed a good joke. She set her priorities and was focused in working toward her goals. She was thorough in developing ideas and had a strong determination for seeing them through. Although her colleagues considered her single-minded, she thought through a problem and would come to a

conclusion based on facts. She perplexed others by rarely revealing how she arrived at her conclusions. Throughout her professional career, Professor Wiegand was active in the American Home Economics Association. She was elected to the Home Economics honor society, Omicron Nu, and to the Extension honor society, Epsilon Sigma Phi. From the latter she received an award for excellence in her work in Cornell Cooperative Extension.

Betsy developed a great loyalty to Cornell and a life-long interest in trees, shrubs, flowers, birds, animals, conservation and ecology from her parents, Professor Karl McKay Wiegand and Maude Cipperly Wiegand, both botanists and Cornellians, and their next door neighbors and friends, Professor Albert H. Wright and Anna Allen Wright. After her retirement, Betsy continued to live in the Wiegand home and delighted in caring for the grounds and gardens.

Service to others was a basic part of her personal life as well as her career. After retirement, she participated in FISH (Friends In Service Here), a volunteer organization to provide transportation for those who needed it. She served as FISH treasurer for many years. She also was active in Nature Conservancy and enjoyed Monday night seminars at the Laboratory of Ornithology.

A private person, few colleagues knew much about her family and how she cared for various members. For many years, Betsy researched her genealogy, carefully documenting facts and organizing materials. Betsy is survived by two sisters, Anna Mae Van Deman Bacon and Catherine Van Deman Eastman; and several nieces and nephews and their children. She was predeceased by three brothers and a sister.

Betsy's loyalty to Cornell was exemplified by her bequest to the College of Human Ecology to be divided among three scholarship funds. In discussing her interest in a bequest, she indicated no need to have her name attached to the funds, but a desire to honor her mentors, Helen Canon, Mabel Rollins, and Jean Warren.

C. Arthur Bratton, Rose E. Steidl, Francille M. Firebaugh

Harold H. Williams

August 29, 1907 — February 25, 1991

Harold H. Williams was appointed professor of biochemistry in Cornell's Graduate School of Nutrition and the Department of Biochemistry and Nutrition in 1945, one year after the department was established. He served as department head from 1955 to 1964, He retired as professor emeritus in 1973. During these years, he made a significant contribution to the excellence of biochemistry on this campus.

Professor Williams was born in Blanchard, Pennsylvania in 1907 and received a B.S. degree in agricultural biochemistry in 1929 from Pennsylvania State College. He was an undergraduate research assistant in their Institute of Animal Nutrition. He received a Ph.D. degree from Cornell in 1933 in animal nutrition, biochemistry and physiology. During his years as a graduate student, he served as a graduate research assistant in the Laboratory of Animal Nutrition. Following completion of his Ph.D. degree, he studied for two years as a Sterling Fellow at Yale University School of Medicine under Lafayette R. Mendel, one of the great pioneers in nutrition and biochemistry.

Immediately prior to his return to Cornell, Harold Williams spent four years in the research laboratory of the Children's Fund of Michigan, first as a research associate, then as assistant director and finally as associate director. Here he studied the nutrition of growing children. This organization has established standards of nutrition for normal children and has studied the vitamin and mineral composition of human milk and the nutritional problems of children afflicted with leukemia, anemia, nephrosis and diarrhea. While with this project in Detroit, Professor Williams was also a special chemistry instructor at Wayne University and at the Children's Hospital of the Medical School at Wayne.

At the same time, Dr. Williams and Dr. Icie Macy Hoobler, director of the research laboratory, also wrote *Hidden Hunger*, which was published just before Dr. Williams came to Cornell. This book, prompted by the worldwide nutrition problems pointed up by World War n, is a semi-popular text describing human food and nutrition problems.

Another project of Professor Williams while he was in Detroit during wartime dealt with the treatment of burns. As a civilian with the Office of Scientific Research and Development, he worked with Dr. John Hirshfeld, a surgeon who has since come to Ithaca, to determine the hitherto unknown connection between burns and human metabolism.

At Cornell, Professor Williams continued to study human nutritional requirements and explored various aspects of nitrogen and amino acid metabolism, the biochemistry of the digestive processes of ruminants, milk synthesis in man and animals, and the biological activity of selenium in microorganisms. He published more than 140 scientific papers on these subjects. In 1953, he was honored by being given the Borden Award of the American Institute of Nutrition for his studies on milk production. He was elected a Fellow of the American Institute of Nutrition in 1983.

During his tenure at the State College of Agriculture and Life Sciences, Cornell, Professor Williams served on numerous university and government committees including the Nutrition Research Advisory Committee of the U.S. Department of Agriculture; the Food and Nutrition Board of the National Academy of Sciences-National Research Council; the Nutrition Study Section of the National Institutes of Health; and the United Nation's Food and Agricultural Organization Expert Panel on Milk Quality. In 1971, as an authority in nutritional biochemistry, he gave expert testimony to the Senate Subcommittee on Labor, Health, Education and Welfare Appropriations. The objective was to urge the committee, by its support, to continue and enhance the international leadership of the United States in the life and health sciences. He also served on the editorial board of the *Journal of Nutrition* and as an overseas correspondent of "Nutrition Abstracts and Reviews". While in Detroit, Professor Williams was chairman of the Detroit section of the American Chemical Society, and in 1951 he was chairman of the Cornell section. He was also a fellow of the American Association for the Advancement of Science, a member of the American Institute of Nutrition, the American Society of Biological Chemists, the Society of Experimental Medicine and Biology, Sigma Xi, Phi Kappa Phi, Phi Lambda Upsilon, and Alpha Zeta.

As head of the Department of Biochemistry, Dr. Williams was very interested in the teaching program, encouraging the staff to attempt new courses and methods of presentation.

Professor Williams was married in 1935 to Agnes T. Gainey, a Cornellian and Ithacan. After he retired, he and his wife were on the golf course early on many a morning from the time that the snow had departed until cold weather came again. They were constant companions, sharing an interest in sporting events, concerts, other university functions and travel. Dr. Williams was extremely proud of his three daughters who were all Cornell graduates. After retirement, he and his wife enjoyed a family reunion each summer in the West.

He is survived by his wife, Agnes Gainey Williams of Ithaca, and daughters Patricia of Washington, D.C, Margaret of Encinitas, California, and Kathleen of Denver, Colorado.

Louise J. Daniel, Leon A. Heppel

Charles Edward Williamson

May 29, 1915 — May 30, 1996

Charles Edward Williamson, Professor Emeritus of Plant Pathology, died on May 30, 1996.

Professor Williamson was born in Newport, Indiana on May 29, 1915. He came to Cornell from Wabash College, an institution at which many young men had studied earlier under the tutelage of the illustrious Professor of Botany, Mason B. Thomas, and found their way into plant pathology at Cornell University. His undergraduate education culminated in the A.B. degree at Wabash College in 1937, and he then began graduate work at Cornell University. As a graduate student he was very helpful to other graduate students, particularly beginning students. He also was a good athlete and participated in many graduate student activities. Ed was a member of the Plant Pathology Volley Ball Team in 1941, which were champions of the Cornell Graduate League.

He was awarded the Ph.D. degree in 1949; the award delayed by service in the United States Armed Services from July 1942 to August 1946. Ed attained the rank of Captain and served as a meteorologist during the war. He lost much of his Ph.D. thesis material in a fire on Long Island, but when he returned from serving in World War II, he went to work and completed his Ph.D. degree in spite of this serious loss.

His assignment to the Cornell Department of Plant Pathology was made in October 1948, and Professor Williamson assumed duties in extension and research on ornamentals at the New York State Ornamentals Laboratory at Farmingdale, New York. Ed's early work was impressive as he demonstrated the relationship between ethylene production by leaf-spotting pathogen-host complexes and defoliation of affected leaves. He extended this work to show the practical importance of ethylene production by diseased plant tissues as it affects the keeping quality of flowers in storage or in transit.

Following this early work, was a series of contributions to the florist industry of New York State in the form of basic research for solution of specific grower problems, talks to audiences all over New York State and to many florists out of state at special schools and conferences, guidance to growers in outlining and carrying through successful cropping programs, and in many publications on control of diseases of florist crops. His work was concerned with soil sterilization and fumigation, nematode control, and the nature and control of numerous plant diseases affecting anemones, carnations, chrysanthemums, geraniums, roses, and snapdragons, among other flowers. Ed had a close relationship with growers, gaining their confidence and respect as he helped them with their many

cropping problems. He was particularly competent in diagnosis, and devoted many hours in the greenhouses and nurseries, helping growers to understand what was wrong, and then following through on his recommendations with them until the problem was solved. Ed's most recent work has been with control of foliar nematode disease of chrysanthemums, root rot of poinsettias, and geranium rust.

Aside from his professional accomplishments, Ed enjoyed square dancing, and he also worked with the Boy Scouts of America.

Ed is survived by his wife, Mildred Jane; two sons, Robert Bruce and David Lee; and a daughter, Judith Williamson Matthews.

Carl W. Boothroyd, William Mai, H. David Thurston

Lucille Williamson

December 12, 1893 — November 8, 1990

Cornell Professor Emerita Lucille Williamson died in Long Beach, California, on November 8, 1990, at the age of 96. She had been a member of the faculty of the New York State College of Home Economics for 28 years prior to her retirement in 1960. Professor Williamson held positions in resident teaching, research and extension service in household economics and management.

Professor Williamson received her Bachelors and Master's degrees from the University of Oklahoma and a Ph.D. degree in chemistry from Columbia University in 1923. She was a member of the faculty at the University of California from 1923 to 1928. She came to Ithaca when her husband, Professor Paul Williamson, began graduate work in agricultural economics.

When first in Ithaca, she participated in a study being conducted by Flora Rose of several thousand Belgian schoolchildren who had suffered from malnutrition during WWI. This study was initiated at the behest of President Herbert Hoover who had been recognized for his relief efforts in post World War I Europe.

Professor Williamson also helped to develop nutritious and economical cereals, particularly for use in New York City, to stave off malnutrition among poor families during the depression. The cereals contained a high proportion of skim milk mixed with/oats, wheat or corn. Eleanor Roosevelt sampled the cereal during a Farm and Home Week demonstration and later served the cereals at the White House to promote their adoption.

Professor Williamson's later work focussed on the performance and durability of household equipment. Her research provided the basis for extension publications which were widely used in programs throughout the United States. Professor Williamson directed many graduate students, including a significant number of foreign students, who remember her breadth of knowledge, her skill in directing research and also her genuine hospitality. Upon her retirement she spent several months in Europe and received a warm welcome from many of her former students.

Her home on Oak Hill Road was the favorite gathering place for faculty and graduate students in household economics and management. The good food, relaxed atmosphere and stimulating conversation were much appreciated.

She was a member of several professional organizations, including the American Standards Association, American Home Economics Association, Sigma Xi and Sigma Delta Epsilon. In Ithaca she was active in scouting, the PTA, League of Women Voters and the local chapter of her sorority, Alpha Phi.

Her husband, Professor Paul Williamson, a member of the faculty in agricultural economics, died in 1943. She is survived by her two children, James Williamson and Mrs. Barbara Ann Timmer; and three grandchildren.

Alice Davey, Rose Steidl, Jean Robinson

Harold A. Willman

September 1, 1903 — July 14, 1999

Harold A. Willman was Mr. 4-H in New York State for over 50 years. He probably had a greater impact on the agricultural youth in this state than any other individual during the 20th century. Even now, years after his retirement at many meetings of livestock or dairy producers, someone will frequently inquire about Harold and reflect on the influence he had on them in their youth, or their parents, or even their grandparents; and how they remembered how he puffed his pipe and asked them about their calf or lamb or horse and indirectly about them and their future. We will never know exactly how many farm youth chose to become students at Cornell and then leaders throughout the state and nation because of Harold.

Harold was born on a farm in McKean County, Pennsylvania on September 1, 1903. After high school, he studied at Clarion State Teachers College and taught country school for 2 years before entering Pennsylvania State University where he received a B.S. degree in 1927 followed by a M.S. degree at the University of Minnesota. He worked as a county agent in Pennsylvania for a year before accepting a position at Cornell in 1929 as Extension Instructor of Animal Husbandry at an annual salary of \$2,600. From then until his retirement in 1964, he gave major attention to the youth phase (4-H) of livestock and dairy educational programs in New York State. His 4-H judging teams won national contests several times. He judged many of the livestock and dairy shows himself and usually selected the animals and youth that could participate in the State Fair. He also directed the youth livestock activities at the New York State Fair; but actually directed the youths themselves, more than their animals or their activities. He set high standards for all involved in the 4-H program.

His leadership in developing 4-H County extension agents and local leaders for the 4-H Club boys and girls was outstanding. The growing numbers of 4-H members necessitated the development of teaching methods and aids that could be used by the leaders. His well written bulletins, mimeos and 4-H Club manuals were widely used. His book entitled, *The 4-H Club Handbook*, received national acceptance and acclaim.

With his fantastic memory for both people and animals, it was not uncommon for him to recognize a 4-H boy or girl and tie this individual directly to their parents or even grandparents, and then remember the animal the grandmother had exhibited many years ago.

Professor Willman was honored for his meritorious service by many county and New York State organizations. These included the State Fair Board of Directors, the State Farm Bureau Association, the Dairy Cattle Breed Associations and the Empire Chapter of the Future Farmers of America. In addition, many county 4-H clubs gave him special recognition.

He was a member of Epsilon Sigma Phi, honorary extension fraternity, as well as Alpha Zeta and Alpha Gamma Rho.

Following his retirement in 1964, he was very active in the New York State 4-H Foundation and continued activities at the State Fair. He prepared teaching aids for youth group leaders. A main activity was a horse judging series that is used across the country and internationally.

Harold was also an avid sports fan and seldom missed a Cornell football or basketball game. His interest in the Animal Science Department continued long after his retirement, as he continued to attend department functions. He also continued to follow his alma mater, Penn State, throughout the years. He was especially pleased with former 4-H club members who became active members on Cornell sports teams.

Harold and his family established the Willman 4-H Fund in 1981, to support both the Department of Animal Science and the New York 4-H Foundation to enhance the development of youth through animal science projects and project activities. A small portion of the fund's income is also contributed to the Cornell Athletic Department.

Harold is survived by his wife of 65 years, Louise, living in Columbia, Missouri; and daughters, Jean Scott and Nancy Burton; grandchildren and one great-grandchild.

Robert H. Foote, Douglas E. Hogue, Harold F. Hintz

Carl Seymore Winkelblech

June 28, 1918 — October 30, 1995

Professor Emeritus Carl Seymore Winkelblech, 77, died at his home on Graham Road in Ithaca, New York, October 30, 1995, after a courageous struggle with cancer. Born June 28, 1918, in Aaronsburg, Pennsylvania, he was a son of the late Paul M. and Ollie Treaster Winkelblech.

Carl received the B.S. degree in agricultural engineering from Pennsylvania State University in 1939 and the M.S. degree in agricultural engineering from Ohio State University in 1961.

Before joining the faculty at Cornell, Carl spent one year in the Engineering Department of the Oliver Corporation at South Bend, Indiana and 13 years with the USDA Soil Conservation Service where he was responsible for the design and construction of many large group drainage projects. He also designed hundreds of water storage structures. In 1953 and 1954, he served as a Niagara County Extension Agent where he helped establish the County Soil Conservation District. He also developed an overall county drainage plan with priorities based on land use capabilities. Carl was appointed an Extension Assistant Professor in August 1954 with principal responsibility for conducting educational programs in soil and water engineering and tillage machinery. He was promoted to Associate Professor in July 1959 and to full Professor in July 1967.

Professor Winkelblech's background and experience permitted him to develop outstanding educational materials in drainage, water supply, soil conservation and management, water resource development, and tillage. He was one of the early innovators in the development of equipment and techniques for minimum tillage. He built one of the first plow-plant machines. Carl worked extensively with growers to minimize compaction and soil management problems through proper tillage practices. As an example of his practical approach to farmers' problems, he developed equipment for ridge planting on muck soils that was enthusiastically accepted by growers. He also designed a strawberry runner cutter to implement a new technique in strawberry culture.

Professor Winkelblech provided leadership in the development of the Land Improvement Contractors' Association and was instrumental in inaugurating a highly successful training program for New York State land improvement contractors. He also worked extensively with golf course operators on drainage and compaction problems. Professor Winkelblech was a consultant on the technical staff of the "Temporary State Commission on Irrigation" during the summers of 1956, 1957 and 1958. He and Professor Hugh Wilson conducted a study for the Commission to

determine the feasibility of developing water supplies and the legislative requirements to distribute irrigation water to important agricultural areas of the state.

He organized and conducted many county and state plowing contests. He developed the criteria and rules for the conduct of these contests and used these principles as effective tools to teach good plowing and plow adjustment. He served as a judge at several national and world plowing contests.

His outstanding extension program in machinery management received national recognition from his peers by being awarded four Blue Ribbons in the American Society of Agricultural Engineers' Competition for TV short courses, movies, demonstrations and publications. He was a prolific writer, contributing over one hundred articles to *Extension County News* and farm magazines. He also authored three excellent college bulletins: "Basic Principles of Tillage", "Farm Pond Construction", and "Drainage Around the Home".

Carl worked closely with farm machinery distributors in New York State providing leadership in the New York State Tractor Club, and the New York Farm Equipment Dealers' Association. For many years, Carl was an integral part of Empire Farm Days, a major agricultural machinery exhibition.

As an authority on rural water supply and treatment, Carl developed and disseminated information that has aided countless New York State farmers and homeowners.

Professor Winkelblech retired on July 31, 1975, after 21 years of continuous service to the Department of Agricultural Engineering in the New York State College of Agriculture and Life Sciences at Cornell University. In October 1975, he was awarded the title of Professor of Agricultural Engineering, Emeritus.

He continued to utilize his knowledge and expertise in drainage after retiring. He aided many golf courses throughout the state in solving their drainage problems. He took particular interest in improving the drainage on the Robert Trent Jones Golf Course at Cornell University. "Wink", as he was known by his friends, became an avid golfer after being given a set of golf clubs for his work on drainage at the Cornell course. His most recent contribution was locating and designing a holding pond, between holes #1 and #6, for the anticipated course irrigation system. Wink played golf every day the weather permitted and frequently arrived at the course as soon as it opened. He looked forward to joining other Cornell retirees for a round of golf. Before his death, he was awarded a lifetime membership at the Robert Trent Jones golf course at Cornell. After retirement, Carl and Olive spent the winter months in Florida where he played golf and became an excellent surf fisherman. He supplied fresh fish to all his Cornell associates in the area.

Carl was a very kind and caring person who dedicated his life to helping others. He would do anything to help someone and never asked for anything in return. His family and grandchildren were most important in his life and they respected and loved him in return. Carl dedicated his life to educating, invigorating, improving and serving agriculture.

Professor Winkelblech is survived by his wife, Olive of Ithaca, New York; daughter and son-in-law, Mary Ann and John Beno of Freeville, New York; three sons and daughter-in-laws, Kermit and Sandra of Palos Park, Illinois; Dean and Kathy of Andover, Massachusetts; David and Helen of Hawley, Pennsylvania; eleven grandchildren; two great grandchildren; and a sister, Mary Stover of Aaronsburg, Pennsylvania.

Wesley W. Gunkel, Everett D. Markwardt, William F. Millier

Carlton Eugene Wright

May 5, 1911 — May 30, 1997

Professor Wright was raised on a dairy farm in Vermont and graduated from the University of Vermont in 1932. After two years as manager of a fruit farm in Barre, Vermont, he entered the education field as teacher of vocational agriculture in Middlebury, Vermont, where he served for three years. He came to Cornell University in the summer of 1936 to complete his Master's degree, which was awarded in February 1937.

Professor Wright returned to Vermont in February 1937 to work at the University of Vermont as Assistant Trainer and Assistant State Supervisor of Agriculture Teachers. On July 1, 1939, he accepted a position at the University of New Hampshire as Assistant Professor in charge of the Applied Farming course, and as Assistant Teacher Trainer in Agricultural Education. He held this position until June 1941, when he returned to Cornell for advanced study. In February 1943, he received the Doctor of Philosophy degree in Agricultural Education and Agricultural Economics. He became an Instructor in the Department of Agricultural Economics in the College of Agriculture and Life Sciences where he worked on the newly established Food Information Service. This program was designed to cooperate with the war effort in supplying food information to the public through the statewide Cooperative Extension system. He resigned in 1944 to become Director of the New York State Institute of Agriculture and Home Economics, a unit of the State University of New York at Cobleskill. One of his major responsibilities at Cobleskill was to rebuild the program and student body that had been decimated by the war. From the directorship of the institute, Dr. Wright was called to Washington, D.C. in February 1947 to become the first Director of Research and Publications of the American Vocational Association. He returned to New York State to organize a food information effort with consumers in the New York City area on July 1, 1948. This program covered the metropolitan area of New York, New Jersey and Connecticut and was sponsored jointly by Cornell University, Rutgers University and the University of Connecticut in collaboration with the United States Department of Agriculture. This was the beginning of Cornell University's Cooperative Extension programming in the five boroughs of New York City. In 1953, Dr. Wright returned to Ithaca as Associate Professor of Food Information and was leader of the extension programs in food information for consumers throughout the State. In 1955, he worked for three months with the Federal Extension Program to plan a series of three national conferences for consumer marketing employees throughout the United States. He was promoted to full Professor at Cornell University in 1962.

During the two years 1962-64, Professor Wright was Chief of Party of the Cornell Project at the University of Liberia. Upon his return in 1964, he assumed leadership for expansion and implementation of a statewide program of marketing information for consumers. In 1969, he returned to New York City as Controller of the Cornell Extension program to assume fiscal and personnel responsibilities.

Dr. Carlton Wright retired July 1, 1973 after forty years of educational leadership, and was named Professor Emeritus. He is the author of *Food Buying*, published by the Macmillan Co. in 1962. He was a member of Alpha Zeta, Kappa Phi Kappa, Phi Delta Kappa, Phi Kappa Phi, and Epsilon Sigma Phi.

Throughout his career, Professor Wright demonstrated unusual capacity to organize and carry out new programs. His broad experience, professional capacity and even temperament contributed to this ability to perform with excellence in programs cutting across departments and colleges and under unique and complex administrative structures. In retirement, he lived in Vermont and then returned to Ithaca, New York where he was an active member of the First Congregational Church and involved in the Boy Scouts of America, the Friends of the Library and the Cayuga Trails Club serving as president of the Finger Lakes Trail Conference.

He is survived by his wife of 58 years, Lucille Neumann Wright; two sons, Timothy, of Honolulu, Hawaii, and Stephen, of Dansville, New York; and four grandchildren.

Professor Wright will be remembered by his colleagues and friends for his wide range of personal and professional interests. He worked effectively with academicians and politicians, with producers and consumers with the goal in mind of improving our food marketing system.

C. Arthur Bratton, Lucinda A. Noble, Robert P. Story, Carol L. Anderson

Forrest Blythe Wright

October 21, 1896 — June 16, 1991

Forrest Blythe Wright was a member of the faculty of agricultural engineering in the College of Agriculture for nearly 38 years prior to his retirement in 1958. He became interested in Cornell University while stationed on the campus with the Air Wing of the U.S. Army Signal Corps. He graduated from Cornell University in 1922, and was granted the Master of Science degree in 1924. He was the second agricultural engineer in the U.S. to earn a Ph.D. degree which he received in 1933 from Cornell University.

“Doc” Wright assisted Howard W. Riley in teaching Agricultural Engineering I, Gasoline Engines, and later assisted B.B. Robb with Course 10, Household Mechanics. In time and until retirement he assumed sole responsibility for this very popular course taken by nearly 10,000 students. Students in home economics took the course to satisfy their graduation requirements in physics.

In 1934 he developed and taught a course in farm electrification when electricity was just beginning to come to some rural areas and farms. In 1935, he wrote a textbook entitled, *Electricity in the Home and on the Farm*, which became a popular text throughout the country. A third edition was published in 1950.

Another textbook, *Rural Water Supply and Sanitation*, was written in 1939. This also became a popular text. This book was selected by the New York Public Library as one of the 100 most essential technical books in 1957 following a 1956 revision. It was revised again in 1977.

Nine bulletins, such as “The Gasoline Engine on the Farm” together with others on electrification, were written by Doc. He wrote numerous articles for many publications, notable were “Electricity on the Farm” and “Agricultural Engineering”. He won the 1949 American Society of Agricultural Engineers’ paper award honor for one of his contributions.

Doc Wright also had time for research and development. He invented automatic egg handling, washing and drying machines marketed by the then GLF Cooperative. The basic principles of these machines were to be later used in sophisticated egg processing equipment. He also made studies of paint durability and heat transfer from the sun through roofing materials, insulation and siding. Doc developed a new design of chick brooder using an electric lamp and a dehydrator for drying laboratory samples of grain and fruits. He also investigated the feasibility of flame weeding.

Doc was a dedicated teacher, always striving to have his students interested and involved in the subject. He worked diligently and thoroughly to achieve his goal of doing the best he could and to have those around him “catch the spirit” and do the same. He organized and operated an aviation ground school in Elmira and Ithaca in the 1920s. His helpfulness and teaching skills, his popular radio programs on mechanics and care and use of the sewing machine were enjoyed by a wide circle of friends and acquaintances.

Doc Wright was well known in and around Ithaca for his civic activities. From 1923 until long after retirement he was active in the Boy Scouts of America and once served as vice president of the local Council, and received the Silver Beaver Award. He served as leader of young people’s groups and served on the Board of Trustees of the Unitarian church. He served as president of the Improvement Association in the Village of Forest Home where he maintained his residence for 28 years. Here he instigated the installation of a water district and the establishment of a fire district in the area.

He was a charter member of the Kiwanis Club of Ithaca and its third president. He was a member of Rotary International in Ithaca and served on the Board of Directors. He served for a number of years on the Ithaca Community Chest teams. Doc had many hobbies. He was an ardent fisherman. He enjoyed woodworking and painting. Doc and Billie were genial hosts and had many friends. He was a great story teller.

Doc was born in Four Oaks, Kentucky and spent his early life on a farm in Falmouth, Kentucky. In 1917 he entered Transylvania College in Lexington, Kentucky, with two scholarships.

Doc was a member of ASAE, Phi Delta Kappa, Pi Kappa Alpha and Sigma Xi and listed in the *American Men of Science* and *Who Knows Who and What*.

He travelled throughout the North American continent, Hawaii, South America and Europe. After retirement Doc worked for three years in Mexico on the Montana Project to teach Mexicans about irrigation and vastly increasing crop yields.

Doc is survived by his wife Mildred (Billie) of 66 years, of Melbourne Beach, Florida; a son, Paul, of Raleigh, North Carolina; five grandsons; six great grandsons; and Enumerable friends and associates.

During his many years of service to Cornell, Doc became well known and sincerely liked by the entire Cornell family. He was looked up to by former students all over the world who consider Doc as a real friend, advisor and teacher.

His colleagues and friends have initiated a campaign to establish a memorial scholarship in Doc's name to recognize his many accomplishments and contributions to the college and university.

E.S. Shepardson, C.N. Turner, R.B. Furry

Lemuel D. Wright

March 1, 1913 — May 12, 1995

Lemuel D. Wright was born in Nashua, New Hampshire in 1913. He received the B.S. and M.S. degrees in Chemistry in 1935 and 1936 respectively from the University of New Hampshire and a Ph.D. degree in Biochemistry from Oregon State University in 1940. His postdoctoral work was done with R.J. Williams at the University of Texas. He became an Instructor of Biochemistry at the West Virginia School of Medicine after which he worked at Merck, Sharp and Dohme from 1942-56 and became a department head. Between 1956-78, Lem Wright was Professor of Biochemistry in the Section of Biochemistry Molecular & Cell Biology, Division of Biological Sciences, and of Nutrition in the Division of Nutritional Sciences at Cornell University. In 1968, he spent a one-year sabbatic at the Max-Planck Institute at Munich, Germany. In 1978, he became an Emeritus Professor, but he continued to serve the University as the Graduate Faculty Representative for the Field of Nutrition.

Lem Wright was a member of the American Society of Biological Chemists, American Institute of Nutrition, Society for Experimental Biology and Medicine, American Chemical Society, New York Academy of Science, and the American Association for the Advancement of Science. He served on editorial boards of *Analytical Biochemistry*, *Journal of Nutrition* and the *Proceedings of the Society for Experimental Biology and Medicine*. He also served on study sections at the National Institutes of Health in Bethesda, Maryland. In recognition of his research on vitamins and cholesterol metabolism he received the Borden Award in Nutrition (1958) and the Outstanding Achievement Award of the College of Technology at the University of New Hampshire (1970) and was named Career Fellow of the National Institutes of Health (1963).

Lem's scientific career began at the time of the exciting crescendo of discoveries of essential nutrients. First with R.J. Williams and E.E. Snell and later with collaborators at Merck, Sharp and Dohme, Lem worked out methods for the microbiological assay of numerous B-vitamins, including nicotinic acid, folic acid, biotin, and vitamin B-12, coincident with their isolation and characterization. During the same period of time he worked on the renal clearance of essential amino acids, and examined the metabolic interrelationships affected by these vitamins and amino acids in pyrimidine metabolism. He discovered biocytin and studied the interaction of biotin with the egg white protein, avidin. At the time that he came to Cornell, Lem began working on the biosynthesis of cholesterol and discovered the acetate replacing factor, mevalonic acid. This led naturally to studies of mevalonate metabolism and influences on the utilization of mevalonate for cholesterol metabolism. These studies were important in laying

the basis for understanding nutrient effects on cholesterol metabolism prior to the realization of the importance of cholesterol as a risk factor in arterial disease. Lem never lost his love for study of the B-vitamins, however. In collaboration with D.B. McCormick and students at Cornell, he continued work on the metabolism of biotin and of lipoic acid. This work remains the best characterization of the metabolic fate of these essential coenzymes in animals. In addition to publishing more than 155 papers in his scientific career, Dr. Wright edited with D.B. McCormick the six volumes on Vitamins and Coenzymes in the “Methods in Enzymology” series. Throughout his scientific career, Lem Wright combined basic biochemical studies with an interest in nutrition.

Lem was a man of strong quiet integrity. He gave scientific collaborators more than their share of credit, and had a work ethic which nurtured students by example. He combined a quiet demeanor, wry humor, and insistence on high standards. These qualities served the Field of Nutrition well during Lem’s second “career” as Graduate Faculty Representative. His personal interest in students and his ability to make even those denied admission to the program feel good about themselves helped to build the reputation of the Cornell Nutrition Program to unparalleled heights.

When not in the lab, Lem loved to sail, climb mountains, and father stray animals. He was an avid ham radio operator. He will be remembered by all as a compassionate person and a productive scholar.

Michael N. Kazarinoff, Donald B. Zilversmit

Donald R. Yennie

March 4, 1924 — April 14, 1993

Donald R. Yennie, professor of physics at Cornell University, died on 14 April 1993 at the age of 69. He was an internationally recognized authority on quantum electrodynamics, the fundamental theory of the interaction between matter and electromagnetic radiation. He will be remembered not only as a leader in the most difficult and precise aspects of this field, but also as a beloved teacher and friend to his many students and colleagues.

Don was born in Paterson, New Jersey in 1924. During World War II he served in the Navy, and was an undergraduate at the Stevens Institute of Technology. He graduated in 1945 with an M.A. degree, and was an instructor in physics at Stevens during 1946-47. In 1951, he earned his Ph.D. degree from Columbia University as a student of Hideki Yukawa. He then joined the Institute for Advanced Study in Princeton. From 1952 until 1957, he was first an instructor and then an assistant professor at Stanford University. He then moved to the University of Minnesota, and, in 1964, was recruited by Hans Bethe and the theory group to join the physics faculty at Cornell University. He was an NSF Senior Fellow, a Guggenheim Fellow, and a Fellow of the American Physical Society. He served as a visiting professor at the University of Paris, the University of California (Santa Barbara), Fermilab, and SLAC, and held an Alexander von Humboldt Award at the University of Heidelberg at the time of his death.

Don's work covered a wide range of topics in theoretical physics. He had a strong interest both in fundamental questions about quantum field theory and in applications of field theory to experimental data.

While at Stanford, Don developed much of the theoretical formalism needed to interpret Robert Hofstadter's Nobel-Prize-winning experimental studies of elastic collisions between electrons and nuclei. This work led to important new insights into the internal structure of protons and neutrons. Don's review article, written in 1957 with M.M. Levy and D.G. Ravenhall, was a standard reference in this field for years. At the same time, he pioneered the theoretical analysis of inelastic electron collisions. His paper, with R.H. Dalitz, laid the groundwork for this subject which has since generated hundreds of papers.

One of Don's most influential papers was written in 1961 with S.C. Frautschi and H. Suura. It provided the definitive resolution of the infrared-divergence problem in quantum electrodynamics. This work completed the earlier effort by F. Bloch and A. Nordsieck, putting the analysis on a solid quantum-field-theoretic basis, and providing the technical tools needed to extract meaningful answers from quantum electrodynamics to any order in perturbation theory. It was the final ingredient in the formal development of quantum electrodynamics, a theory, confirmed

by experiment, that is among the foundation stones of modern physics. In recent years, the techniques developed and refined by Don for this problem have been successfully applied in quantum chromodynamics, the theory of subnuclear interactions, to show how long-wavelength contributions factor from short-wavelength contributions in high-energy hadronic amplitudes.

Don's incomparable technical skills, together with his profound understanding of quantum field theory, are well illustrated by his many difficult and precise calculations of the properties of simple atoms in quantum electrodynamics. His analyses, particularly of the Lamb-shift and hyperfine splittings in hydrogen and muonium, remain among the most challenging ever attempted in quantum field theory. They are essential for the experimental verification of quantum electrodynamics, and have provided a starting point for a generation of researchers in this field. Don was still actively involved in such work at the time of his death.

Don was always deeply interested in experimental results, as well as the theory behind the experiments. He often spent hours analyzing data and questioning experimental procedures. This is evident in his extensive work on the interactions of high-energy photons with hadrons. His work led to important clarifications both of the experimental data and of the theoretical formalism needed to understand the data. It resulted in a major review article, written in 1978 with T. Bauer, R.D. Spital, and F.M. Pipkin.

Don was deeply devoted to his graduate students, many of whom became lifelong friends and colleagues. His teaching conveyed the same meticulous intellectual standards that marked his research, and yet it is his unassuming modesty, his warmth and gentle kindness that are most strongly remembered by his students. Don and his wife, Lois, were a constant source of friendship and hospitality.

Don Yennie will be greatly missed by all who knew him. His influence as a physicist and as a human being will remain with everyone.

L. Hand, T. Kinoshita, P. Lepage

Roger Grierson Young

December 18, 1920 — August 21, 1994

Roger Grierson Young was born in Moose Jaw, Saskatchewan, Canada, the son of Robert S. and Maryann Young. He received a B.S. degree in 1943 from the University of Alberta. After graduation, Roger was employed as an industrial chemist with the Aluminum Company of Canada in Arvid, Quebec. In 1946, he returned to the University of Alberta where he earned his M.S. degree in 1948. Then Roger entered the University of Oregon as a Teaching Fellow and later as a Research Fellow until the completion of his Ph.D. degree in 1951.

Roger first came to Cornell in 1951, and for two years he was a Rockefeller Postdoctoral Research Fellow in enzyme chemistry working with Nobel Laureate James B. Sumner. Roger continued his postdoctoral studies at Cornell with H.W. Williams studying the biochemistry of the eye. During this study, he received a Geer Research Grant in 1953. From 1953-55, he served as a biochemist with Johnson & Johnson's Ethicon Suture Laboratory in New Brunswick, New Jersey.

In 1955, Roger returned to Cornell as an Assistant Professor of Biochemistry and Toxicology in the Department of Entomology and Limnology. He was naturalized a United States citizen in Ithaca and was promoted to Associate Professor in 1960. Roger was a member of the Cornell Faculty for 28 years and at his retirement in 1983 was granted the rank of Professor Emeritus.

His research dealt with a wide range of subjects, from the biochemistry of the eye to physiological processes in insects and other arthropods. His 32 scientific papers in refereed journals reflect his wide range of research interests. Particularly noteworthy was the leadership that Roger gave to the development of Environmental Toxicology Training at Cornell. He developed a proposal for the training program and NIH funded it in 1965. He served as the first director of the training program. The Environmental Toxicology Training program continues today and the program is now a Field in the Graduate School.

In addition to his extensive research interests, Roger taught graduate-level courses in Insect Biochemistry. He also participated in courses in Veterinary Medicine emphasizing the significance of toxic chemicals, both organic and inorganic, in the environment. In courses he presented, Roger took a deep interest in the progress of his students, offering patience and understanding with the difficult material. His laboratory exercises required particular attention for the inexperienced students because of the small size of the test animals. He was a most supportive instructor.

Roger advised an average of ten undergraduates each year. He also served as major professor or as a graduate special committee member for 26 students. Roger served on the Entomology Graduate Admissions Committee. He was also Entomology Field Representative and Comprehensive Exam Committee member. In addition, he served on the Graduate School's Fulbright Review Committee and was on the Faculty Council of Representatives. Roger was a member of the Society of Sigma Xi, the American Chemical Society, the American Association for the Advancement of Science, and the Entomological Society of America.

During Roger's career at Cornell, he and his family spent sabbatical leaves at the University of Washington, the University of the Philippines, and the University of California (Davis). After his retirement, Roger continued many of his scientific interests. He taught chemistry for a semester at SUNY Cortland and carried out several research projects at the Cornell Toxicology Laboratory. For three semesters he conducted biochemical research at the Huxley College of Environmental Studies, Western Washington University, Bellingham, Washington.

In addition to his professional interests, Roger was an active and loyal member of the First Baptist Church in Ithaca, and for many years, he participated in the Volunteer Fire Company of Varna. He enjoyed golfing with friends at the Robert Trent Jones Cornell Golf Course. His lifelong enthusiasm for camping, learned early in his youth, extended to countless camping adventures with his family. Roger's interest in life around him was reflected in a variety of hobbies. He built and sailed a boat, a product of his interests in woodworking and water-related activities. He was an avid reader and he pursued and maintained active hobbies in genealogy and photography.

Roger Young is survived by his wife of 40 years, Emily V. (Howes), Cornell M.A. '49. His three children are degree holders from Cornell: Roger, B.S. '77; Carolyn, B.S. '80, M.N.S. '84; and Elizabeth, B.A. '84.

Colleagues, students and friends recognized Roger for his scholarship, integrity, helpfulness and genuine kindness. Throughout his life he exhibited a quiet commitment to his family, friends and his professional career.

Arthur A. Muka, David Pimentel, Edgar M. Raffensperger

