



Memorial Statements: Anatomy Faculty of Cornell University

prepared by the Office of the University Faculty

Compilation: March 20, 2013

Both Comprehensive and Recent Memorial Statements may be found at:

Faculty Memorial Statements Comprehensive File (1868-2009)

<http://ecommons.library.cornell.edu/handle/1813/19313>

Individual Memorial Statements (1868-2009)

<http://ecommons.library.cornell.edu/handle/1813/17813>

Faculty Memorial Statements (1996–present)

http://theuniversityfaculty.cornell.edu/memorials/mem_main.html

An enhanced collection of Memorial Statements for the Veterinary Faculty is at

Memorial Statements of Veterinary Faculty

<http://ecommons.cornell.edu/handle/1813/28278>



Howard Bernhardt Adelmann

May 8, 1898 — July 25, 1988

“Professor Howard B. Adelmann represents a splendid type of scientist and scholar. He is a Cornellian if there ever was one. Born in Buffalo, he came to Cornell in 1916 and with short interruptions ... he has resided on the lovely hills of Ithaca ever since.” So wrote Henry E. Sigerist, the eminent scholar, editor, and historian of medicine, in his enthusiastic review of Adelmann’s 1942 edition of *The Embryological Treatises of Hieronymus Fabricius of Aquapendente*. Yes, Howard was indeed a Cornellian, one of Cornell’s greatest teachers and scholars. His affiliation with our institution spanned seventy-two years, sixty-seven of them as a member of the faculty—a tenure that in the entire history of Cornell is surpassed only by the seventy-three years of Walter F. Willcox! At the time of Howard’s death, at the age of ninety, only Willcox had ever served longer as a member of the Cornell faculty.

Howard graduated from Cornell with an A.B. degree in 1920, an A.M. in 1922, and a Ph.D. in 1924. He began his long and distinguished teaching career here in 1919 when he was appointed assistant in histology and embryology while still an undergraduate. Until the mid-1960s one climbed the academic ladder to a tenured position at Cornell very slowly. Even so, Howard moved upward more rapidly than many of his peers, becoming an instructor in 1921, an assistant professor in 1925, and professor in 1937. He was appointed professor emeritus in 1966.

While still an assistant professor, Howard won international acclaim as an experimental embryologist for his pioneering studies of cyclopia and the development of the amphibian and the avian eye. These attracted the attention of Professor Hans Spemann, who in 1927 invited Howard, as a National Research Council Fellow, to work in his laboratory at the University of Freiburg. Thus began a long and inspiring friendship.

In the early thirties, during a two-year sojourn in New York City as a visiting professor in the Department of Ophthalmology at Columbia’s College of Physicians and Surgeons, Howard was repeatedly urged to leave Ithaca and permanently join the department’s staff at a most tempting salary—offers he steadfastly refused, for his heart was at Cornell.

Very early in his academic career Howard began collecting rare books dealing with the history of embryology, anatomy, and general biology. His extensive private library of more than 4,800 volumes subsequently became the nucleus of the History of Science Collections established by the Cornell Library in 1961. With continuing support from Howard, the Adelmann Collection has prospered, and today it is one of the finest of its type in this country. Included in this remarkable collection are nearly all of the great classics in anatomy and embryology from the 16th

through the 19th century. A life-long friend of the University Library, Howard was also a founding member of the Library Associates and in 1942-43 served as the second chairman of that group.

Howard's respect for history was pervasive and unusual— unusual, at least, among his colleagues in the sciences. He read at least six foreign languages, including Greek and medieval Latin, and he always insisted on reading “the old masters” in their original language to be certain of the essence of their arguments. It is thus not surprising that Howard's scholarly interests turned increasingly to the history of anatomy and embryology. His handsome volume on Hieronymus Fabricius was published in 1942 by the Cornell University Press and received that year's F.S. Crofts Prize for the most distinguished work by a member of the Cornell faculty. In recognition of Howard's outstanding contributions to its collections, and to the history of anatomy and embryology in general, the University Library in 1988 celebrated Howard's ninetieth birthday by acquiring in his honor a magnificent copy of Fabricius' *De venarum ostioliis* (Padua, 1603)—one of the rarest of all the great classics in the history of science.

Extending his earlier work on Fabricius, Howard subsequently produced two internationally acclaimed studies on the life and work of another of the founders of modern embryology, the 17th-century Italian scientist Marcello Malpighi. His monumental five-volume work, *Marcello Malpighi and the Evolution of Embryology*, was published by the Cornell University Press in 1966; his second multivolume work on Malpighi, *The Correspondence of Marcello Malpighi*, was published by the Cornell University Press in 1975. For the first of these definitive studies Howard was awarded the History of Science Society's Pfizer Award in 1967 for the outstanding book on the history of science published during the previous year. Appropriately, Howard traced his own intellectual heritage directly back to Malpighi. “At surprisingly few removes he [Malpighi] was the forebear of many of us who are teaching and studying today. He was, for example (if I may be personal for a moment), the teacher of Antonio Maria Valsalva; Valsalva, of Giovanni Battista Morgagni; Morgagni, of Antonio Scarpa; Scarpa, of Ignaz Döllinger; Döllinger, of Louis Agassiz; Agassiz, of Burt Green Wilder; Wilder, of Simon Henry Gage; Gage, of Benjamin Freeman Kingsbury; and Kingsbury, whose rare qualities I take this opportunity to extol, was my teacher.”

More than twenty-five glowing reviews of Howard's magnum opus, *Marcello Malpighi and the Evolution of Embryology*, appeared in professional journals. A sampling of but a few comments is sufficient to convey the enthusiasm generated by the publication of this magnificent study which was hailed by both scientists and historians from around the world:

Imbued throughout with a passionate enthusiasm for the historical past and for the science of embryology, these five immense volumes will be a permanent monument to the underlying unity of the scientific and cultural traditions. When in future generations, men shall read *Marcello Malpighi and the Evolution of Embryology*, they may be led to remark both of science in the 17th century and of scholarship in the 20th, “there were giants in those times.” [Leonard G. Wilson, Yale University]

There can be no dispute that this is the most monumental contribution of our century to the “fine structure” of the history of biology in general and embryology in particular . . . The sheer mass of the result looks at first sight intimidating, but the writing is so lively and the facts revealed so curious and entertaining that anyone who dips into any of the volumes at random will probably be sufficiently intrigued to keep on reading. An infinite amount of unravelling has gone into this, the digging out of the details of Malpighi’s somewhat harassed life at Bologna, Messina, and Rome, the identification of the meanings of hundreds of obsolete technical terms of the old biologists to show what they intended, and the dissection of Malpighi’s own theoretical thinking, central as it was to the general unfolding of the perpetual opposition of epigenesis and preformation. The scholarship is meticulous. [Joseph Needham, Cambridge University]

Nearly twenty years later, Daniel Boorstin, the Librarian of Congress, summed it up best in his book *The Discoverers*: “A good introduction to Malpighi is Luigi Belloni’s article in the *Dictionary of Scientific Biography* . . . supplemented by Joseph Needham, *A History of Embryology* (1934). But there is no competition anywhere else in the history of medicine for the delights of reading and browsing than in Howard B. Adelman’s monumental *Marcello Malpighi and the Evolution of Embryology*.”

Numerous honors came to Howard for his scholarship during his illustrious career at Cornell, among them the degree of Doctor of Science *honoris causa* from Ohio State University in 1962, the Order of the Star of Italian Solidarity in 1962, the William H. Welch Medal from the American Association for the History of Medicine in 1967, the degree of Doctor of Medicine *honoris causa* from the University of Bologna, Italy, in 1972, and the Galileo Galilei Prize from the University of Pisa, Italy, also in 1972.

Early in his career, Howard was acclaimed by his undergraduate students as the “best” and “toughest” teacher at Cornell. The full measure of his inspiration as a teacher, however, is reflected in the dozens of tributes from his former graduate students on the occasion of his eighty-fifth birthday and at his death. A short sample follows:

Howard never did things casually. He insisted on punctiliousness and practiced the old aphorism that if a thing is worth doing it has to be done well. [William Montagna, Oregon Regional Primate Research Center]

My association with Howard as student, colleague and friend was the most important and influential personal relationship of my professional life. [Harold F. Parks, University of Kentucky Medical School]

My memories of Dr. Adelman are personal ones; walking round and round the Arts & Sciences' Quadrangle on a summer's evening listening to him talk about Malpighi; Sunday evening dinners at his apartment with good food, Mozart, chess, and reading aloud. He was a living example of what he preached—determine what is most important and then pursue it with complete disregard for the trivialities of life. [A. Duncan Chiquoine, Hamilton College]

I have never forgotten the positive effects you had on my personal and professional life, all that I owe you for your steadfast belief in my potential, the generous and often critical advice that helped mould my personal and professional outlooks. [William A. Wimsatt, Cornell University]

Howard's love and understanding of young children was also a delight to the families of many of his graduate students and young colleagues. He would often invite a family of five or six to a Sunday evening dinner and entertain all in his apartment with good food, fine music, and readings from Grimm's *Fairy Tales*. In addition, Howard was always a source of sound counsel and sympathetic reassurance when it came to the problems a youngster of two to five posed for a young mother.

During all these years, Howard also carried his full share of Cornell committee and administrative assignments. He served as chairman of the Department of Zoology from 1944 to 1959 and was a faculty representative on the Cornell Board of Trustees from 1947 to 1951.

Howard and Dorothy May Schullian were married on July 6, 1978, each for the first time—he at age eighty, she at seventy-two! His wife was herself a distinguished historian of medicine, as well as the first curator of the History of Science Collections in the Cornell Library. Having been professional colleagues for many years, they shared together for the last decade of their lives both the burden of declining health and the continuing joy of common interests.

Howard leaves for all of us a rich legacy of scholarship that includes not only his own publications but, also, his commitment to preserving and understanding those of his predecessors. This legacy will be a source of reference and inspiration for his students—and his students' students—for generations to come.

John M. Anderson, David W. Corson, Perry W. Gilbert

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

Pierre Augustine Fish

Dean of the N. Y. State College of Veterinary Medicine

February 17, 1865 — February 19, 1931

The University Faculty deeply deplores the death of Professor Pierre Augustine Fish, who died February 19, 1931, after a short illness. He was born at Chatham, New York, on February 17, 1865, and entered Cornell University in 1885. After a leave of absence of one year, he took the degree of B.S. in Natural History in 1890. He entered the Graduate School and was granted the degree of D. Sc. in 1894. While doing work for the advanced degree he served as instructor in Physiology and Neurology under Professors B. G. Wilder and S. H. Gage. Two different degrees in veterinary science have been conferred upon him: one from the National Veterinary College of Washington, D. C., in 1896, the other from Cornell University in 1899.

Professor Fish spent thirty-eight of the forty years of a useful and distinguished career in the service of Cornell as a teacher, investigator, and administrator. For two years he was in the service of the national government at Washington. During the year 1895-96, he was assistant to his friend and colleague, Professor V. A. Moore, in the Division of Pathology, Bureau of Animal Industry. During the year 1918-19 he was on leave from the University, having been commissioned a Major, Veterinary Corps, and attached to the Surgeon General's Department. Becoming an assistant professor in 1896, he was advanced to a professorship in 1901. When the Ithaca division of the Medical College was established he organized the courses in physiology and taught them for some years. He served for twenty-nine years as secretary of the faculty of the Veterinary College. He became Dean of the Veterinary College upon the retirement of Professor V. A. Moore in 1929. He was a member of the original faculty of the Veterinary College, having left Washington in 1896 with Professor V. A. Moore to become a member of that body.

One of the outstanding characteristics of Professor Fish was his talent for scientific investigation. Research held for him a profound interest. Such an interest in investigation led to a broad productive scholarship, which is manifest in his numerous articles and various larger publications.

He was not only interested in problems of education, research, and administration, but was also a force in the councils of the profession of veterinary medicine. He served as editor of the Cornell Veterinarian from 1912 to 1915, and of The Journal of the American Veterinary Medical Association from 1915 to 1918, was vice-president and president of the New York State Veterinary Medical Society, and a member of numerous important committees in

local, state, and national veterinary associations. He strove always for the highest possible standards of education and professional ethics. His own high personal and professional standards, his keenness of perception, his calm and judicial attitude, caused his counsel to be sought and valued above that of other men. He was a Fellow of the American Association for the Advancement of Science, a member of Sigma Xi, Phi Kappa Phi, Phi Zeta, the Society for Experimental Biology and Medicine, and local, state and national veterinary associations.

He gave himself without stint to the many problems confronting him. His sound learning and impartial fairness endeared him to his colleagues and to the many generations of students passing through his classes. Death closed too soon a most successful career of teaching, scholarship, and administration. We shall treasure the memory of his kindly and helpful personality.

Source: Faculty Records, p. 1684 Resolutions of the Trustees and Faculty of Cornell University, September, Nineteen Hundred And Thirty-One

Simon Henry Gage

May 20, 1851 — October 20, 1944

Simon Henry Gage was born at Crumhorn Lake, Otsego County, New York on May 20, 1851. In a prayer meeting that he attended as a youth he first heard of Cornell University from a clergyman who urged his young listeners to have nothing to do with “that godless institution.” Gage was not one to let such an indictment pass without a study of the facts. Convinced by his inquiries of the injustice of the charge, and persuaded that Cornell was the place for him, he matriculated in the fall of 1873—and for seventy-one fruitful years his place it turned out to be.

Gage’s enthusiastic interest in biology immediately attracted the attention of Professor Burt Green Wilder, whom he assisted throughout his undergraduate years. Upon receiving the degree of B.S. in 1877 he was appointed Instructor in Microscopy and Practical Physiology. His subsequent titles were: Assistant Professor of Physiology and Lecturer in Microscopical Technology, 1881; Associate Professor (as above), 1889; Associate Professor of Anatomy, Histology, and Embryology, 1895; Professor of Microscopy, Histology, and Embryology, 1896; Professor of Histology and Embryology, 1902.

In 1896 he organized in the newly established Veterinary College an independent department of histology and embryology which in 1902 was transferred to Stimson Hall, then the new home of the Ithaca division of the Medical College. He retired from teaching in 1908 on a pension provided by the Carnegie Foundation for the Advancement of Teaching, in order to devote his whole time to the research which he prosecuted with vigor and enthusiasm until his last illness. His final visit to his laboratory was made only ten days before his death.

In 1893 he joined Professor Comstock in establishing the Comstock Publishing Company, which, through the bequest of Comstock and the gift of Gage, became the property of Cornell in 1931 when Professor Gage became president of the company, an office he held until his death. The profits of this enterprise continue to be one of the major sources of the support of the Cornell University Press.

Professor Gage was ever most generous to the university of his affections. In 1915 he and his son, Henry Phelps Gage, presented a fund in memory of his first wife, Susanna Phelps Gage, herself an able biologist. This endowment, now amounting to almost \$7000, will eventually be used for a room in a new dormitory for women. Three years later they established the Susanna Phelps Gage Endowment of \$10,000 for research in Physics. These larger gifts were supplemented by many others, including valuable books, sets of periodicals, and apparatus.

In 1921-22 Professor Gage was a faculty member of the University Board of Trustees. From 1923-40 he was Librarian ("Responsible Librarian," he chose to call himself) of the Van Cleef Memorial Library, now the library of the Department of Zoology. It was, indeed, Professor Gage who persuaded Mynderse Van Cleef to found this memorial to his brother, Charles Edward Van Cleef.

Professor Gage was a prolific contributor to professional journals. Microscopy was perhaps his dominant interest, stemming probably from his earlier interest in photography, but he also made notable additions to our knowledge of the biology of the lamprey in a series of fundamental researches published over a period of fifty years. The Southern Brook Lamprey has been named in his honor *Ichthyomyzpn Gagei*. His studies of the fat particles of the blood and of the rate at which fat is deposited in the tissues are also noteworthy.

Of his books the most characteristic is "The Microscope," first published in 1881 and probably the most widely used American text on the subject. The seventeenth edition appeared on his ninetieth birthday in 1941. With Burt G. Wilder he was co-author of "Anatomical Technology," 1882; with B. F. Kingsbury of "Vertebrate Histology," 1899; and with his son, Henry Phelps Gage, of "Optic Projection," 1914. In 1893, he and John Henry Comstock edited "The Wilder Quarter-Century Book," said to be the first American collection of researches published in honor of a university teacher. Shortly before his death he completed a history of the Comstock Publishing Company, and he leaves the nearly completed manuscript of a history of microscopy in America, a work which is being edited for publication by his wife, Clara Starrett Gage, and his son, Henry Phelps Gage.

Gage was long a member of the American Society of Zoologists, one of the original members of the American Association of Anatomists, and a member of the first board of editors of the American Journal of Anatomy, which he assisted in establishing. He was also a Fellow of the American Association for the Advancement of Science and twice presided over the meetings of its Zoological Section; a member of the New York State Science Teachers Association (President, 1896), American Microscopical Society (President, 1895-96, 1906), American Society of Naturalists, Royal Society of Arts, Philadelphia Academy of Natural Sciences, American Fisheries Society, Optical Society of America, and the National Association for the Prevention of Tuberculosis.

He was a man whom his students and colleagues delighted to honor. At his sixty-fifth birthday dinner there was announced the establishment of a fund in support of the Simon Henry Gage Fellowship in Animal Biology. By his ninetieth birthday this had reached the sum of \$10,000 and the first fellow was then appointed. His seventy-fifth birthday was observed by a dinner given in his honor by the American Association of Anatomists in New Haven, and his eightieth by a dinner given in Philadelphia by the Advisory Board of the Wistar Institute of Anatomy, of

which he had been a member since its organization in 1905; and on this occasion he was presented with a copy of volume 48 of the American Journal of Anatomy, which was dedicated to him.

But no mere statement of the positions he occupied, or of the honors accorded him can convey the true qualities of the man; to know these was the high privilege only of those who worked near and with him. He was a lover of life, and with him life and work meant the same thing. He had an infectious enthusiasm for work which age never affected. To the end he lived in the future; no one was ever readier to discard the outworn or outmoded, to adopt what was new if it were better than the old. In the classroom and out he was a great teacher, for his whole life was a pattern that provoked emulation, exemplifying as it did the best traditions of the profession. His laboratory was a magnet that drew a constant stream of inquirers and of those who felt the need of refreshment and inspiration. His sincere and youthful enthusiasm, his fresh and forward-looking point of view, his fine sense of humor, his hearty, refreshing laugh, and his kindly interest in men and their problems struck a responsive chord in all with whom he came in contact. His many friends and this University that he loved so well and served so long and devotedly are the richer for his life; as with all great teachers, his influence will continue to be felt for generations.

Perry Webster Gilbert

December 1, 1912 — October 15, 2000

At the time of his death, Perry Gilbert had been continuously affiliated with Cornell for 64 years. He was an inspiring teacher and lecturer, an internationally recognized expert on sharks, a gifted administrator, and a master of public relations. His death brought to an end a long career, which saw him achieve distinction in each of these areas.

Perry was born and brought up in North Branford, Connecticut, the only son of Scott and Hester Gilbert. After graduation from high school he entered Dartmouth College in 1930. There he formed an enduring friendship with Harlan Banks, his college roommate who was eventually to become the Liberty Hyde Bailey Professor of Paleobotany at Cornell. At Dartmouth, Perry came under the tutelage of Professors William Ballard and Norman Arnold, who sparked and nurtured his interest in their respective disciplines of Vertebrate Anatomy, and Histology/Embryology. After two postgraduate years as an Instructor at Dartmouth, Perry began a program of graduate study at Cornell in 1936 with mammalogist William J. Hamilton as chairman of his committee. With his doctorate in hand in 1940, and an unexpected vacancy at Cornell as the new school year began, Perry was immediately hired as an Instructor in the Department of Zoology by Chairman Benjamin Young. His principal duties from the beginning involved teaching the course in Comparative Vertebrate Anatomy. This course had a large enrollment because, along with Organic Chemistry, it was required for entrance to most Medical Schools. Perry was to continue teaching this course with dedication and distinction, often in Summer Session as well as in the Fall and Spring terms until 1967. The constant need for Teaching Assistants in this popular course provided his graduate students with a role model and the first-hand experience they needed. Most of his graduate students became college teachers. Perry was tenured as Associate Professor in 1946, and became Professor of Zoology in 1952. With the establishment of the Division of Biological Sciences and the elimination of departmental designations, Perry elected to affiliate with the then Section, now Department of Neurobiology and Behavior, and assumed the title of Professor of that specialty.

Soon after arriving at Cornell, Perry met his future wife, Claire Rachel Kelly, and they were married in 1938, with Harlan Banks, who was also here as a graduate student, serving as Perry's Best Man at the wedding. The young couple began married life on Linden Avenue in Collegetown, later moving to a farm on the Coddington Road, and ultimately settling down in a spacious home on the Parkway. Claire and Perry's union was blessed with eight children: five sons and three daughters. In addition to being a busy, caring mother, serving as an always

gracious hostess, and enthusiastically performing all other duties of a faculty wife, Claire served as Perry's "keel and rudder" in his endeavors, editing or often co-authoring his many publications.

As a teacher, Perry was noted for the excellence and clarity of his lectures; his prowess at the chalkboard was legendary for his ability to produce symmetrical drawings using both hands simultaneously. As thesis advisor to his graduate students, he was a rigorous and demanding mentor, but always kind and helpful. His Ph.D. students, well prepared, entered the teaching profession imbued with a love for books and academic excellence as well as compassion for students. One of Perry's outstanding attributes was introducing his graduate students and junior colleagues to his wide circle of professional friends, both at scientific meetings and in his home. He enjoyed a good story and could tell one as well.

In the 1950s, the Gilberts bought a farmhouse in the Danby Hills surrounded by considerable acreage with a view of the valley. Through the years, they improved the property, known as "The Nob," modernized the house, and built a deep pond. It was a seasonal vacation retreat for the family, as well as the site of many social gatherings of Perry's colleagues and students, and his and Claire's many friends. The property remains in the family, much of it enrolled in the Finger Lakes Land Trust.

As a scientific investigator, Perry ranged widely. His doctoral dissertation (1940) had dealt with the anatomy of burrowing squirrels, the woodchuck in particular. On his first sabbatical leave (1949), he was appointed as a Carnegie Fellow in Embryology, working with Dr. George Corner in Baltimore. Several publications resulted, among them a beautifully illustrated monograph on the origin and development of the human extrinsic eye muscles. A subsequent sabbatical (1957) found him studying sharks at the Lerner Marine Laboratory on Bimini, with a Guggenheim Fellowship. In 1963, he was continuing shark studies with a fellowship at the Scripps Institution of Oceanography, La Jolla, California. When Cornell established the Isles of Shoals Marine Program in 1966 on Star Island in the Gulf of Maine, Perry was one of the founding faculty. He continued for the next several years as a Visiting Lecturer on the anatomy and behavior of sharks and rays.

By 1967, various aspects of the biology of sharks had become the focus of his future research endeavors. His reputation for expertise in this subject attracted the interest and support of governmental funding agencies, notably the Office of Naval Research, which encouraged and supported his experimental studies of ways to protect people in the water (downed aviators and shipwreck survivors) against attacks by sharks. Building on his interest in these matters, he established the National Shark Attack File, which focused attention on experiences of many survivors of encounters with aggressive sharks. During these years, he traveled widely to coasts of the world where

sharks were a problem and he served as editor of two authoritative publications: *Sharks and Survival* (1963), and *Sharks, Skates, and Rays* (1967).

In the 1960s, Perry carried on research as a Visiting Fellow at the Cape Haze Marine Laboratory in Placida, Florida, which was then under the direction of Eugenie Clark. He continued this relationship after the laboratory's move to Siesta Key and in 1967, while on leave from Cornell, he was invited and agreed to become its Director. Under Perry's leadership, the name of the laboratory was changed to the Mote Marine Laboratory, in recognition of the generous financial support provided by William R. Mote and the Mote family. The Gilberts moved from Ithaca to Sarasota, and through an ingenious arrangement, Perry retained his Cornell Professorship, becoming in essence a Professor in absentia. Each year he spent some weeks in Ithaca, giving lectures and consulting with students and colleagues. The university gained from policies established at the Mote Lab providing no-cost access to research equipment and teaching facilities for Cornell faculty and students. Perry, of course, treasured the distinction of his Cornell title, which also lent prestige to the Mote laboratory.

Under Perry's leadership, the laboratory flourished and became known as a center of excellence in a broad variety of disciplines in marine research. During these years, he demonstrated his rare talents as an administrator, in addition to continuing his own active research. In the mid-1970s, it became obvious that for a variety of reasons, chiefly resulting from problems of coastal erosion at the Siesta Key site, the Laboratory needed to be moved once again. Perry directed the planning, design, local politicking, and fund-raising leading to the construction of an elaborate new facility on City Island in Sarasota. Following the laboratory's successful move to this vastly superior location in 1978, Perry retired as Director and at the same time he was also named Professor of Neurobiology and Behavior, Emeritus, at Cornell.

Throughout his retirement, he continued his work at the laboratory as Mote Senior Scientist and as a member of its Board of Trustees. Upon the occasion of his retirement from Cornell, his friends honored him with a symposium of distinguished speakers, a banquet, and the establishment of an endowed "Perry Gilbert Lectureship in Comparative Anatomy and Behavior". Likewise at the Mote Laboratory, in recognition of his devoted service and successful leadership, the new Education Building was named in his honor. For the continuation of studies he had initiated, the Mote Marine Laboratory established an endowment for the "Perry W. Gilbert Chair in Shark Research". Perry is survived by his wife, Claire; and seven of his eight children.

Kraig Adler, John Anderson, Samuel Leonard, Howard Evans

Grant Sherman Hopkins

September 23, 1865 — December 21, 1952

Dr. Grant Sherman Hopkins, the last member of the original faculty of the New York State Veterinary College, passed away December 21, 1952. He is survived by his wife, Ann Ottaway Hopkins and daughter, Ellen Hopkins Walker of Pittsburgh, Pa. and a sister Katherine Hopkins of Westfield, New York. A number of nieces and nephews survived him. He was the son of Ezra and Catharine Johnson Hopkins and was born in Westfield, New York, September 23, 1865.

Graduating from Westfield High School, he won a Chautauqua Scholarship and entered Cornell University in 1885 and received his B.S. degree in 1889. While an undergraduate, he started his teaching career as student assistant under Dr. Burt G. Wilder in the Department of Zoology and spent a summer at Woods Hole. In 1890, he entered the Graduate School and received the appointment of instructor with Professor Simon Henry Gage, in the Department of Embryology and Histology. He received his D. Sc. degree in 1893.

At the opening of the New York State Veterinary College, he continued with Professor Gage, teaching anatomy and anatomical methods. He matriculated in the Veterinary College and received the D.V.M. degree in 1900. His faculty status in the Veterinary College made him ineligible for the Horace K. White prize, an award given to the one having the highest scholastic standing in his class.

In 1903, he was appointed full professor in veterinary anatomy and became head of the Department of Anatomy on the original veterinary faculty. This appointment he held until his retirement in 1934, thus completing 46 years on the teaching staff of Cornell University.

His sound theory in pedagogy “that the younger student should receive his instruction from the most experienced teacher” resulted in the fact, that he personally taught every freshman class that entered the Veterinary College, until the time of his retirement.

Spare time from his heavy teaching load was taken up by research, and his notable contributions to the field of science is substantiated by the following bibliography:

1. Preparation and Embedding of the Embryo of the Chick.
Hopkins and Gage, Amer. Soc. Microscopy—1890.
2. Structure of the Stomach of the *Amia calva*.
Amer. Soc. Microscopy—1890.

3. The Lymphatics and Enteric Epithelium of *Amia calva*.
Wilder Quarter Century book—1893.
4. Enteron of American Ganoids.
Journal of Morphology—1895. Thesis for D. Sc. degree.
5. Heart of Some Lungless Salamanders.
American Naturalist—1896.
6. Apparatus for Illustrating the Circulation of Lymph.
Amer. Microscopic Soc. Proc.—1896.
7. Relation of the Ligamentum Nuchae to the 1st Cervical Vertebrae—
1899.
8. Notes on the Variation in Origin of the Internal Carotid Artery of the
Horse. Amer. Anat. Soc.—1902.
9. Embryology of the Egg.
Animal Food and Diseases—1905.
10. Requirements for a Veterinary Education Abroad. 1912.
11. Directions for the Dissection and Study of the Cranial Nerves and Blood
Vessels of the Horse. 1913—revised 1922, 1937.
12. A Guide to the Dissection of the Blood Vessels and Nerves of the Pec-
toral and Pelvic Limbs of the Horse. 1914, revised 1925, 1937.
13. Review—Lymphatic Glands in Meat-producing Animals.
Paul Godbille, Vet. Med. Assoc. Jour. 1916.
14. Innervation of the muscle, Retractor Oculi.
Anat. Rec—1916.
15. Paranasal or Facial Sinuses of Sheep.—1918.
16. Atlas of the Viscera in Situ of the Dairy Cow.—1918.
17. Review—The Anatomy of the Domestic Fowl.
B. F. Kaup, Cornell Veterinarian—1919.
18. Establishment and Growth of the New York State Veterinary College—
1919.
19. A Guide to the Dissection of the Thoracic and Abdominal Viscera of
the Horse.—1930. Revised to include the Cow, 1942.
20. Obituary—Dr. P. A. Fish—1931.
21. Obituary—Dr. V. A. Moore—1931.
22. Address—Veterinary Conferences—1932.
23. Response to Retirement—1934.
24. The Correlation of Anatomy and Epidural Anesthesia of Domestic Animals. Vet. College report, 1934-35.

At the time of the retirement of Professor Simon Henry Gage in 1908, a few of his colleagues organized a committee consisting of Drs. V. A. Moore, P. A. Fish, B. F. Kingsbury, A. T. Kerr and G. S. Hopkins to secure a permanent

memorial. This committee in 1916, the 65th birthday of Professor Gage, had made possible the beginning of the Gage Fellowship by presenting the sum of \$2,778.98 to the Treasurer of the University.

In 1940 the committee now consisting of only two of its original members, Drs. Hopkins and Kingsbury, completed its work. On May 20, 1941, the occasion of the 90th birthday of Prof. Gage, the sum of \$10,030.30 was given to the University for the Gage Fellowship Fund.

For several years Dr. Hopkins was Chairman of the Veterinary Flower Library and was largely responsible for the expenditures made for books and periodicals. The growth and usefulness of the library, built upon the policy he established, has resulted in one of the best veterinary libraries in this country.

As a teacher, Dr. Hopkins was most thorough and painstaking. His knowledge of anatomy and its basic needs in the practice of veterinary medicine, his style of presenting the facts and the interest he took in each individual, won for him a lasting impression in both the minds and hearts of all students whose good fortune it was to have been in his classes.

Not only was he interested in the scholastic life of the student, but he had a personal and human interest in all of them. Thus, many came to him for advice and counsel.

In his long period of service to the University, he was a member of the following societies and fraternities: Sigma Xi, Phi Kappa Phi, Sigma Kappa, American Anatomical Society, American Veterinary Medical Association, New York State Veterinary Medical Association and the Statler Club.

He served one term on the Board of the Memorial Hospital. He was also a member of the Presbyterian Church and was for several years chairman of the local district.

As a member of the original faculty of the Veterinary College, he contributed much to the shaping of its policies and the foundation of veterinary medicine in New York State.

His research and texts on veterinary anatomy added much to the standing the College has in the field of veterinary medicine in the United States and justified his selection by Dr. Law to the original faculty of the Veterinary College.

A. G. Danks, M. E. Miller, Earl Sunderville

Abram Tucker Kerr

January 7, 1873 — August 15, 1938

After years of faithful service to Cornell University, Abram Tucker Kerr died on August 15, 1938. He was born in Buffalo, New York, on January 7, 1873. There he attended the public schools. After obtaining his B.S. at Cornell in 1895 he returned to Buffalo as a medical student and received the M.D. degree from the University of Buffalo in 1897. While studying medicine he was student assistant in histology and pathology and in 1898-1900 was acting and adjunct professor of Anatomy in the University of Buffalo. He studied at Göttingen in 1899 and at Johns Hopkins in 1899-1900. He was called to Cornell in 1900 as assistant professor of Anatomy and became professor of that subject in 1904. He became the administrative head of the Ithaca division of the Medical College in 1902 and held that office for thirty-six years.

In addition to his heavy load of teaching and administrative duties he found time to serve the University whenever the need arose. No sacrifice of time or effort was too great when the interests of Cornell were involved. Older members of the faculty will recall with feeling his unselfish services in one of the greatest emergencies this University has ever been called upon to face—the tragic typhoid epidemic in 1903. They will recall, too, his calm, efficient handling of the crisis that came with the influenza epidemic in 1918. Dr. Kerr played a leading part in the reorganization of the Cornell Infirmary; to him its staff turned constantly for advice. He acted as chairman of the Trustees' Committee on Hygiene and Sanitation from its formation in 1909 to his death. He organized the health services of Cornell and served as acting professor of Hygiene in 1920-21 and again in 1935-36. His organizing capacities were called upon to help solve the traffic problem on the campus, which had become acute with the rapid increase in the use of the automobile.

He was deeply interested in the health problems of the City of Ithaca and served from 1911 to 1912 as president and subsequently for several terms as vice-president of the board of trustees of the Ithaca Memorial Hospital. By his colleagues in the medical profession he was made president of the Tompkins County Medical Society in 1910. As a member of the executive committee of the American Association of Anatomists from 1910-1914, and as a contributor to standard textbooks on Anatomy, he played his part in the development of his chosen field.

But in spite of his wide interests and varied activities the Ithaca Division of the Medical College, which he served devotedly for thirty-eight years, remained closest to his heart and to it he devoted his best efforts. He survived its dissolution a little more than two months.

Benjamin Freeman Kingsbury

November 18, 1872 — July 8, 1946

Benjamin Freeman Kingsbury was born at St. Charles, Missouri on November 18, 1872, the son of Benjamin Barnes and Sarah Nichols Freeman Kingsbury. A few years thereafter his parents moved to Defiance, Ohio, where he prepared for college.

He received the degree of Bachelor of Arts from Buchtel College, now the Municipal University of Akron, in 1893. In the fall of the same year he came to Cornell for graduate work under the direction of Professors Burt Green Wilder and Simon Henry Gage

He received the degree of Master of Science in 1894. His thesis for the Master's degree, "The Histological Structure of the Enteron of *Necturus maculatus*," was awarded first prize in animal histology by the American Microscopical Society and was published in the proceedings of the Society for 1894. He was appointed University Graduate Scholar in Physiology and Vertebrate Zoology in 1894 and in June, 1895, received the degree of Doctor of Philosophy. His doctoral dissertation, "The Brain of *Necturus maculatus*," has become one of the minor classics of neurology. In 1895-96 he held the Goldwin Smith Fellowship in Physiology and Vertebrae Zoology.

When in 1896 the Department of Histology was organized by the late Professor Gage in the newly established College of Veterinary Medicine, Dr. Kingsbury was appointed Instructor in Microscopical Methods, Histology and Embryology and three years later was promoted to an assistant professorship. In 1902 he was made Assistant Professor of Physiology in the Ithaca division of the Medical College. From 1902 to 1904 he studied at the University of Freiburg, i. B., where he received the degree of Doctor of Medicine in 1904.

On the retirement of the late Professor Gage in 1908, Dr. Kingsbury was chosen to succeed him as Professor and Head of the Department of Histology and Embryology.

After his retirement in 1941 Professor Kingsbury was elected Guest Professor of Anatomy in the Medical School of the University of North Carolina. He died in Chapel Hill on July 8, 1946. He is survived by his wife, Janet Williamson Kingsbury, and four children by a former marriage.

Professor Kingsbury served as vice-president of the American Association of Anatomists in 1932-33 and was a member of a number of other scientific and honorary societies. He enjoyed international distinction for his researches in neurology, histology and embryology. He was the author of numerous contributions to scientific

journals, and the following books: *Vertebrate Histology* (with Professor S. H. Gage), 1900; *Laboratory Directions in Pharmacology*, 1905; *Laboratory Directions in Physiology*, 1906; *Laboratory Directions in Histology and Histological technique* 1910, (numerous editions); and *Histological Technique* (with Professor O. A. Johannsen), 1927. He was elected a member of the Institute Internationale d'Embryologie and in 1934 was awarded the degree of Doctor of Science *honoris causa* by Bowdoin College.

Professor Kingsbury was retiring, even shy; only those closest to him could appreciate the real qualities of the man, but even those not so privileged could not fail to see that his was a nature rare in any walk of life.

His achievements as an investigator were outstanding, but it is as a teacher of superlative qualities that he will be remembered by his students, to whose interests he was ever unselfishly devoted. He taught naturally, simply, and lucidly, the effortlessness of his performance concealing the thoughtful preparation for it. Nor was his teaching confined to the classroom and laboratory; the whole conduct of his life was an inspiring example. His students revere his memory, and in them his profound and wholesome influence will live on.

H. B. Adelman, W. N. Barnard, B. P. Young

Doctor James Law

Professor of Veterinary Medicine and Surgery

February 13, 1838 — May 10, 1921

The career of James Law embraced the first fifty years of the history of Cornell University. He was a member of the first Faculty which began its work in October, 1868, and until his death, May 10, 1921, either as active or emeritus professor his services to the University and his adopted country were continuous and invaluable.

It was significant that in the young University almost the first professorship created was of a subject that had at that time no academic standing in America, and the value of which to purely scientific studies and to the welfare of the State was scarcely dreamed of. To Ezra Cornell was due the recognition of that subject; and to Andrew White was due the recognition of the equal value of all subjects of academic study.

No choice could have been happier from these two points of view. The new professor had been trained in the best schools of Europe under the most famous teachers of their day, and was himself of such personal dignity of character as to impress all who met him with the conviction that he was of the highest type of scholar and man.

Although his chair was but one of many in the new university, Dr. Law by his own broad knowledge practically founded a course in Veterinary Medicine, and furnished the country with graduates who later organized the National Control of Animal Diseases.

It was the broad knowledge of every branch of his subject and his practical application of it to the problems of animal industry in the United States that won for him and the University, which he served so faithfully, the recognition by the State of New York and the Federal Government of his accomplishments; and which led to the creation, in 1894, of the New York State Veterinary College, the first state veterinary college in America.

During the interval between 1868 and 1894, Dr. Law had, almost single-handed, accomplished a revolution in the conception of the knowledge and practice of Veterinary Medicine in the United States, and had raised it to a rank coordinate with human medicine. His persistent effort in raising the standard of veterinary education has found expression not only in the institution of which he was head, but also in the veterinary colleges of America.

He was a great teacher because he was a great scholar, and he pursued his unremitting labors almost to the last hour of his long and honored life. He won the affection and respect of all who knew him, and the University owes him for his splendid example of unselfish devotion, gratitude which cannot be expressed in words.

Source: Fac. Rec, p. 1129 Joint Resolutions Adopted by The Trustees and Faculty of Cornell University, June, Nineteen Hundred and Twenty-One

Chronology

Professor of Veterinary Medicine and Surgery, 1868 – 1896

Professor of the Principles and Practice of Veterinary Medicine, Veterinary Science, and Veterinary Therapeutics, 1896 – 1908

Director of The New York State Veterinary College and Dean of Faculty of Veterinary Medicine, 1896 – 1908

Emeritus Professor of The Principles and Practice of Veterinary Medicine, 1908 – 1921

Malcolm E. Miller

August 1, 1909 — April 18, 1960

Malcolm E. Miller, born on a dairy farm in Durrell, Pennsylvania, received his high school education at Towanda, Pennsylvania (1928), his preveterinary training at Pennsylvania State University (1930), and the degree of Doctor of Veterinary Medicine (1934), the Master's degree (1936), and the Doctor of Philosophy degree (1940) at Cornell University. He was appointed in 1934 to teach in the Department of Anatomy of the Veterinary College. He served continuously until the time of his death April 18, 1960. In the Department of Veterinary Anatomy, he was the student assistant from 1932 to 1934, instructor from 1934 to 1940, Assistant Professor from 1940 to 1945, Associate Professor from 1945 to 1947, and Professor and Head of the Department from 1947 to 1960. He was Secretary of the Veterinary College from 1948 to 1960. In addition he served on many important committees of the College Faculty.

The international reputation which Professor Miller enjoyed was earned largely through his contribution to the advancement of the teaching of gross anatomy, particularly of the dog. His thesis for the Ph.D. degree in 1940 was entitled "The Dissection and Study of the Trunk of the Dog." His *Guide to the Dissection of the Dog*, published in 1947, is in its third edition and has been widely used in the veterinary anatomy laboratories of the English-speaking colleges. In 1946 Dr. Miller began the preparation of a textbook on the anatomy of the dog. He worked long and hard on this project, which was interrupted by frequent illnesses. Only a few weeks before he was hospitalized for his terminal illness, the contract was signed with the publisher for *The Anatomy of the Dog*. This monumental work of some 750 pages containing over 350 illustrations is to be published posthumously over his name. It is indeed most unfortunate that he was not spared to see the culmination of his efforts.

Former students will always remember Professor Miller not only for the quality of his teaching but also for his interest in their problems both in and out of the classroom. His classes consisted of students who were in their first year of the professional curriculum where his kindness, patience, and consideration were particularly valuable to those so often discouraged and lost in a new field. He carried on the philosophy of Professor Hopkins of the original Faculty in veterinary anatomy that all students have the ability to do the work but that some require more assistance and guidance. He was definitely a leader, never a driver.

He was partially incapacitated by illness in 1937, never completely recovered, and had many serious operations which provided only temporary relief. It was an inspiration to his students and to his colleagues that he was never

depressed by his unfortunate circumstances. He never expected others to share his burdens. He gave of himself to the best of his capacity and asked no quarter of any man. He was a member of many professional and scientific groups including Alpha Zeta, Phi Zeta, Phi Kappa Phi, Sigma Xi, Omega Tau Sigma, Southern Tier Veterinary Medical Society, New York State Veterinary Medical Society, American Veterinary Medical Association, American Association of Anatomists, American Society of Zoologists, American Association of Veterinary Anatomists, of which he was twice elected president, and the World Association of Veterinary Anatomists, on whose nomenclature committee he served. He served also on the nomenclature committee of the American Association of Veterinary Anatomists for many years.

He was active in community affairs in Danby where he was one of the leaders responsible for the Danby Federated Church and served on many important committees of the church. He was a member of the board of trustees, serving as president during the last year. He was frequently called as a consultant during the formation of other church federations. He gave unselfishly of his time and counsel in many worthwhile community projects. He is survived by his wife, Mary (Cornell '35) ; a son, Jesse (Cornell C.E. '60) ; and two daughters, Faith (Cornell '62) and Sharon. He gave as fully to his avocation of hunting and gardening, time and health permitting, as he did to his other interests. Over the years many a colleague and student have shared the pleasures of a day afield with Dr. Miller and his dog. Hunting companions were always welcome.

Of his many virtues the most admirable was probably the superb courage with which he endured physical infirmity for 23 years. His was a philosophy of optimism closely entwined with realism. This was reflected in his daily contacts with his fellow men and the goals which he set for living.

Gordon Danks, R. E. Habel, E. P. Leonard

Veranus Alva Moore

Dean of the N. Y. State Veterinary College

April 13, 1859 — February 11, 1931

The University Faculty records with deep sorrow the death on February 11, 1931 of Veranus Alva Moore, late dean of the N. Y. State Veterinary College.

Born on April 13, 1859, he entered Cornell University in 1883 and graduated with the degree of B.S., in 1887. In the spring of his senior year, he entered the Bureau of Animal Industry of the Federal Department of Agriculture where he served nine years, the last one as chief of the Division of Animal Pathology. While in Washington he studied medicine and received the M. D. degree in 1890.

At the opening of the Veterinary College in 1896, Dr. Moore was appointed Professor of Pathology, Bacteriology and Meat Inspection, a position which he held continuously until his retirement. In 1908 he succeeded Dr. James Law as Dean of the College and as such served for twenty-one years. From 1898-1910 he was Professor of Pathology and Bacteriology in the Ithaca division of the Medical College.

Primarily interested in Veterinary education at a time when the general public little appreciated the need and importance of trained veterinarians, Dr. Moore did an inestimable service by instilling into the public consciousness an appreciation of the vast responsibilities resting upon a sound scientific veterinary service in the promotion of public health.

His training as a bacteriologist and pathologist gave him a keen insight into the close correlation between many of the diseases common to animals and man, and ideally fitted him to advocate public health measures of far reaching importance to both State and Nation. He likewise rendered an incalculable service to the livestock owners of the country by his research and his sound advice.

He published many special papers, gave numerous addresses, and prepared books in his field. A teacher for more than thirty years, his influence upon successive generations of students was profound and he inspired them with something of his own high ideals for their chosen profession. His quiet dignity and exceptional ability won for him the highest admiration and affection of all his colleagues.

In a wider circle of his relations, the same high appreciation of his character and abilities is apparent. His successive appointments as delegate of the United States to the International Veterinary Conference in Budapest; Member

of the International Commission for the control of tuberculosis in cattle; member of the Commission for revising the Federal Meat Inspection regulations; an Adviser to the Surgeon General's Office in the World War; member of the White House Conference on Child Health and Protection, all alike are indicative of the confidence felt by public officials in the wisdom of his counsels and his single minded desire to promote the public well-being. In addition he gave generously of his time to the local Board of Health, Board of Education, Memorial Hospital, and other organizations.

The bestowal of honorary degrees upon Dr. Moore by two great universities and his recent election to membership in the Royal College of Veterinary Surgeons in London are well merited academic honors.

A successful and sympathetic teacher, just administrator, wise counselor, and steadfast friend is gone, but the memory of his consecrated life will long be cherished as an incentive and a benediction.

Source: Fac. Rec. p. 1682 Resolutions of the Trustees and Faculty of Cornell University, September, Nineteen Hundred And Thirty-One

Retired: June 1929 (Fac. Rec. p. 1594, 1682)

James Wenceslaus Papez

August 18, 1883 — April 13, 1958

James Wenceslaus Papez, Emeritus Professor of Anatomy, died on April 13, 1958, in Columbus, Ohio, of a heart attack. The third in a family of eleven, he was born in Glencoe, McLeod County, Minnesota. He received his early education in the township of Brookfield and his college education at the University of Minnesota. After graduation in 1908, he entered the Medical School where he earned the M. D. degree in 1911. At Minnesota he became interested in the studies of the nervous system by the great comparative neuroanatomist, J. B. Johnston, and subsequently elected neurology and academic medicine as a career. Upon graduating from the Medical School, he joined the faculty of the Atlanta College of Physicians and Surgeons as Associate Professor of Anatomy; and then later (1914-20) as Professor of Anatomy, Histology and Embryology at Emory University Medical School. In 1920, he came to the Ithaca division of the Cornell Medical School as Assistant Professor of Anatomy and later was made Professor. When the Ithaca Division was dissolved, in 1939, he remained on the campus as Professor of Anatomy in the Department of Zoology, where he taught the following courses: Human Growth and Development, Physical Anthropology, Cerebral Mechanisms, Gross Human Dissection, and Comparative Neuroanatomy. He retired in 1951, after 31 years at Cornell, and left Ithaca to become Director for the State of Ohio of the newly established Laboratory for Biological Research at the Columbus State Hospital. Here he continued his productive works on the human and vertebrate brain.

At Cornell he served as Secretary and Curator of the Cornell Brain Association (also known as the Burt Green Wilder Brain Collection) whose officers included Professors B. F. Kingsbury, A. T. Kerr and H. D. Reed. The collection of human brains, housed in Stimson Hall, was begun by Doctor Wilder (1841-1925), first professor of Zoology at the opening of Cornell, who advocated . . . “the need of studying the brains of educated persons rather than those of the ignorant, criminal or insane, in order to determine their weight, form and fissural pattern, the correlation with bodily and mental powers of various kinds and degrees, and the influence of sex, age, and inheritance . . .”. In his early days at Cornell, Doctor Papez devoted most of his time to the accumulation, care, and study of the brains bequeathed by former Cornellians and others to the collection. He published a number of morphological studies on these brains including one on the brain of Doctor Wilder.

It is important and interesting in remembering Doctor Papez to remark that the first area of research interest in biology at Cornell was Comparative Neurology. At the suggestion of Professor Agassiz of Harvard University, who

served as visiting lecturer in Zoology in the early days of Cornell, Doctor Wilder, his former student, undertook the collection and study of vertebrate brains. Neuroanatomical research and teaching has remained to this time a part of the curriculum and research in biology; and the fact that Cornell is known today as a center of neuroanatomical work is due in large part to the efforts of Doctor Papez.

Professor Papez published approximately one-hundred works on the structure of the brain of vertebrates including man. He published a well-known and still widely-used book entitled "Comparative Neurology" and another, coauthored by Dr. W. Haymaker, "The Hypothalamus, Anatomic, Functional and Clinical Aspects." Perhaps his greatest single contribution, and certainly one of the most important publications from the Ithaca Division of Cornell Medical School, was his paper entitled "A Proposed Mechanism of Emotion" which appeared in the Archives of Neurology and Psychiatry in 1937. This paper served as the foundation for much of subsequent psychobiological experiments on emotion and for the elucidation of many clinical observations on the human, particularly after frontal lobotomy. It is to be regretted that many scholars missed the importance of this work until many years later and it is only in the last few years that it has attracted the attention it deserved. John F. Fulton, eminent medical historian and Emeritus Professor of Physiology at Yale, wrote as follows in his recent book, "Frontal Lobotomy and Affective Behavior", concerning the significance of this contribution: "At the time of its appearance it seemed to many to be highly speculative, for Dr. Papez was able to adduce little in the way of positive experimental evidence for his view that 'the hypothalamus, the anterior thalamic nuclei, the gyrus cinguli, the hippocampus, and their interconnections constitute a harmonious mechanism which may elaborate the function of central emotion as well as participate in emotional expression*. This shrewd deduction has been richly vindicated by all the recent experimental work herein described, and his further comment that 'emotion is such an important function that its mechanism, whatever it is, should be placed on a structural basis' will no doubt become something of a classic in the history of neurology." And, Gerhardt von Bonin, in his "Essay on the Cerebral Cortex", commented that the emotional mechanism was first propounded by Papez "in a brilliant synthesis of many hitherto unrelated anatomical facts." Still other of his papers, particularly those on the basal ganglia and subthalamus, are at present among the standards of neuroanatomical works.

The literary efforts of Doctor Papez include also a number of published verses and a book of poems entitled "Fragments of Verse"; many of the poems were written to his wife, Mrs. B. Pearl Sowden Papez. Mrs. Papez, an artist, is responsible for all of the illustrations in his publications. She was his constant companion and assistant in his studies. They have three children and nine grandchildren.

Dr. Papez was of gentle and kindly disposition; he was admired and appreciated by his students with whom he spent many hours in conversation and instruction. His best teaching was in the laboratory in personal instruction.

In 1957, Doctor Papez was honored by the University of Minnesota with its Outstanding Achievement Award medal. During the Second World War, Dr. Papez served as a member of the Selective Service Board, N. Y. and was awarded a Congressional Medal of Selective Service. He was a member of the American Association of Anatomists, American Society of Physical Anthropologists, American Association for Advancement of Science, Association for Research in Nervous and Mental Diseases, American Neurological Association, American Anthropological Association, Human Genetics Society, Society of Biological Psychiatry, Alpha Epsilon Delta, Sigma Xi, and Phi Kappa Phi.

J. A. Dye, H. S. Liddell, Marcus Singer

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 Cornelian 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

Wolfgang O. Sack

March 17, 1928 — June 21, 2005

Most of his associates called him Wolf. He was born in Leipzig, Germany and grew up in eastern Germany and in Berlin. By the time he was six years old, in 1934, the Nazis were in control of the national government. In WWII, his entire class and their teacher were drafted as a home defense anti-aircraft unit. They were expected to continue schooling in the morning and drill on their gun in the afternoon. Near the end of the war, Wolf was running from the advancing Russians when he was shot in the leg, but he made it to the American lines.

In 1951, he immigrated to Canada. While he was selling nursery stock in Ontario, he found his way to Guelph, the site of the Ontario Veterinary College, founded in 1862, and the oldest living veterinary College in North America—the alma mater of Septimus Sisson, author of the first comprehensive textbook of Veterinary anatomy in English (1910). Unaware of this omen, he applied for admission and was accepted.

Wolf was well grounded in veterinary anatomy, first under John Ballantyne at Guelph, where he received the D.V.M. degree from the University of Toronto in 1957. After two years in a veterinary practice in Chicago, he returned to Guelph as an Assistant Professor and later, Associate Professor (1959-64). On leave from Guelph, he completed an embryological study of the pharynx of the dog under Professor Tom Grahame of the University of Edinburgh and received a Ph.D. degree in 1962. After his stay in Edinburgh, Wolf went to Giessen in the spring of 1962 and studied for six months under Professor August Schummer, of Nickel Schummer, and Seiferle, authors of the five-volume gold standard, *Lehrbuch der Anatomie der Haustiere*.

In 1964, Wolf was appointed Associate Professor of Veterinary Anatomy at Cornell, and he and his wife, Lorraine Brant Sack, and their two young sons, Christopher and Kevin, moved to Ithaca. When his boys were old enough to crew for him, Wolf enjoyed sailing his 26-foot sloop in races on Cayuga Lake. Much later, Kevin and his wife presented Wolf with a cherished grandson, Jacob, now seven.

Wolf was an enthusiastic musician, with a particular love of baroque and early classical music. Soon after coming to Ithaca, he built his own harpsichord. He sang regularly with several Cornell and Ithaca choirs. His main instrument was the recorder, with a special preference for the bass. He played for more than forty years with groups ranging from trios to octets and larger, thereby sharing much pleasure with many friends.

Wolf was a dedicated teacher, illustrating his lectures with diagrams and models and carefully labeled dissections sealed in museum jars. He worked constantly on the improvement of the large animal dissection guides for the course he taught. His efforts were much appreciated by his students, who often celebrated his birthday (on St. Patrick's Day) with embarrassing enthusiasm. His rare lapses into German usually went unnoticed, but he confused the German an (at) with English on, resulting in a startling invitation to "sit on the table."

Wolf's translation of volume II of Nickel, Schummer, and Seiferle: *The Viscera*, was a significant advance in anatomy for Anglo-Americans, and his first big project at Cornell. His work in writing and translation and his compulsion to get it straight, to do it right, account for his early association with the International Committee on Veterinary Anatomical Nomenclature. The committee was formed because the terms of position and direction in the human nomenclature are not applicable to quadrupeds or embryos, and many features of animals are absent in man. The committee consists of about 40 members, varying from year to year. They work in English, French, or German. Wolf served as an English-German and German-English interpreter in heated exchanges at meetings in 1960 in New York, 1961 in Vienna, 1963 in Hannover, 1965 in Giessen and Wiesbaden, and 1967 in Paris, where the first edition was finally hammered out.

His contributions to the nomenclature went far beyond interpretation. The nomenclature is in Latin and his editing of those Latin endings made the American committee members look far more erudite than they really are. He served on the Subcommittee for General Terms and Regions and Parts of the Body, the Subcommittee on the Skin and its Derivatives, and the Editorial Committee. He took over the neglected committee on Veterinary Embryological Nomenclature, reorganized it, and turned out a complete list of terms in record time.

Wolf was the author or co-author of 28 research publications on the anatomy of domestic animals, including embryology, vagal innervation of the stomach, abomasal displacement, blood vessels and nerves of the bovine abomasum and intestines, bones and nerves of the equine limbs, genital ducts, clinical anatomy of the equine hock, parasites of the equine visceral arteries, passive stay apparatus that enables the horse to rest while standing, function of the bovine cecum, surgical access to the joints of the limbs of the sheep and goat, and the equine hoof.

Books written or co-authored, or translated by Wolf include *Guide to the Dissection of the Horse*, *Anatomy of the Horse*, and *Essentials of Pig Anatomy*. He organized a team to produce the *Textbook of Veterinary Anatomy* by K.M. Dyce, Edinburgh; W.O. Sack, Cornell; and C.J.G. Wensing, Utrecht; 3rd ed. Philadelphia, Saunders, 2002. It has reached worldwide distribution in six languages. This is a concise successor to Sisson and Grossman's *The Anatomy of Domestic Animals*.

Wolf was a joiner; he belonged to the American Veterinary Medical Association, New York State Veterinary Medical Society, Royal College of Veterinary Surgeons (London), American Association of Anatomists, American Association of Veterinary Anatomists (President 1981), European Association of Veterinary Anatomists and the World Association of Veterinary Anatomists (Secretary-General 1983-91, President, 1991-95). He handled sales in the Western Hemisphere of the 316-page volume containing *Nomina Anatomica Veterinaria*, *Nomina Histologica Veterinaria*, and *Nomina Embryologica Veterinaria*.

Wolf served on several faculty committees of Cornell University and the College of Veterinary Medicine. He was promoted to Professor in 1973, and retired to emeritus status in 1991.

Abraham Bezuidenhout, Alan Dobson, Robert E. Habel

Jacob Gould Schurman

May 22, 1854 — August 12, 1942

The third president of Cornell University died in New York City last August in the eighty-ninth year of his age. Nearly three centuries earlier his Schurman ancestor had migrated from Holland, probably by way of France, to New Rochelle. Following the Revolution, Jacob's great-grandfather, William Schurman, a loyalist, removed to Prince Edward Island and there Jacob was born. After twelve years on a farm, two in a store, and one in a high school, he secured through a Canadian government scholarship two years at college and at the end gained a higher award, in a competition open to all Canadians under twenty-one years of age, which gave him three years of study in Great Britain. There he crowned his student career by winning, over a swarm of competitors, a Hibbert Travelling Fellowship open to any graduate of a British university. Thus he rounded out his preparation by two years of study on the continent before he returned at the age of twenty-six to Canada. The springs from which he drank deepest are identified by his dedication of an early book to James Martineau, "the ethical and religious helper of two generations," and by his tributes, one soon after his return, to Eduard Zeller as "the foremost thinker of modern Europe," and another, half a century later, to Kuno Fischer as "the most logical, the most lucid, and the most brilliant expositor I ever listened to, and the greatest of university orators."

Schurman's work after his apprentice years lay in three fields; as scholar and teacher, as educational leader and administrator, and as statesman and diplomat.

As teacher he excelled in the critical and sympathetic exposition of the work of others. One may apply to him his own characterization of Kuno Fischer, whose mind he said "was not of the creative order in the highest sense of that term, but his power of sympathetic understanding and appreciation and his gift of reproduction were marvelous. He was the expounder of other men's systems." This judgment is confirmed by the title of what Schurman doubtless planned to make his *magnum opus*, an *Examination of Kant's Critical Philosophy*, announced as late as 1896 but destined never to see the light.

The position he would have taken in that book, at least about ethics, was foreshadowed in his first publication, *Kantian Ethics and the Ethics of Evolution*, which was an outgrowth of his European studies. His conclusion was that neither the hedonistic system of Spencer nor "the empty abstraction formulated by Kant" could explain "the concrete facts of the moral world," but that "between them both lies the idea of humanity as foundation for morality."

On his return to Canada, Schurman taught for six years at Acadia and Dalhousie colleges and was then called to Cornell University to fill the chair of philosophy and Christian ethics which had just been endowed by Henry W. Sage, the wealthy and imperious chairman of the Board of Trustees. Sage and Schurman became friends as close as the difference of forty years in their ages and the wide diversity of their backgrounds would permit. From the start Schurman achieved such outstanding success as teacher and lecturer that four years after his appointment his patron endowed a School of Philosophy as a memorial to his wife, Susan Linn Sage, with Schurman as dean. When President Adams retired two years later Sage saw to it that his protege was selected as Adams' successor, a judgment which the ensuing twenty-eight years was amply to justify.

Schurman came to the presidency of Cornell University with an intimate knowledge of the institution, gathered during his six years as a member of its faculty, and was ready at once to take the helm. In several respects his career resembled that of the first president. Like White, he came to the office in his thirties and with the energy and confidence of youth and had a long term of service. Like White, he had at his elbow as co-worker and intimate friend an older man of wide business experience who was as devoted as himself to the University and a tower of strength in all matters financial. Like White, he was widely familiar with the institutions of higher learning at home and abroad. Like White, he interrupted his academic duties from time to time to undertake diplomatic service abroad. Over White however he had one enormous advantage: uninterrupted and abounding health.

With these qualifications Schurman in his inaugural address came out boldly for a radical change of university policy. He proposed to gear Cornell, as most beneficiaries of the Morrill Land Grant Act in other states were already geared, into the State system of higher education. Many in and out of the university were strongly against this proposal, but Sage, with the wisdom and tolerance of his years, urged: "Let the young man have his head," and Sage's word was law. Looking back over the intervening half-century one may doubt whether any other course would have brought as much gain to Cornell or to the State and Nation. The annual income of the university has increased since 1892 by more than ten million dollars including contributions from the State, which have risen from nothing to more than three millions. Three-eighths of Cornell's income now comes from State and Federal appropriations.

The success of a university president is gauged largely by the caliber of the men added to the faculty during his term of office and the ease with which they are able to work in their own fields or to collaborate among themselves without interference from the administration. It may be too early to apply the first of these tests, but undoubtedly in few American universities has the academic atmosphere been as free from strife and bitterness as it was at Cornell

during the Schurman administration. This fact is the more to his credit because it was mainly his creation rather than his inheritance. While professor he exemplified, and while president he exalted, vital teaching and productive scholarship as the essentials to which all the machinery of administration, including that of the president's office, should be subordinated. He insisted that the faculty's control over educational problems in peace and war should not be impaired by trustees or president, or by inflamed public or alumni opinion. He was tolerant of opposition and was unwilling that in vital matters a small majority of the faculty or trustees should have their way, preferring always to bide his time until substantial unanimity had been reached. Over considerable opposition from both sides, which he shrewdly conciliated, he secured the inclusion of elected representatives of the faculty among the Board of Trustees and thus increased the influence of teachers in all university matters.

His work as a diplomat was less important to Cornell. After seven years in the presidency he accepted an appointment as president of the first Philippine Commission, and for the rest of his life he maintained a warm interest in the people of those islands. This interest is revealed in a small book, *Philippine Affairs, a Retrospect and Outlook*, which appeared two years after his return to Cornell.

A dozen years later Schurman reentered the diplomatic field when he became American minister to Greece and Montenegro. This excursion also resulted in a small book, *The Balkan Wars, 1912-13*, which appeared just as the dragon's teeth sown at Sarajevo sprang up into a greater war. The First World War led him to abandon his plan of retiring from the presidency after twenty-five years, as White had done after twenty, but three years later he did so. His country then again urged its claims and sent him for four years as minister to China, and for a slightly longer term, 1925-30, as ambassador to Germany. During his residence in Berlin, in addition to other services in the line of duty, he obtained from American contributors more than half a million dollars with which to build an auditorium much needed by his German alma mater, the University of Heidelberg. The gift was made "in recognition of high and helpful service to American students for over a century."

Throughout his career he was aided more than the public ever knew by his wife, Barbara Munro Schurman. As he was, during the later years of his presidency, the most admired man in Ithaca, so his wife was the best loved woman. They had seven children of whom five are living.

Charles Rupert Stockard

February 27, 1879 — April 7, 1939

With the passing of Dr. Stockard on April 7 of the current year Anatomy has lost an inspiring leader, and our medical college one of the oldest and most distinguished members of its active faculty.

Dr. Stockard was born in Washington County, Mississippi, on February 27, 1879. The son of a physician, he showed in his early youth great enthusiasm in the field of Zoology, attested by numerous observations on the nesting habits of birds and a collection of eggs which he fondly kept until his death. He entered the Mississippi Agricultural and Mechanical College, receiving the degrees of bachelor of science in 1899 and master of science in 1901. During the Spanish-American War he was acting professor of Military Science at the above institution, and afterwards he held the same position in Jefferson Military College from 1901 to 1903.

In spite of this early experience, a military career had no appeal for young Stockard. His love of nature reasserted itself and he decided to become a zoologist, entering Columbia University, from which he received the Ph.D. degree in 1906. While at the Columbia department of Zoology he conducted investigations on various subjects, including Botany, and wrote articles on the natural history of the spoon-billed sturgeon—abundant in the lakes of the lower Mississippi area—and the nesting habits of birds in Mississippi. Under the direction of Professor Bashford Dean he studied the development of the thyroid, the lens of the eye, and the mouth and gills of the cyclostome fish *Bdellostoma stouti*. This early work on fish embryology determined the direction of subsequent studies; at the suggestion of Professor T. H. Morgan and following the trend initiated by the German experimental embryologists, particularly Herbst, Stockard undertook a series of important investigations on the influence of external factors on development, selecting the embryos of the minnow *Fundulus* as a favorable object. One of his first papers was on the development of *Fundulus* in solutions of lithium chloride, followed by a study of the artificial production of a single median cyclopean eye by means of sea water solutions of magnesium chloride, and later by an analysis of the influence of external factors, chemical and physical, on the development of the same fish. This work was carried out at the Marine Biological Laboratory at Woods Hole, Massachusetts, where Dr. Stockard spent most of his summers and where his absence will be deeply felt.

Dr. Stockard joined Cornell Medical College in 1906 as assistant in Embryology and Histology, and in 1908 he became instructor in Comparative Morphology. His inquiring mind found a stimulus in the teachings of Professor James Ewing and led to work on tissue growth and regeneration—mostly in the jelly-fish *Cassiopea*—which he

carried out at the marine laboratory of the Carnegie Institution at the Dry Tortugas, Florida. These investigations were aided by the Huntington fund for cancer research.

In 1909 he was appointed assistant professor of Embryology and Experimental Morphology. His attention was once more focussed on the problems of embryonic development and he returned to his early interest in the origin of the lens of the eye. Experiments on this subject had already been performed by several investigators who had destroyed the optic vesicles by mechanical means, but Stockard followed an entirely different approach and showed that certain chemical substances such as magnesium salts, alcohol, chloretone, and other anaesthetic agents generally inhibit the normal outgrowth of the optic vesicles. Under these conditions the lens originates from the ectoderm without any direct stimulus whatever from an optic vesicle. Continuing his work along these lines, he carried out experimental studies on the position of the optic anlage in *Amblystoma* (1913) and of the artificial production of eye abnormalities in the chick embryo (1914). From these investigations he concluded that specific defects are not specific responses to a given chemical substance, as advocated by Herbst, Hertwig, and himself in earlier papers. Congenital defects of the eye he regarded as an index of developmental deficiencies in the whole embryo, an idea expanded later (1923) in the course of experiments on the influence of alcohol on mammalian development.

Dr. Stockard was appointed professor of Anatomy in 1911. That year he went abroad and worked in the Zoological Station at Naples and in the Anatomical Institute at Munich, visiting the most important zoological and anatomical laboratories of the continent. He returned to Germany the following summer to marry Miss Mercedes Müller of Munich.

As a natural consequence of his findings on the effects of alcohol and other narcotics on development, Dr. Stockard attacked the problem of the influence of alcohol on the germ cells and development of embryos in mammals, and the first contribution on this topic appeared 1912. He devised methods whereby guinea pigs were made to inhale alcohol fumes for variable periods, and the effects on the offspring were carefully noted. As often happens in scientific research, one problem led to another which was apparently unrelated but the solution of which was indispensable for the successful continuation of the work. One of these problems arose in the course of the experiments with alcohol when it was realized that the available data on ovulation of the guinea pig were inadequate and often misleading. With the collaboration of Dr. G. N. Papanicolaou, Dr. Stockard undertook a daily examination of the vagina of guinea pigs, preparing smears of the contents which were found to vary according to the stage of the sexual cycle. In this way the existence of a typical oestrous cycle for this animal was firmly established. The influence of this discovery on anatomical research in this country was widespread, judging from the large number

of studies on the same subject in diverse animals which followed. It also led to a painstaking study of the human sexual cycle by Dr. Papanicolaou, published in 1933.

The experiments on the influence of alcohol on the mammalian germ cells did not fill Dr. Stockard's mind to the point of displacing other interests, and once more he returned to the field of experimental Embryology. But this time he was concerned with the origin of the vascular endothelium and the blood cells. The exponents of the monophyletic theory on the origin of blood had been scoring heavily, it seemed, and claimed to have demonstrated that the different types of blood corpuscles spring from a common stem cell. Dr. Stockard sought light on this important problem in a study of blood development in *Fundulus*, but he did not limit himself to observations on normal embryos. He found that treatment of eggs at the two-celled stage with weak solutions of alcohol in sea water neither arrests the formation of the blood nor interferes with the development of the heart, but that the latter is often closed at its posterior end and that this prevents the free circulation of the blood. Nevertheless, the heart which does not contain blood may be fully developed and have a normal endothelial lining. Undoubtedly, the latter does not arise from a cell capable also of producing blood elements. Furthermore, these studies also showed that the origins of the white and red blood corpuscles, respectively, are distinct and that these two different types of cells cannot be considered to have a common origin except in so far as both arise from mesenchyme cells. The latter, however, also give rise to pigmented cells (chromatophores).

The work on the influence of alcohol on the germ cells and development lasted for a period of over thirteen years, with more than one hundred guinea pigs treated from a few months to six years, and records available from over 5,000 animals in the several generations. It aroused immediate interest not only in the medical profession but also among the laity. This was due in large measure to the adoption of the Eighteenth Amendment. Reports on these experiments—with the collaboration of Dr. Papanicolaou—appeared in various publications. While admitting that alcohol exerts a deleterious influence on the individual and causes defects and even the death of some of the offspring *in utero*, Dr. Stockard concluded that “when we consider the welfare of the race or stock rather than that of the individual, it is found that the descendants of those groups of animals which suffered the highest mortalities and thus withstood the most rigorous elimination are superior in quality to the descendants of the groups less severely affected. This individual selection furnishes a great advantage to the later generations.” Similar thoughts were expressed later by him (1924) to the discomfort of those who have cherished the idea that alcohol, even when used in moderation, spells the doom of our race.

Aside from their social implications, the alcohol experiments furnished proof that the germ cells themselves may be adversely affected because males that inhaled alcohol fumes gave rise to defective offspring although mated with vigorous untreated females. The effect of this injury of the germ cells is not only shown by the immediate offspring of alcoholized animals but is conveyed through their descendants for several generations.

In breeding such a large number of guinea pigs Dr. Stockard noticed the presence of an extra toe in some of the animals, which he regarded as the atavistic reappearance of a digit lost in the course of evolution. These observations furnished the basis for an interpretation of a similar reappearance of the great toe in the hind limbs of certain dog breeds, and it was found that when the latter are crossed with breeds which lack the great toe, its development in the first generation of hybrids seems to be inherited as a single-factor Mendelian dominant. An interpretation of true polydactyly in the human was also advanced on the basis of the findings in the guinea pig and dog.

The problem of the origin of identical twins in humans and other mammals is also a subject which had engaged Dr. Stockard's attention since his early experiments in the influence of the external factors on development. In 1921 he published an extensive article entitled "Developmental rate and structural expression: An experimental study of twins, 'double monsters' and single deformities, and the interaction among embryonic organs during their origin and development" which shed considerable light on the fundamental processes involved.

The idea that constitutional differences in humans may depend upon definite hereditary patterns of the endocrine complex of the individual held a preeminent place in Dr. Stockard's mind during the latter half of his fruitful career. His early views on this subject were largely speculative, but he was a man of great mental resourcefulness and he was determined to test their validity in the same experimental fashion that he had applied to his studies on development. The existence of wide dissimilarities in the modern breeds of dogs led him to select this animal for the experiments, especially since certain extreme human types are duplicated in the dog. With the aid of the Rockefeller Foundation he acquired a farm in Westchester County and began to assemble dogs of various breeds. At the beginning the experiment was beset with unforeseen difficulties. To raise dogs in the pure air of the country with enough space to roam about sounds like an easy matter. But even under these ideal conditions confinement in adjoining, though spacious, runs, on the one hand, and the susceptibility of some of the breeds to disease, on the other, led to problems which had little to do with the aim of the investigation. Distemper, parasitic worms, mange, and unsuspected dietary deficiencies were some of the obstacles that had to be surmounted. Dr. Stockard, however, was not a man who could be easily defeated and he immediately began to cast about for remedies and

when none existed he applied himself to discover them. This accounts for his brief excursions into the realm of veterinary medicine, especially his contributions to the treatment of distemper (translated into Norwegian by O. L. Mohr) and the transmission of immunity to this disease. Within a few years the problems of disease and diet in the dog colony had been conquered. Considering that at times there were nearly 400 dogs in adjoining kennels and with an almost negligible mortality this was no mean achievement.

An experiment of the scope of Dr. Stockard's, involving crosses between different breeds; rearing of young with pronounced disharmonies in some cases; studies on the inheritance of morphological characteristics; observations on behavior and instincts; and histological examinations of the endocrine glands, requires considerable time and patience. In the course of the last twelve years a wealth of data had been slowly accumulating. Some of the results have already been reported in various publications. At his death Dr. Stockard left an extensive manuscript covering the diverse aspects of his work. It is expected that it will be published in the near future. Had he been granted a few more years of life he could have experienced the satisfaction of having accomplished a task with the thoroughness which was so characteristic of his scientific undertakings.

Besides being a leader in scientific research Dr. Stockard was a born teacher. He had the gift of clarity and the ability to impart knowledge. He was always popular as a lecturer because he could simplify the abstruse and digest it for his hearers. Among the many lectures that he gave the following deserve special mention: Harvey Lecture, 1921; DeLamar Lectures, Johns Hopkins, 1925; Harrington Lectures, University of Buffalo, 1926; Beaumont Foundation, Detroit, 1927; Lane Lectures, Stanford University, 1930; Potter Memorial Lecture, Jefferson Medical College, Philadelphia, 1934; and the Joseph Collins Lectures at the Academy of Medicine, New York, 1937. The subject of the Lane Lectures was expanded into a volume under the title *The Physical Basis of Personality* (New York, W. W. Norton, 1931), translated into German as *Die Körperliche Grundlage der Persönlichkeit* (Jena, G. Fischer, 1932). He contributed chapters to several books. His remarkable capacity for work made it possible for him to attend to numerous duties not related directly to teaching and research. He was at one time secretary-treasurer of the American Association of Anatomists, managing editor of the *American Journal of Anatomy*, coeditor of the *Journal of Experimental Zoology* and the *American Anatomical Memoirs*, trustee of the Marine Biological Laboratory, Woods Hole, Massachusetts, the Long Island Biological Association and the Bermuda Biological Station, and for a number of years member and then president of the board of scientific directors of the Rockefeller Institute for Medical Research, a position which he occupied at the time of his death.

During a visit to Germany in 1922 he received the M.D. degree from the University of Würzburg. Previously, in 1920, the University of Cincinnati had conferred on him the degree of doctor of science. He was president of the American Association of Anatomists (1928-30) and the American Society of Zoologists (1925), section vice-president of the American Association for the Advancement of Science; member of the Harvey Society (honorary), the American Philosophical Society, the National Academy of Sciences, the New York Academy of Medicine and the Institut International d'Embryologie of Utrecht, Holland, and others.

The friendliness of his manner, his keen sense of humor, and his frankness were duly appreciated by those who were associated with him. His influence on research in his own department is attested by the seventeen volumes of collected studies issued since 1910. Yet he did not believe in research as a duty. He preferred to speak of it as an "opportunity." This wholesome point of view explains his own attainments as an investigator, because only love of research for its own sake can lend the patience and courage required to overcome difficulties and bring the task to a successful termination. A man of his scientific stature can be substituted but not replaced.

Earl Sunderville

October 5, 1886 — November 4, 1958

Dr. Earl Sunderville, Professor Emeritus of Veterinary Anatomy, died November 4, 1958, in Tompkins County Hospital after a prolonged illness. His wife preceded him in death by about a month.

Dr. Sunderville was born in Newark, New York, of Dutch parentage on October 5, 1886. He took pride in having received his grammar school education in an old country school near Newark, New York. After completing the then three-year course in Veterinary Medicine at Cornell, he received the D.V.M. degree in 1908. Although 22 years of age at this time, he felt he was too youthful in appearance to go into practice, although that was his ambition. To gain maturity he accepted an assistantship in anatomy that fall and an instructorship a year later. He never went into practice but stayed in the Department of Veterinary Anatomy for 39 years. In 1914, he was made Assistant Professor and, in 1934, Professor and head of the department, a position he held until his retirement in February, 1947. In addition to his teaching duties, Dr. Sunderville was secretary of the Veterinary Faculty from 1925 to 1945. He was held in high esteem by his students, and his deeply entrenched conviction was that the most experienced teachers should instruct the least experienced students.

The former students and friends of Dr. Sunderville defrayed the cost of the painting of his portrait which now hangs in the James Law Auditorium among those of other faculty members of the Veterinary College. During the time between the death of Dean P. A. Fish on February 19, 1931, and the appointment of Dr. W. A. Hagan as Dean, on July 1, 1932, Dr. Sunderville served with Dr. R. R. Birch and Dr. W. A. Hagan on an interim committee which administered the affairs of the College.

Among Dr. Sunderville's better-known publications are: "Lymphatic System of Cattle," "Postmortem Anatomy of Chickens," and "Tonsils in the Dog."

Prior to World War I, he served on Dr. Septimus Sisson's committee of the American Veterinary Medical Association which compiled a glossary of anatomical terms applicable to the gross structures of veterinary species. These terms have composed the standard nomenclature used in English veterinary medical publications ever since. In a recent comparison of this nomenclature with the new international anatomical nomenclature (Paris, 1955), they were found to be surprisingly similar.

Dr. Sunderville attended the International Veterinary Congress in London as the representative from Cornell in 1930. For over a decade, varied exhibits of College activities were largely prepared and displayed by him at the State Fair. His three sabbatic leaves, in 1923, 1932, and 1940, were largely spent touring the United States and visiting the other veterinary colleges. During the leave of 1932 he also attended the Medical School at the University of Rochester.

From the very beginning of the national professional fraternity, Omega Tau Sigma, he was one of its staunchest supporters and counselors, having been elected secretary of the Grand Council for 12 years and Grand Treasurer for a number of years. Even after retirement he maintained an active interest in the local chapter and more than any other man was responsible for its present fine physical facilities. Dr. Sunderville was also a member of Sigma Xi, Phi Kappa Phi, Phi Zeta, Acacia, and the local, state, and national veterinary medical associations.

He was active in Masonry from 1911, having become early a 32nd degree Mason. He belonged to the Scottish Rite bodies of Ithaca and Binghamton. He was past master of Hobasco Lodge 716 F. and A.M. and a member of its Fellowcraft Club. In addition to serving as presiding officer and trustee of the Lodge of Perfection, he had served as Grand Representative of the Grand Lodge of Michigan.

Dr. Sunderville possessed great love and loyalty for his family and for Cornell. For nearly 40 years each student who attended the Veterinary College at Cornell was personally known to him. In the dissecting laboratory, his answers to questions were concise, accurate, and to the point. Often, the person who asked the question felt a degree of guilt upon being shown the answer since the structure could be revealed so easily and quickly by Dr. Sunderville.

As a youth, he helped his father who was a contractor and thus he developed a vital interest in carpentry, particularly cabinet making, and built many items which served their home. In fact, he built two houses in the village of Forest Home as well as their cottage at Sodus, New York, in which he and his family spent many enjoyable vacations and weekends. Other hobbies included gardening and fishing.

Dr. Sunderville will be remembered most vividly for his close attention to anatomical detail in the dissecting room, where he served not only as a most precise instructor but also as a strict disciplinarian. Outside the classroom his wise counsel was always freely and cheerfully given to the numerous students who consulted him during a generation when drastic changes were being made.

M. E. Miller, H. H. Dukes, H. L. Gilman

Burt Green Wilder

Professor of Neurology and Vertebrate Zoology

1841 — January 21, 1925

By the death on January 21, 1925, of Dr. Burt Green Wilder, Cornell University loses almost the last member of her original faculty. The pupil of Oliver Wendell Holmes, of Jeffries Wyman, of Asa Gray, of Louis Agassiz, and attached to these great teachers by an almost religious affection, he brought to our chair of zoology notable traditions. Since 1866 he had been Agassiz's assistant and it was Agassiz who, backed by Asa Gray, named him for the new institution, in whose fortunes both were deeply interested. Appointed among the very first of its professors in September of 1867, more than a year before our doors were opened to students, Dr. Wilder was of great help in the gathering of our equipment; and for more than forty years, till his retirement from teaching in 1910 and his return in 1911 to the Massachusetts home of his boyhood, he served this university with a singular fidelity,

Born at Boston in 1841, he was a precocious lover of nature and his studies were from the first chiefly devoted to natural science; but at his issue from Harvard in 1862 the country's call took him into the hospitals of the civil war and to the front as a surgeon, and on his return in 1865 a further year was given to the completion of his medical studies. Then, however, he turned to the career of the scholar. At Cornell he showed himself from the start a teacher of rare powers. He was a master of exposition. The charm of his diction and the lucid grace of his style made him captivating alike by voice and pen. His lecture room was always crowded and his articles found welcome in our best magazines. But he was, before all, the patient and conscientious leader of research. Working quietly but tirelessly in the midst of his students, and ever ready to interrupt his investigation to listen to a question or to share with those about him some fascinating discovery, his laboratory was a fruitful nursery of budding scholarship. Nor was his interest in his students confined to class room and laboratory. Many bear in lifelong memory the kindly word or thoughtful act that showed his sympathy in their personal haps and mishaps,

As did few others Dr. Wilder shared the unconventional ideals of the young university, and to the end he was their champion. For his personal convictions, too, he was always ready to do battle, and it never dismayed him if his cause was unpopular. For the simplified spelling of English, for a better nomenclature in anatomy, for temperance rather than abstinence in the use of alcoholics, against tobacco, against secret societies, against intercollegiate athletics, he stood with uncompromising frankness, regardless of opposition and of ridicule. Discrimination because of race or sex found always in him a zealous foe. This ruggedness of personality has given him large place in student legend as well as in the memory of his colleagues. In the faculty he was often a minority of one; but

he held his ground, and the music of his diction, coupled with his unwavering courtesy, made him always gladly heard.

From the poverty of Cornell's early years none perhaps suffered more than Dr. Wilder and his work; but he bore its burdens and deprivations with exemplary patience, and through it all, despite the weight of his duties, he was a prolific contributor to the literature of science. His published papers number many scores. But he welcomed with joy the growing prosperity which enabled him to turn over division after division of his biological teaching to new and soon independent departments and permitted his larger attention to those neurological studies which were ever the center of his interest. If even in this best loved field he leaves behind him no work of long breath, it is due not less to his sacrifice of self to his teaching and to the public spirit which spurred him to a share in righting every wrong than to his unbounded conscientiousness and his all too scrupulous concern for the details of method. Both as teacher and as investigator he leaves a name not soon to be forgotten.

Source: Fac. Rec., pps. 497, 1410 Adopted By The Trustees And Faculty Of Cornell University June, Nineteen Hundred And Twenty-Five

Walter Long Williams

February 26, 1856 — October 23, 1945

Dr. Walter L. Williams was born February 16, 1856 near the present village of Argentina, Illinois. His early education was obtained in a country school followed by a year in the Presbyterian Seminary at Mt. Zion. After a year of school teaching, he entered the Illinois Industrial University, now the University of Illinois. Spending two years there, he became intensely interested in the subject which was to become his life's work. He continued his veterinary studies in the Montreal Veterinary College where he attended classes conducted by the great Dr. William Osier, graduating as honor student in the class of 1879.

Following graduation, he established a private veterinary practice in Illinois and became Assistant State Veterinarian. In 1891, ill health compelled him to enter a less strenuous field. For two years he served as professor of Veterinary Science at Purdue University following which he accepted a professorship in the Montana Agricultural College, Bozeman.

When plans were announced in the American Veterinary Review regarding the establishment of a College of Veterinary Medicine at Cornell, Dr. Williams wrote to Dr. Law and later came to Ithaca for an interview with President Schurman and Dean Law. He received the appointment of Professor of Veterinary Surgery, Obstetrics, Zootechnics and Jurisprudence and began his work in 1896, one of the original faculty of the New York State Veterinary College. He served in this capacity until 1915 when he was appointed Professor of Veterinary Obstetrics and Research Professor in diseases of breeding cattle. In 1911 he became a Professor Emeritus.

Dr. Williams was an inspiring teacher. He brought nearly twenty-five years experience as a practitioner in an extensive equine practice to his students. He was a thorough believer in learning by doing. Through his zeal, the clinics which are now an integral part of veterinary training were founded at Cornell. He was also the first to establish a course in Surgical Exercises. The training received from his clinics was invaluable.

During a sabbatical leave in 1910, Dr. Williams acted as veterinarian on the Parker ranch, the largest cattle ranch in the Hawaiian Islands. Later in 1919-1930, he spent a year on this estate where, as usual, he was wide awake to opportunity—here on a vast scale—for research and advancement of knowledge pertaining to disease in breeding animals.

The experience of sixty-five years in the veterinary profession added to intellectual curiosity and authority of leadership in his chosen field resulted in an impressive wealth of internationally recognized articles and books.

Of his books, his "Veterinary Obstetrics" and "Diseases of the Genital Organs of Domestic Animals" are used in many of our colleges as well as in those of other English speaking countries. Their translation into Spanish have spread their influence to South American schools as well as to Continental Spanish speaking colleges. "Veterinary Obstetrics" also has found its way into Italian instruction through an Italian translation.

Among Dr. Williams' contributions to veterinary science are the following:

The diagnosis in 1885 during his practice in Bloomington, Illinois of *dourine*. This was the first diagnosis of the disease in America.

The development of the roaring operation which was demonstrated to the English in London in 1909.

The poll evil operation.

The production of a surgical operating table for large animals which was duplicated in leading schools as well as in the U. S. Remount Station and adopted by prominent veterinarians.

The studies in genital disease.

Dr. Williams was an Associate Editor of the American Veterinary Review between 1890 and 1911; Editor for the United States of the Veterinary Journal of London between 1906 and 1908; President of the Illinois State Veterinary Medical Association from 1889 to 1900, the American Veterinary Medical Association in 1893, the New York State Veterinary Medical Society in 1906-07; an honorary member of the Iowa Veterinary Medical Association, a foreign corresponding member of the Society Centrale De Medicine Veterinaire of France; an honorary member of the Central Veterinary Society of England, and the Veterinary Society of Sweden.

Until his final illness, Dr. Williams was a frequent visitor at the College Clinics, always alert and interested. In January at the 1945 Veterinary Conference, when almost eight-nine years of age, he presented a paper, "Recollections of, and Reflections Upon Sixty-five Years in the Veterinary Profession."

At the time of his retirement in 1921, the faculty and alumni of the Veterinary College gave a testimonial dinner for Dr. Williams in Prudence Riskey Hall. The large attendance, the speeches, the letters, and telegrams attested to the high regard in which the honor guest was held.

Again on the occasion of his eightieth birthday, the Veterinary faculty with some of the former assistants in his department gathered in Balch Recreation Room in honor of Dr. Williams' anniversary. It was a pleasant affair, an

evening of friendly good will of the kind one experienced in the cordial atmosphere of Dr. and Mrs. Williams' home.

A living likeness of Dr. Williams, painted by Olaf M. Brauner in 1911, was presented to the University by the Veterinary Alumni and may be viewed in the Flower Library.

J. N. Frost, H. J. Milks, Earl Sunderville

William Abell Wimsatt

July 28, 1917 — January 9, 1985

William Abell Wimsatt died at his home in Ithaca, New York, after a courageous fight against cancer. He was born in Washington, D.C., the oldest of three sons of Alma Cheyney and William Church Wimsatt. After his father's early death Bill spent his summers on Chesapeake Bay and his winters in Tarpon Springs, Florida. Both environments inspired him with an enduring love of the out-of-doors. He developed such a keen interest in birds, especially birds of prey, that he trained several hawks for falconry and retained a lifelong interest in the sport.

When Bill was a student at St. John's Preparatory School in Washington, D.C., he attended a lecture by Professor Arthur A. Allen, the colorful Cornell ornithologist who triggered his strong desire to study at Cornell. His mother's serious illness prevented his coming to Ithaca for a time, but after her death he transferred from Catholic University in Washington to the College of Arts and Sciences at Cornell, where he spent his senior year. After graduation Bill became one of "Doc" Allen's graduate students in ornithology and soon published five communications on birds.

In 1940 Bill married Ruth Claire Peterson, a fellow student in Allen's ornithology class. Of their six children, Bill, Jr., Ph.D.; Michael, M.D.; John, A.A.S.; Mary, M. A.; Jeffrey, D.V.M.; and Ruth, B.S., five followed in their parents' footsteps in receiving degrees from Cornell.

When Bill took a course given by the distinguished embryologist Howard B. Adelmann, he was inspired to broaden his interests and changed his major to anatomy and embryology with Dr. Adelmann as his doctoral committee chairman. Bill was pleased that through Adelmann he could trace his scientific lineage to the great seventeenth-century anatomist Marcello Malpighi. His sense of history, however, never hindered Bill in exploring new ideas and new methods, whether in research, teaching, or social relationships.

In 1943, after Bill had received his doctorate at Cornell, he became an instructor of anatomy at Harvard Medical School. In 1945 he returned to Cornell as an assistant professor of zoology; in 1947 he became an associate professor; in 1951, a professor of zoology, a title he proudly held until his death. He was an active member of the Section of Genetics, Development, and Physiology in the Division of Biological Sciences, and from 1945 until 1960 he also taught histology and embryology to students in the College of Veterinary Medicine.

One of Bill's outstanding traits was his absolute loyalty to family, friends, and the institutions he loved. It was this loyalty that made him accept onerous tasks willingly, knowing full well they would consume much of his time, his

energy, and his patience. Prior to the complete reorganization of the field of biology at Cornell, Bill was chairman of the Department of Zoology. During the planning of the shuffle it became clear that the Department of Zoology would be dissolved and that none of the new sections would even have the term *zoology* in their names. Bill was the vigorous and vociferous advocate of zoology, but once the die was cast, he called the chairman of the committee planning the reorganization and asked, "How can I help to make it work?" This loyalty to Cornell and its best interests had its counterpart in the loyalty his family, friends, and students felt for him.

It was inspiring to see Bill in the laboratory engaged in animated discussion with his undergraduates and graduate student assistants. In his inimitable way he impressed them with his ability boldly to integrate structure and function. No student who took his course ever forgot this experience.

In addition to serving Cornell on innumerable committees and as a faculty trustee (1960-65) Bill was the recipient of many richly deserved honors. He authored more than eighty-five publications for professional journals and served as the organizer and editor of a widely acclaimed multivolume series on the biology of bats, which was published by Academic Press. At the time of his death, volume four of *Biology of Bats* was in preparation. Bill was devoted to his professional societies, attended meetings as frequently as time permitted, and served as an associate editor of the *American Journal of Anatomy* for eleven years.

The imagination and attention to detail that characterized his research was evident in his cabinet making. He was a superb craftsman in whatever he built, whether it was miniature ships or chests of drawers.

One of his most prized possessions was a log cabin on a large tract of land in the Danby hills. Slowly and laboriously he added a Great Room with a fireplace that burned five-foot logs, and here he and Ruth graciously entertained graduate students, colleagues, and friends. It is on this land that Bill's ashes were scattered and that Bill became a part of the environment he loved so dearly.

Howard E. Evans, Ari van Tienhoven, Perry W. Gilbert