

Physicist Robert Wilson Wins 1984 Fermi Award

Shares Top DOE Prize with French Physicist Georges Vendryes

Robert Rathbun Wilson, professor of physics emeritus at Cornell University, and French physicist Georges Vendryes have been named co-recipients of the 1984 Enrico Fermi Award.

The prize from the U.S. Department of Energy (DOE) is the highest scientific award given by that agency in recognition of "exceptional and altogether outstanding scientific and technical achievement in the development, use or control of atomic energy."

The award, to be presented Dec. 20 in ceremonies in Washington, DC, consists of a presidential citation, a gold medal, and \$100,000 to each recipient. The award honors the memory of the leader of American scientists who achieved the first self-sustained, controlled nuclear reaction.

Previous winners of the Fermi Award, established in 1954, include Hans A. Bethe (1961), Nobel laureate and professor of physics emeritus at Cornell.

Wilson will be honored for his "outstanding contributions to physics and particle accelerator design and construction." The DOE notes that Wilson, as the first director of the Fermi National Accelerator Laboratory, led the effort that resulted in the establishment of a world-class facility, the

highest energy accelerator in the world.

Vendryes, director of the Commissariat a l'Energie Atomique, will be cited for his "outstanding contributions in research on nuclear energy and for his direction of the French program of nuclear power, which have been essential to the brilliant success of fast breeder reactors."

Wilson, who first joined the Cornell faculty in 1947, has achieved an international reputation as a designer and builder of particle accelerators, the huge and powerful machines used by physicists to study the characteristics of matter and the forces that govern its motion.

After building a progression of electron synchrotrons at Cornell, Wilson left in 1967 to build what was at the time the world's largest particle accelerator at the Fermi National Accelerator Laboratory (Fermilab) in Illinois. That same year, Cornell commissioned its largest accelerator, still in use, and now part of the Robert R. Wilson Synchrotron Laboratory.

Wilson served as director of Fermilab for 11 years, then he taught at the University of Chicago and Columbia University before returning to Ithaca in 1982. He is also the Ritzma Professor Emeritus at Chicago and

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Robert R. Wilson toured the tunnel of the synchrotron laboratory that bears his name, shortly before the facility's 1968 dedication.

Historic Group Seeks To Add Ag Buildings

The City of Ithaca Landmarks Preservation Commission voted after a public hearing Tuesday night to recommend that the city designate seven Agriculture Quadrangle buildings as local historical landmarks.

The recommendation must be approved by the city's planning and development committee and Common Council before the designation is made. The same buildings are already on state and federal rosters of historic buildings.

The seven include Stone, Roberts and East Roberts Halls, which are listed for demolition in plans for Academic II, the new state building at the west end of the quadrangle.

Others included in Tuesday's discussion are Bailey, Comstock, Caldwell and Fernow Halls.

The Landmarks Commission met to hear

a petition for designation filed by Historic Ithaca. Five letters in support of the petition were read and several persons spoke in support of it, saying the architectural and historic significance of the buildings, the order and structure Stone, Roberts and East Roberts give to the upper campus, the basically sound nature of the structures and the fact that they are on national and state rosters should all qualify them for local designation.

Vice President David L. Call and Associate University Counsel Shirley Egan appeared for Cornell. In a written statement in opposition to the petition, Call said, in part:

"The university appears solely on its own behalf and does not represent the State of New York, the State University of New York or the State University Construction

Continued on Page 11

Barton Blotter

Fire Extinguisher Thefts Rise, Create Threat to Lives in Dorms

Three students have been referred to the Judicial Administrator on charges of attempting to steal fire extinguishers from Boldt Hall the day before Thanksgiving.

"The incident dramatizes a critical situation that has been snowballing over the past several months, a situation that is a threat to the lives of students on campus," according to Lt. Theodore Pless, manager of the Department of Public Safety's Crime Prevention Program.

Pless said that since July 1 a total of 69 fire extinguishers have been stolen from dormitories and living units. Fewer than 30 were stolen over the same period last year, he said.

"They are usually used to spray water or relatively harmless chemicals around in mindless horseplay that could lead to tragedy, should a fire break out," Pless explained.

The total cost in dollars of replacing the extinguishers is nearly \$1,700, not including installment fees.

Theft of a fire extinguisher is a misdemeanor punishable by up to one year in jail, Pless said.

In addition to the stolen fire extinguishers, there has been an increased number of false fire alarms set off on campus this year. A total of 19 since July 1, according to Pless.

"False alarms cost taxpayers large sums when the fire trucks roll for no reason. The trucks also pose a real danger to pedestrians and motorists," the lieutenant said.

Nine other students were referred to the Judicial Administrator, according to the morning reports of the Department of Public Safety for the two-week period from Nov. 12 through 25. Four were charged with taking \$50.04 worth of food from the Noyes Center Pickup, four others were charged with tampering with a vending machine, and one student was charged with taking a calendar from the Campus Store.

There were 15 thefts involving losses in cash and valuables of \$3,660, according to the reports for the two-week period. The thefts included a \$400 sectional couch taken from a lounge in University Hall No. 3, an \$800 scale from Stocking Hall, \$380 worth of stereo equipment from Sheldon Court and a microwave oven worth about \$300 from Riley Robb Hall.

In addition, a total of \$229 in cash was stolen from various sites on campus in four separate incidents.

Some \$2,919 worth of furniture stolen over the past several weeks from Cascadilla Hall has been reported returned intact.

Sage Chapel Will Conduct Contest For Student to Preach Next May

Graduate and undergraduate students may apply for the Sage Student Preacher Award, with the finalist to preach at the Sage Chapel Service on May 5, 1985.

Semi-finalists will be invited to participate in a preaching skill building workshop in March. In addition to a teaching session with the Rev. David G. Buttrick, professor of homiletics and worship at Vanderbilt University, semi-finalists will have the opportunity to be critiqued personally on both the content and presentation of their sermons.

To apply, students should submit an outline of proposed sermon to Room 119-A, Anabel Taylor Hall by Friday, Dec. 7. Entrants should include scriptural reference, if appropriate.

Outlines will be reviewed and semi-finalists chosen by members of the Sage Chapel Advisory Council. A panel made up of CURW chaplains and advisers, local clergy and others will select the finalist at the March preaching conference.

They will make judgments on the criteria of depth of spiritual and/or moral insight; clarity of message; evidence of personal integrity; suitability for Cornell congregation, and ability of presentation.

Female Volunteers May Lower Wages for Others

Sociologist Says Result is Unintended Side Effect

By LISA H. TOWLE

Female volunteers are owed a debt of gratitude, but their voluntarism may increase the extent to which women become economically dependent on primary wage earners, namely men.

A Cornell sociologist who researches problem issues of careers and home life, says that middle-class women providing free, yet vital services may be lowering the wages for others, as well as jeopardizing their own future economic independence.

Jennie T. Farley, an associate professor in the New York State School of Industrial and Labor Relations at Cornell, believes this economic dependence is an unintended side effect of voluntarism, and fighting it will require careful molding of the economic awareness of a new generation of women.

There are some 93 million volunteers in this country, based on a 1983 Gallup Poll. Although the figure is divided about evenly between the two sexes, a disparity emerges in the nature of the volunteer work. Males tend to have jobs at the policy level, while women work at the operations level.

"Nowhere is this schism more apparent than in the running of a political cam-

paign," says Farley, an avid volunteer who chooses her causes carefully.

Farley says that history provides ample evidence of the importance of female volunteers. She has studied records dating back nearly 400 years to get "a whole new picture of American life" and the roles of women. Her research includes a study of women listed in "Who's Who in America," "Who Was Who," and the historical volume of "Who's Who" that traces significant personages back to the 1600s.

Indeed, she explains, large-scale voluntarism is a uniquely American phenomenon that was born on the frontier where, in order to survive, people had to be neighborly and mutually concerned with each other's well being.

"Women volunteers have made an enormous contribution to life in this country. One small example is the historic preservation effort. It has been women who have waged successful battles to get houses, museums, and the like designated as places not to forget," she said in an interview.

In the mid-1970s, though, the National Organization for Women announced that no woman should volunteer because women

were being exploited by working for free. Eventually, NOW's position was modified to state that voluntarism is alright, so long as it is for organizations that fight for social change.

Still, this inflexibility distresses Farley who rails against the "degrading" notion that by volunteering women are the equivalent of "human capital rusting away at home."

Women are far from that, she maintains. Yet, unless a woman is independently wealthy and can afford noblesse oblige, Farley says volunteering will keep her dependent even though it allows her to set her own work hours and choose her own causes.

Farley draws a parallel between traditional female jobs — teacher, social worker, nurse, dietician, librarian — and the volunteer. Jobs in the traditional human service fields require much education, but the pay is low.

Volunteers are attracted to these fields because the work is important — passing on culture, caring for the sick, nurturing, and teaching. Because there is no pay for volunteers who provide such vital services, the services are made available to the

community with little, if any, expense for the social agencies.

"Therefore, the chance for change, for higher wages, is retarded because volunteers pick up the slack," Farley says.

She does not advocate discarding the volunteer ethic immediately or totally; however, she does suggest that voluntarism and work-for-pay be viewed differently.

Previously, says Farley, young women were told to get a skill in case they needed something to "fall back on." Farley suggests that parents encourage their daughters to become economically self-sufficient at something they enjoy doing.

Economic independence is the greatest equalizer, Farley explains. "Should a woman decide that she wants to give her time to a cause, she can pick and choose knowing that her time and her money are her own."

"The beginnings of a solution to this dependency dilemma lie with the coming generations and how well we train them to manage their lives," Farley emphasizes.

Farley was the founder and first director of the women's studies program here. Begun in 1972, it was one of the first in the nation.



"Top Cop" Thomas J. Sardino, Syracuse police chief and president of the International Association of Chiefs of Police, discusses law enforcement training with Christopher J. O'Hara, patrol officer from the Cornell Department of Public Safety. Sardino addressed graduates of the Tompkins County Law Enforcement Academy earlier this month. O'Hara was president of the 11-member class that also included officers of other area forces. William E. McDaniel, Cornell director of public safety, was director of the 12-week school, and Lt. Michael E. Moran from Cornell was training supervisor.

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Borlaug: Political Instability, Drought Share Famine Blame

The current, tragic famine in many African nations has been caused as much by political instabilities as by drought, according to Norman Borlaug, plant scientist and winner of the 1970 Nobel Prize for Peace.

Borlaug, who visited Cornell this month as an A.D. White Professor-at-Large, said that religious, tribal, and linguistic differences within the nations of Africa result in unstable governments. This, he said in a radio interview, makes it impossible to organize agricultural systems and to take advantage of new technology.

"Even though you can improve the technology, or you might have (technology) that can be transferred in, and I think this is the case in Africa with corn, everything is wrong with those countries," Borlaug stated.

"There's no infrastructure; roads, highways, and railroads, for the most part, don't exist," he explained. "Now, we have seen from the television pictures ... that there are large quantities of grain in the ports, but it wasn't moving into the interior, and this is largely caused by the political situation."

The problem is not limited to Africa, Borlaug said. The lack of clear government policies favoring agricultural development throughout the third world is the single most important factor holding back food production.

Borlaug suggested ways of improving food production — developing high-yielding varieties of crop plants, restoring soil fertility, controlling weeds and disease pests, conserving moisture, and better utilization of (moisture) and fertilizer.

"You've got to link that to economic

policies that will permit the small farmer to apply that new technology, otherwise the technology is worthless," he stressed.

Borlaug cited India as an example of a nation that has learned the value of economic policies favoring agricultural development. When he was working there 20 years ago, he said, the Indian government, faced with major famine conditions, imported wheat from the United States, Canada, and Australia, and sold it in government food stores at roughly 60 percent of world wheat prices.

"They expected small Indian farmers to produce at 40 percent less cost than the American, Canadian, or Australian farmers when virtually all the fertilizer was imported, so it never made any sense," he said.

Only when the government made fertilizer available at the village level and extended credit to the farmers so they could buy it at planting time and pay for it at harvest time, did the farmers respond, Borlaug said. At the same time, he added, the Indian government committed itself to a floor price that was the same as the international price.

National wheat production in India has gone from 400 million bushels to 1.65 billion bushels per year over the last 17 years, he said.

During his two-week visit to Cornell, Borlaug gave several public lectures and met with faculty and students. Excerpts from his radio interview are scheduled to be broadcast locally on WHCU-AM at 12:20 p.m. Friday, Dec. 7. The complete interview is to be aired by WPCX-FM at 8:30 a.m. Sunday, Dec. 9.

Famine Relief Effort to Be Organized Here

An organizational meeting in an effort to help alleviate starvation in Ethiopia and other drought-afflicted countries is planned for 2 p.m. Sunday in the Memorial Room of Willard Straight Hall.

The goal of the organizers is to initiate an international campus-community effort which would do fund-raising on a local level while also working to get governments to contribute more time, effort and resources to address both the short- and long-term

problems.

Remarks will be made by Dorothy Cotton, director of student activities; Kenneth McClane, associate professor of English; Ithaca Mayor John Gutenberger; Ali Makke, an Ethiopian graduate student; Gail Riina, assistant director of CURW; the Rev. John Taylor of the Unitarian Church of Ithaca; James Turner, director of the Africana Studies Center, and others.

The meeting is open to the public.

PEOPLE

Pohl Wins Buckley Solid State Physics Prize

A Cornell physicist whose discoveries more than a decade ago have proved to be crucial in unlocking the secrets of the structure of glass and glassy materials has been awarded the 1985 Oliver E. Buckley Solid State Physics Prize of the American Physical Society.

The prize, generally regarded as the world's most prestigious award in this branch of physics, will be presented this spring to Robert O. Pohl, professor of physics and a member of Cornell's Laboratory of Atomic and Solid State Physics. The prize includes a \$5,000 cash award.

Glass has long been a puzzle to solid state physicists. Most ordinary solids — such as copper, salt, quartz, or silicon — are built up out of atoms arranged in a remarkably regular geometrical array, like soldiers in formation. This geometric regularity has provided the key to understanding the important physical properties of such solid

substances. Glass and glassy substances, on the contrary, are disordered solids whose atoms are not arranged in any neat geometric pattern, more like people in a disorganized crowd.

Because their atoms lack this simple regular arrangement, the physical properties of glasses have proved notoriously difficult to explain. Until Pohl's 1971 discoveries, there was not even a body of data common to all glassy materials for which physicists could attempt to construct such explanations. Studying glasses at very low temperatures, a few degrees above the absolute zero of temperature, Pohl discovered that the manner in which they conducted heat and exchanged heat with their surroundings could be described by a few simple universal laws, regardless of what particular glassy material was being investigated.

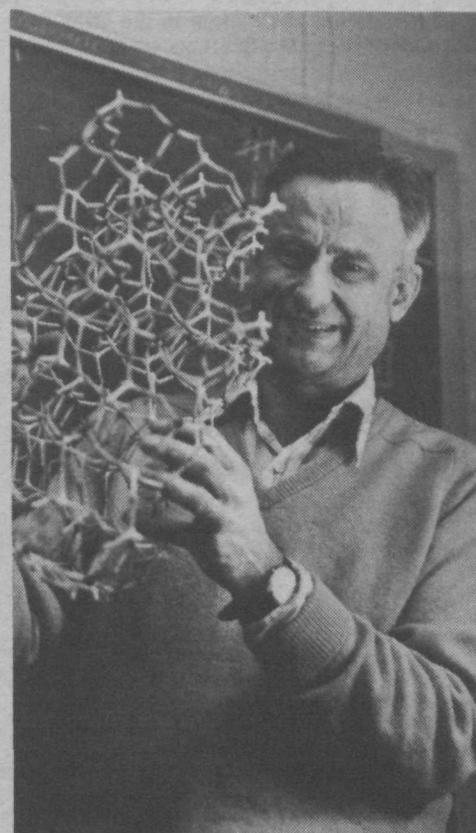
Pohl's discoveries of the universal low

temperature behavior of glasses stimulated a great outpouring of further studies, both theoretical and experimental, by Pohl and other scientists throughout the world. This work, growing out of Pohl's 1971 experiments at Cornell, has led to a new level of understanding of such disordered solids.

Pohl's is the second Cornell discovery to be honored with the Buckley Prize. In 1981 the prestigious award went to physics professors David M. Lee and Robert C. Richardson and their former graduate student, Douglas D. Osheroff, for their discovery of superfluidity in the rare form of liquid helium known as helium-3. This discovery was also made in 1971 in the Laboratory of Atomic and Solid State Physics.

In addition to his basic research, Pohl has been interested in nuclear waste disposal problems. He was a member of a scientific advisory committee which reported on the issue at the request of President Carter.

Pohl has been a member of the Cornell faculty and of Cornell's Laboratory of Atomic and Solid State Physics since 1958. Born in Germany, he received his Ph.D. (1957) from the University of Erlangen, West Germany. He spent the 1980-81 academic year at the Juelich Nuclear Research Center in West Germany under an Alexander von Humboldt Foundation Fellowship, sponsored by the Federal Republic of Germany.



Professor Robert O. Pohl with a model of the crystal lattice of the mineral feldspar, which has many of the properties of amorphous solids.

Rickard Named as Acting Dean Of State Veterinary College

Charles Rickard, associate dean of the State College of Veterinary Medicine at Cornell University, has been appointed acting dean of the College. Former Dean Edward C. Melby Jr., who resigned Nov. 1, will join SmithKline Beckman Corp. in January as a vice-president of research and development.

Dean Rickard received his D.V.M. degree from Cornell (1943), followed by a master's degree (1946) and a Ph.D. (1957) from the University of Michigan at Ann Arbor. After two years in private veterinary practice, he joined the faculty of the State College of Veterinary Medicine in 1946 as an assistant, then associate professor of clinical pathology. Since 1950, he has been a professor of veterinary pathology; from 1965 until 1973, he was chairman of the pathology department.

Appointed associate dean in 1969, Dr. Rickard is also a professor of aquatic animal medicine and associate director of Aguavet — the program in aquatic veterinary medicine conducted each summer at the Marine Biological Laboratory at Woods Hole, Mass. Until his appointment as acting dean, he served for three years as acting chairman of the department of microbiology.

Rickard was instrumental in establishing

the Oncology Laboratory for cancer research at the college in 1962 and, from 1965 to 1976, he was principal investigator for research projects on feline and canine leukemia, supported by the National Cancer Institute. His areas of research include virus induction of leukemias and sarcomas, characterization of tumor-producing viruses, and chemical co-carcinogenesis.

In June 1981, Dr. Rickard accepted the responsibilities of campus coordinator in a consortium including Cornell, Harvard, Rice, and Texas A & M universities, for a program of advice and assistance to King Faisal University at Al-Hasa, Saudi Arabia.

Muawia Barazangi, a senior research associate here and a specialist in seismology, has been appointed an adjunct professor and member of the graduate faculty in the Department of Geological Sciences. His research focuses on the seismotectonics of convergent plate boundaries — the earthquakes, and other effects of collisions between large, drifting portions of the Earth's plates. Except for the period from 1979 to 1980 when he was at King Abulaziz University in Saudi Arabia, he has been at Cornell since 1972.

Nation Directs Electrical Engineering

John A. Nation, professor of electrical engineering and a specialist in high-energy electron and ion beams and plasma physics, has been named director of Cornell's School of Electrical Engineering.

A member of the Cornell faculty since 1965, Nation succeeds Joseph M. Ballantyne, who became the university's vice president for research and advanced studies in July.

The School of Engineering, a unit of the Cornell College of Engineering, has one of the largest fields of research at the Univer-

sity with more than \$7 million in research expenditures in fiscal year 1984 and 42 faculty members. The school has the second largest professional master's degree list in the University, and is the largest undergraduate degree granting unit in the University.

Cornell's School of Electrical Engineering will observe its centennial in 1985. Cornell and Massachusetts Institute of Technology have the oldest electrical engineering programs in the country.

Mermin English Department Chair

Dorothy M. Mermin, an authority on Victorian poetry, particularly the works of Robert and Elizabeth Barrett Browning, has been promoted to professor in the College of Arts and Sciences. She also has been named chair of the department of English, effective through June 1989.

A member of the department of English since 1964, Mermin is the author of "The

Audience in the Poem: Five Victorian Poets" (Rutgers University Press, 1983). Her other scholarly writings include articles and reviews about Matthew Arnold, Elizabeth Barrett Browning, Robert Browning, and Christina Rossetti.

She teaches undergraduate courses in Victorian literature and poetry by women and graduate courses in Victorian poetry and prose.

Rehmus Will Retire Next June As Dean of ILR School Here

Charles M. Rehmus, dean of the New York State School of Industrial and Labor Relations at Cornell, has announced his intention to retire as dean next June.

He will return to service as a neutral arbitrator in labor-management relations in Washington, DC, and California.

Provost Robert Barker said, "Rehmus' stature, as a professional mediator and a leading scholar on collective bargaining, has been a great asset to Cornell. His extensive service to education and government has benefited the ILR School in many ways. He has successfully expanded the undergraduate curriculum, improved programs in professional education, and developed and implemented plans that will help to assure the long-term strength of the ILR program at Cornell.

"Rehmus' accomplishments are many, and we wish him well as he resumes his activities as a professional mediator and arbitrator."

Rehmus came to Cornell in 1980 from the University of Michigan and Wayne State University, where he was co-director of the Institute of Labor and Industrial Relations and a professor of political science. In addition, he served as chairman of the Michigan State Employment Relations Commission and was cited by the Michigan State Legislature as "a much sought after labor arbitrator and a highly respected neutral with an enviable record of success...."

His experience in both academic and government sectors is extensive. Rehmus was chairman of four presidential emergency boards in transportation disputes, and has consulted with various federal and state agencies on manpower and public employment labor relations problems.

Rehmus currently serves on the Governing Board of the National Academy of Arbitrators, the Industrial Relations Research Association, and the International Labour Office.

Watson Resigns Arts College Position

Lawrence Watson, assistant dean in the College of Arts and Sciences, is leaving Ithaca next month to accept a position at Harvard University. He will join the Harvard faculty and staff in late January, serving as an assistant dean and director of degree programs at the Graduate School of Design.

Watson, who also serves as a member of the Ithaca City School District Board of Education and the Tompkins County Human Rights Commission, is a popular soul and gospel vocalist, too.

At Cornell since 1977, he has been responsible for the academic counseling and advising to undergraduate students. He also handled pre-law advising for the College of Arts and Sciences, in addition to admissions, financial aid, orientation, and placement duties. He was co-director of the

college's Minority Educational Affairs and Higher Educational Opportunity Program.

Watson said he leaves the Ithaca and Cornell communities with regret, but added that the position at Harvard offers him a more challenging professional opportunity.

Arts and Sciences Dean Alain Seznec said, "Larry established a program to bring minority alumni to campus to discuss their careers with students. This very successful program is most helpful to our students. Larry will be missed, but we appreciate that he is moving up at this point in his career."

A 1974 graduate of the State University of New York College at Oswego, Watson earned the master's degree from Cornell (1977). Before coming to Cornell, he taught in the Ithaca City School District and was an instructor of Africana studies at the Auburn (New York) Correctional Facility.

Calendar

All items for publication in the Calendar sections, except for Seminar notices, must be submitted (typewritten, double spaced) by mail or in person to Fran Apgar, Central Reservations, 531 Willard Straight Hall at least 10 days prior to publication. Seminar notices should go to the Chronicle office, 110 Day Hall. Items should include the name and telephone number of a person who can be called if there are questions, and also the subheading of the calendar in which it should appear (lectures, colloquia, etc.) ALL DEADLINES WILL BE STRICTLY ENFORCED.

*—Admission charged.

Announcements

Benefit Concert

Mike Green and Dave Adler will appear in a benefit concert for the Community Self-Reliance Center on Friday, Nov. 30 at 8:30PM in Kaufmann Auditorium in Goldwin Smith Hall. They will combine cello, guitar, vocals, awful jokes and incomprehensible philosophy in this concert appearance. Tickets are available at the Community Self-Reliance Center, the Ithaca Guitar Works, McBooks, Borealis Books and the Commons Coffeehouse. For more information call 272-3040.

World Hunger

World hunger should concern everybody. Learn more at the Alternatives Library in 122 Anabel Taylor Hall. Open to the public.

Hillel

Come learn about kibbutz, volunteer, summer programs, university programs for a semester or a year, and alyah from AZYF shaliach, Gadi Aronson. He will be interviewing in the Hillel Office, G-34 Anabel Taylor Hall, on Wednesday, Dec. 5 from 11AM to 4PM. Call 256-4227 or stop by the office to arrange an appointment.

Linguistics Circle Lecture

Thursday, Nov. 29 at 4:30PM in Morrill 106. "Gemination and Antigenation", John J. McCarthy, University of Texas, Austin and AT&T Bell Laboratories.

Coffeehouse

Coffeehouse, Saturday, Dec. 1 from 9PM to 11PM in Anabel Taylor Founder's Room. \$1.00 donation. NOTE: May be changed to Friday, Nov. 30. Call GAYPAC at 256-6482 to confirm.

Ecology Awareness Days

Wednesday, Nov. 28 through Friday, Nov. 30. Learn more about opportunities for recycling and ecological living at Cornell and in the community. Information at the table in WSH on those days. Watch for posters.

Fencing

Fencing (Foil) (Men, Women). Deadline on entries is Thursday, Nov. 29 at 4PM in the Intramural Office, Helen Newman Hall. Must have at least one semester of training to enter. Tournament begins at 7PM in the Helen Newman Gym on Monday, Dec. 3. One to enter (1 constitutes a team). No alternates needed. Fencing Coach will be in charge: Jim Fazekas, 256-2368.

Bowling

Bowling (Men, Women, Co-ed). Deadline on entries is Tuesday, Dec. 4 at 4PM in the Intramural Office, Helen Newman Hall. Days of Play: Monday, 7:30PM & 9:30PM; Tuesday, 9:30PM & 11:30PM; Wednesday, 11PM; Thursday, 9:30PM & 11:30PM. Please specify your preferred day of play on your roster (1st, 2nd & 3rd). Minimum of six to enter. Co-ed: equal number of men and women. Four (4) will constitute a team. Bowling will consist of three shoulder to shoulder games rolled off once a week for nine weeks. Refer to IM Handbook. There will be a charge of \$81.00 per team, due with your roster to enter. Checks only payable to "Helen Newman Bowling". Bowling shoes will be available at the Helen Newman alleys for a slight fee. No refund after the deadline.

Hebrew Choir

Makhela (Hebrew Choir) meets every Sunday at 9PM in the Edwards Room. Call Jeff at 272-6907 for more information.

African Cultural Night

The Cornell African Students Association will present its annual African Cultural Night from 6 to 10 p.m. Friday, Nov. 30 in the One World Room of Anabel Taylor Hall. The event includes a dinner made of dishes from across the continent, traditional dance, music and poetry, and a slide show. Tickets are available at the International Students Office and Willard Straight Ticket Office for \$4 per person. Children under 12

admitted free. For more information contact Eleni Gabre-Madhin, ILC, N. Campus (256-2814).

Personal Growth Workshops

Short-term, small skills building and support workshops, free and confidential. Workshops are offered by Dean of Students Office. To sign up or for more information, call 256-3608 or stop by 103 Barnes Hall. Open to all in the Cornell Community.

EARS Counseling

Just want to talk? That's what EARS counselors are there for! They are trained listeners and are waiting to lend a free and confidential "ear" to listen to your feelings, help you explore your situation and discover options. EARS counselors provide non-judgmental, short-term counseling and have access to a wealth of information about other services at Cornell, if appropriate. Walk into WSH Room 211 or call 256-EARS. Sunday through Thursday from 3-11PM, Friday & Saturday from 7-11PM.

Writing Workshop

Free tutorial instruction in writing. Monday through Thursday from 3:30-6PM and 7:30-10PM; Sundays from 3-8PM in 174 Rockefeller Hall.

Amnesty International

The Cornell Chapter of Amnesty International invites the Cornell Community to stop by AI's information table in WSH each Friday from 10AM to 2PM. Learn how you may help prisoners of conscience all over the world.

Leonardo da Vinci Society

The Leonardo da Vinci Society will present a lecture, "The Bottled Cloud: An Interdisciplinary Look at the Sky and the Sea," by Dr. Jorge C. G. Calado, at 4:30 p.m. Wednesday, Dec. 5, in 110 Baker. How scientific discovery has influenced the depiction of clouds and gases in the arts, and related topics, will be discussed. This is the first in a series of cross-disciplinary topics for this academic year.

Dance

Cornell Folkdancers

The Cornell Folkdancers teach folkdancing every Wednesday and Sunday night from 7:30-9 p.m.; followed by request dancing till 10:30 p.m. Beginners welcome, free, no partners needed. Information at 257-3156 or 256-7149. Location for Sundays is in the North Room of Willard Straight Hall, and for Wednesdays the lounge of Upson Hall, through October.

Cornell Jitterbug Club

The Cornell Jitterbug Club will dance on Wednesdays from 9-11 p.m. in the Anabel Taylor Edwards Room. Beginners taught from 9-10 p.m. For information call 273-5268.

Exhibits

Photography Workshops Planned

The Education Department of the Herbert F. Johnson Museum of Art will offer three free photography workshops Sunday afternoon, Dec. 2, to complement the current exhibition, "Photography in California: 1945-1980," on view through Dec. 23.

Organized by the San Francisco Museum of Modern Art, the show includes 250 black-and-white and color photographs by 50 photographers.

Activities in conjunction with the exhibition will begin at noon, with an introductory workshop on photocopy art presented by Cornell photography professor Jean Locey. It is intended for all age groups and participants are encouraged to bring objects for experimentation.

After the photocopy art activity, Ithaca photographer and Cornell graduate student Doug Nickel will conduct two workshops, one for youngsters ages 6 through 12, and the other for teens and adults. The children's program will be held from 1 to 2 p.m., and will include discussion, demonstration, and "hands-on" activities exploring the ways in which photographers view our world. Scheduled for 3 p.m., the 90-minute teen and adult session will focus on photographic technology of the past 150 years, and how the photograph has been affected by technological developments.

All presentations are made possible through the support of the New York State Council on the Arts.

The museum, located at the corner of Central and University Avenues, is open Tuesday through Sunday, 10 m. to 5 p.m. For more information, contact the museum's Education Department at (607) 256-6464.

Herbert F. Johnson Museum

"From the Age of David to the Age of Picasso: French Drawings from a Private Collection"

from November 7 through December 23.

"Photography in California: 1945-1970" from November 7 through December 23.

"Pop Art Prints" from November 7 through December 23.

PUBLIC PROGRAMS: Saturday, Dec. 1 at 3PM. Environs III: November Music. Recorded noises produced by the museum, electronically altered to create a new sound environment. Preceding the performance there will be a lecture/demonstration on environmental composition at 2PM.

Sunday, December 2, Cornell Professor of Art, Jean Locey will conduct a workshop which introduces all ages to photocopy art at 12 noon.

Sunday, December 2: 1PM-2PM. Workshop for children ages 6-14, "Exploring Photography". Parents welcome.

Sunday, December 2: 3PM-4PM. Teen and adult workshop, "Photographic Techniques: Yesterday and Today". All the public programs are funded through the New York State Council on the Arts.

Olin Library

Samuel Johnson, Commemorating the 200th Anniversary of His Death. First editions of the "Dictionary", "Rasselas", and the "Vanity of Human Wishes". Hours: 10AM-5PM, Monday through Friday. Exhibit through December 31.

Risley College Exhibit

Risley College will present an exhibit of its residents' work in many different media on Friday through Sunday, November 30 through December 2. There will be an opening reception at 5PM on Thursday, Nov. 29. The public is invited. For more information call Karen Lichtenbaum at 256-0641.

Films

Unless otherwise noted films are under sponsorship of Cornell Cinema.

Thursday

Nov. 29, 12:20PM 32 Warren Hall. Rural Sociology 104. "Agro-Industries" (Kenya) Nov. 29, 8PM *Uris Auditorium. "Missing" (1982), directed by Costa-Gavras, with Jack Lemmon, Sissy Spacek, and John Shea. Limited. Cosponsored by Amnesty International.

Friday

Nov. 30, 7PM *Statler Auditorium. "Fame" (1980), directed by Alan Parker, with Anne Meara, and Irene Cara. Limited.
Nov. 30, 10PM *Uris Auditorium. "Passion" (1982) directed by Jean Luc-Godard with Isabelle Huppert, and Hanna Schygulla. Limited.
Nov. 30, 10PM *Statler Auditorium. "The Hotel New Hampshire" (1984), directed by Tony Richardson, with Jodie Foster, Rob Lowe, and Nastasja Kinski. Limited.
Nov. 30, midnight *Uris Auditorium. "Repo Man" (1984), directed by Alex Cox with Harry Dean Stanton and Emilio Estevee. Limited.

Saturday

Dec. 1, 7PM *Statler Auditorium. "The Hotel New Hampshire"
Dec. 1, 8PM *Uris Auditorium. "Passion"
Dec. 1, 9:30PM *Statler Auditorium. "Fame"
Dec. 1, 10PM *Uris Auditorium. "Repo Man"

Sunday

Dec. 2, 2PM *Uris Auditorium. "Benji" (1974), directed by Joe Camp, with Deborah Walley and Edgar Duelaman. Open. Cosponsored by the Ithaca Youth Bureau.
Dec. 2, 8PM *Uris Auditorium. "Popeye" (1980), directed by Robert Altman with Robin Williams and Shelley Duvall. Limited.

Monday

Dec. 3, 9PM *Uris Auditorium. "The Stalker" (1980), directed by Andrei Tarkovsky with Alexander Kaidanovsky and Nicholai Grinko, and Anatoli Solonitsin. Limited to Film Club Members.

Tuesday

Dec. 4, 4:15PM-Hollis E. Cornell Auditorium. "Hazardous Waste: Who Bears the Cost?" Sponsored by EPOC.
Dec. 4, 8PM *Uris Auditorium. "Fritx The Cat" (1972) directed by Ralph Bakshi. Animated. Rated X. Limited.

Wednesday

Dec. 5, 8PM *Uris Auditorium. "Creepshow" (1982) directed by George Romero with Adrienne Barbeau, Hal Holbrook and Stephen King. Written by Stephen King. Limited.

Thursday

Dec. 6, 12:20PM 32 Warren Hall. Rural Sociology 104. "Controlling Interest: The World of the Multinational Corporation"
Dec. 6, 8PM *Uris Auditorium. "Flash Gordon" directed by Mike Hodges with Max von Sydow, Sam J. Jones, and Topol. Limited.

Friday

Dec. 7, 8PM *Anabel Taylor Hall. "The Good

November 1984

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"Fight" (1984), directed by Noel Buckner, Mary Done, and Sam Sills, narrated by Studs Terkel. Admission \$1.50. Open.

Dec. 7, 10PM *Uris Auditorium. "Le Bal" (1984) directed by Ettore Scola, with Jean-Francois Perrier and Danielle Rochard. Open.

Saturday

Dec. 8, 7PM *Uris Auditorium. "Le Bal"
Dec. 8, 8PM *Anabel Taylor Hall. "The Good Fight"

Dec. 8, 9:30PM *Uris Auditorium. "Richard Pryor: Here and Now" (1984), directed by Richard Pryor, with Richard Pryor. Limited.

Sunday

Dec. 9, 2PM *Uris Auditorium. "Meet Me In St. Louis" (1944, directed by Vincente Minnelli, with Judy Garland and Margaret O'Brien. Open. Cosponsored by Ithaca Youth Bureau. Admission \$1.50/\$1.00 under 12.

Dec. 9, 8PM *Uris Auditorium. "Dead End" (1973), directed by William Wyer with Joel McRea, Humphrey Bogart, and Sylvia Sydney. Open.

Lectures

Thursday

Nov. 29, 12:20PM 102 West Avenue. Earl and Pat Martin, Mennonite Central Committee. "Encountering Revolution in Indochina and the Philippines". Southeast Asia Program.

Nov. 29, 4:30PM Rockefeller 374. "Korean Hagiography and Buddhist Textual Criticism: Evidence for the Korean Origin of the VA-JRASAMADHI". Robert Buswell, Research Associate, University of California, Berkeley. Sponsored by the China-Japan Program.

Nov. 29, 7:30PM G-1 Stimson Hall. Patty McGill-Harelstad. "How to Attract the Wombat and Other Curious Beasts". Sponsored by the Cornell Natural History Society.

Monday

Dec. 3, 4:30PM James Law Auditorium. The 1984-85 James Law Distinguished Lecturer Series continues with Wylie W. Vale Jr., professor at The Salk Institute in La Jolla, Calif., speaking on "Diverse Roles of Hypothalamic Regulatory Peptides."

Wednesday

Dec. 5, 3PM 202 Uris Hall. Thesis Seminar: Michael Layne, "Versions of LaFontaine: Illustrations of Moralism". Western Societies Program.

Dec. 5, 7:30PM Anabel Taylor Hall, One World Room. "Beyond Tomorrow" Ways Toward World Community", a student wrap-up of the course: America and World Community.

Thursday

Dec. 6, 12:20PM 102 West Avenue. Jim Rush, Professor of History, Yale University. "Observing the Contemporary Philippines". Southeast Asia Program.

Dec. 6, 7:30PM G-1 Stimson Hall. Dr. Thomas Eisner, "Chemical Ecology: Some Studies on Insects". Cornell Natural History Society.

Meetings

Every Tuesday

The Cornell Outing Club meets weekly at 7:30 p.m. at Japes (behind Noyes Lodge with the canoes on the roof).

Thursday

Nov. 29, 7PM Willard Straight Hall, Loft III. GAYPAC will hold a business meeting. Discussion to follow at 8PM. Topic: "Dealing with Straight Friends".

Tuesday

Dec. 4, 5:15PM Willard Straight Hall, Loft II. Cornellians will hold a meeting to discuss "Racism".

Thursday

Dec. 6, 7PM Willard Straight Hall, Loft III. GAYPAC will hold a business meeting Discussion to follow at 8PM. Topic: "Bisexuality".

Music

Series of Concerts Start Sunday

An eclectic mix of music celebrating the holiday season, Bach's birthday, the culture of Java, and music of Mozart will be performed in a series of concerts here beginning this Sunday, Dec. 2.

At 4 p.m. Sunday in Bailey Hall, 100 student musicians from Cornell's Symphonic Band will give a concert including Russian Christmas music, Cole Porter tunes, "Sketches on a Tudor

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Psalm" by Fisher Tull, and a "Christmas Spectacular!" arranged by Bill Byers.

Using 18th century instruments and performance practices, The Amade Trio, composed of resident faculty at Cornell, will play the Mozart Trios. The performance is in Barnes Hall at 8:15 p.m. on Tuesday, Dec. 4.

In honor of J.S. Bach's 300th birthday, the Cornell Chorale and instrumentalists will give an hour-long concert of his works at 8:15 p.m. on Wednesday, Dec. 5, in Sage Chapel. Rolfe Sokol will be soloist in Bach's

Concerto in A minor for solo violin and strings. Finally, on Friday, Dec. 7, at 8:15 p.m., the Cornell Gamelan Ensemble will play Javanese music in Barnes Hall. Thirty-eight performers using gongs and metallophones will be under the direction of Sumarsam, a native Indonesian and graduate assistant in the music department.

All concerts are free and open to the public.

Thursday

Nov. 29, 8:15PM *Statler Hall. Richard Stoltzman, clarinet; Richard Goode, piano (Series concert).

Friday

Nov. 30, 8:15PM Johnson Museum of Art. Environs III: November Music, a piece for percussion and tape composed especially for the Herbert F. Johnson Museum of Art by William Bradbury. A reception will follow the concert.

Saturday

Dec. 1, 3PM Johnson Museum of Art. Environs III: November Music. Preceding this performance the composer will give a lecture/demonstration on environmental composition at 2PM.

Friday

Dec. 7, 8PM Bailey Hall. George Thorogood and the Destroyers. Rock'n'roll, R&B. Presented by the Cornell Concert Commission.

Religious Services

Friday

Nov. 30, 5:30PM Founders Room. Anabel Taylor Hall. Conservative/Egalitarian Minyan. Shabbat Services.

Nov. 30, 5:30PM Anabel Taylor Chapel. Reform Minyan Shabbat Services.

Nov. 30, 5:30PM Orthodox Minyan. Call 272-5810 for time and place.

Saturday

Dec. 1, 9:15AM Edwards Room, Anabel Taylor Hall. Orthodox Minyan Shabbat Service.

Dec. 1, 10AM Founders Room, Anabel Taylor Hall. Conservative/Egalitarian Minyan Shabbat Services.

Sunday

Dec. 2, 11AM Sage Chapel. Speaker: George Cadigan, Chaplain, Amherst College. Bishop of the Protestant Episcopal Church (Second Advent).

Sunday

Dec. 9, 11AM Sage Chapel. Speaker: Ann Shumate, Associate Director, Residence Life, Cornell (Third Advent).

Catholic

Mon.-Fri., 12:15 p.m. Anabel Taylor Chapel. Catholic Mass.

Every Saturday, 5 p.m. Anabel Taylor Auditorium. Catholic Mass.

Every Sunday, 9:30 & 11 a.m., 5 p.m. Anabel Taylor Auditorium. Catholic Mass. Sacrament of Reconciliation by appt. G-22 Anabel Taylor Hall.

Christian Science

Every Thursday, 7 p.m. Anabel Taylor Founders Room.

Episcopal

Every Sunday, 9:30 a.m. Anabel Taylor Chapel.

Friends (Quakers)

Every Sunday Anabel Taylor Edwards Room. Meeting for Worship at 11 a.m.: Adult Discussion and First Day School at 9:45 a.m. Baby sitting provided.

Korean Church

Every Sunday, 3 p.m. Anabel Taylor Chapel.

Lutheran

Every Sunday, 10:45 a.m. Worship Service. Sunday Church School at 9:30 a.m.

Muslim

Every Friday, 1 p.m. Anabel Taylor Edwards Room. Juma' Prayer. Anabel Taylor 218. Zuhr, Asr and other prayers.

Every Sunday, 12:30 p.m. Anabel Taylor Hall. Sunday meeting, discussion groups, children's classes, etc.



"Bridge," a 1930 work by Paul Signac, is among the works on exhibit at the Herbert F. Johnson Museum of Art currently in the display "From the Age of David to the Age of Picasso: French Drawings from a Private Collection." The exhibition runs until Dec. 23.

Protestant Cooperative Ministry

Every Sunday, 11:15 a.m., Anabel Taylor Chapel.

Seventh Day Adventists

Every Friday, 7:30 p.m. Anabel Taylor Room 314.

Seminars

Agriculture Engineering: "Crop and Water Table Response to Different Drainage Treatments." Larry Geohring, 12:20 p.m. Monday, Dec. 3, 400 Riley-Robb Hall.

Animal Science: "Genetic Potential of Grade AI Holsteins." R. W. Everett, professor of animal science, 11:15 a.m. Monday, Dec. 3, 348 Morrison Hall.

Applied Mathematics: "Information Theory in Random Fields." Prof. Toby Berger, School of Electrical Engineering, 4 p.m. Friday, Nov. 30, 165 Olin Hall.

Astronomy: "Jupiter's Ring System Resolved: Interpretations of the Voyager Images." Mark Showalter, Cornell, 4:30 p.m. Thursday, Dec. 6, 105 Space Sciences.

Biochemistry, Molecular and Cell Biology: "Monoclonal Antibodies Which Block Calcium Influx During the Acrosome Reaction of Sea Urchin Sperm." Jim Trimmer, Marine Biology Research Division, Scripps Institution of Oceanography, University of California at San Diego, 11 a.m. Friday, Nov. 30, 105 Riley-Robb Hall.

Biochemistry, Molecular and Cell Biology: "Regulation of Glycogen Metabolism: The Role of Protein Phosphorylation in the Transduction of Hormonal Signals." Peter Roach, Biochemistry, Indiana University School of Medicine, 4:30 p.m. Friday, Nov. 30, 204 Stocking Hall.

Biophysics: "New Applications of Membrane Potential Sensitive Dyes." Prof. Leslie Loew, Physiology, University of Connecticut Health Center, 4:30 p.m. Wednesday, Dec. 5, 700 Clark Hall.

Chemistry: "Oxygenation of Organic Substrates Mediated by Metal Ions." Joan Valentine, University of California, Los Angeles, 4:40 p.m. Monday, Dec. 3, 119 Baker.

CISER: "Microcomputer Statistical Packages for Social Scientists." Jan Hilfiger, Cornell Computer Services, 12:30 p.m. Wednesday, Dec. 5, N225 Martha Van Rensselaer Hall.

Ecology and Systematics: "Sexual Selection and Reproductive Success in a Plethodontid Salamander." Lynne D. Houck, Biology, University of Chicago, 12:20 p.m. Thursday, Nov. 29, Morison Seminar Room, Corson Hall (jointly sponsored by E&S and NB&B).

Environmental Research: "Decision-Making in a Dangerous World." Paul Slovic, Decision Research, 8 p.m. Thursday, Nov. 29, 105 Rockefeller Hall.

Facilities Planning and Management: "Applying Strategic Plans to Specific Sites." Art Hahn, manager of facilities, TRW Inc., Redondo Beach, Calif., 4:30 p.m. Monday, Dec. 3, 317 Martha Van Rensselaer Hall.

Floriculture and Ornamental Horticulture:

"Propagation of French Hybrid Lilacs Using Stock Plant Etiolation." Diane Miske, 12:15 p.m. Thursday, Nov. 29, 37 Plant Science.

Floriculture and Ornamental Horticulture:

"Source/Sink Relationships in the Forced Easter Lily, Liliium Longiflorum." William B. Miller, Graduate Student, 12:15 p.m. Thursday, Dec. 6, 37 Plant Science.

Food Science: "Measurement of Properties of Packages and Packaging Materials." Joseph Hotchkiss, assistant professor, food science, 4:30 p.m. Tuesday, Dec. 4, 204 Stocking Hall.

Geological Sciences: "Thoughts on Extensional Tectonics." Thomas Hauge, Cornell, 4:30 p.m. Thursday, Nov. 29, 1120 Snee Hall.

Interdisciplinary Research: "Socioeconomic Studies of the Adirondack Park Region." David Allee, Ag Econ, coordinator, 12:15 p.m. Thursday, Nov. 29, 401 Warren Hall.

Jugatae: "Genetic Change in Introduced Populations of Biocontrol Agents: Are We Making New Species?" Neil Murray, Department of Genetics and Human Variation, La Trobe University, Victoria, Australia, 12:15 p.m. Thursday, Dec. 6, 100 Caldwell Hall.

Materials Science and Engineering: "Micro-Chemistry of Grain Boundaries in Ceramics." Prof. W. D. Kingery, MIT, 2:30 p.m. Thursday, Nov. 29, 140 Bard Hall.

Natural Resources: "Strategic Issues: Challenges to Fisheries Management in the 1990s." Dennis Schenborn, Wisconsin Department of Natural Resources, Bureau of Fish Management, 4 p.m. Thursday, Nov. 29, 304 Fernow Hall.

Operations Research: "Parameter Sensitivity Estimation of Queuing Networks Using Perturbation Analysis." Prof. X. Cao, Harvard, 4:30 p.m. Tuesday, Dec. 4, 107 Upson Hall.

Ornithology: "Gardening for Wildlife—Inviting Birds, Bees and Butterflies to Your Backyard." Craig Tufts, National Wildlife Federation, 7:45 p.m. Monday, Dec. 3, Laboratory of Ornithology.

Parasitology: "Study of a Parasitic Nematode on Grape Vines." Martin Harrison, associate professor of plant pathology, Cornell, 4 p.m. Thursday, Nov. 29, Diagnostic Lab Conference Room, Vet College.

Pharmacology: "A Hormone-Sensitive Neuromuscular Pathway in an Electric Fish." Andy Bass, Cornell, 4:30 p.m. Monday, Dec. 3, D-105 Schurman Hall.

Plant Biology: "Micro-Computers and Urban Tree and Park Plant Management." Alexandra Garrison, micro-computer system applications consultant, New York Metropolitan Area, 12:15 p.m. Friday, Nov. 30, 208 West Sibley.

Plant Pathology: "Analysis of Genes from Rice." Ray Wu, biochemistry and molecular and cell biology, Cornell, 11:15 a.m. Friday, Nov. 30, 404 Plant Science.

Plant Pathology: "Individual and Combined Effects of Colletotrichum Graminicola and the European Corn Borer on Maize." Nancy Keller, 4:30 p.m. Tuesday, Dec. 4, 404 Plant Science.

Plasma Studies: "The Theory of Plasma Erosion Opening Switches." Dr. P. Ottinger,

Naval Research Laboratory, 4:30 p.m. Wednesday, Dec. 5, 282 Grumman Hall.

Poultry Biology: "Timed Emulsification Studies on Myosin and Exhaustively Washed Muscle from Chicken Breast Muscle." Donna Gerwig, Poultry and Avian Sciences, Cornell, 4:30 p.m. Thursday, Dec. 6, 300 Rice Hall.

Psychology: "Insect-Plant Interactions: Some Chemical and Behavioral Studies." Thomas Eisner, Neurobiology and Behavior, Cornell, 3:30 p.m. Friday, Nov. 30, 202 Uris Hall.

Statistics: "Robust Estimation of Variance Components." William Fellner, E. I. Dupont de Nemours & Co., Wilmington, Del., 3:30 p.m. Wednesday, Dec. 5, 105 or 120 ILR Conference Center.

Theoretical and Applied Mechanics: "Diagnosing and Quantifying Chaos." Prof. Alan Wolf, The Cooper Union, 4:30 p.m. Wednesday, Dec. 5, 205 Thurston Hall.

Toxicology: "The Immunotoxicity of Dimethyl-nitrosamine." Dr. Michael Holsapple, Pharmacology and Toxicology, Medical College of Virginia, 12:20 p.m. Friday, Nov. 30, NG-02 Martha Van Rensselaer Hall.

Vegetable Crops: (Joint with Pomology) "History of Research in the Department of Vegetable Crops." William C. Kelly, Vegetable Crops, 4:30 p.m. Thursday, Dec. 6, 404 Plant Science Building.

Sports

Friday

Dec. 7, 7PM Barton. Men's JV Basketball - Ithaca College.

Saturday

Dec. 8, 10AM Grumman Squash Courts. Men's Squash - Lehigh.

Dec. 8, 1PM Helen Newman. Women's Swimming - Columbia.

Dec. 8, 2PM Teagle Hall. Men's Wrestling - Wilkes.

Dec. 8, 2PM Lynah Rink. Men's JV Hockey - Pickering Jr. B.

Dec. 8, 4PM Grumman Squash Courts. Men's Squash - Hobart.

Dec. 8, 4PM Teagle Hall. Men's Swimming - Columbia.

Dec. 8, 7:30PM Lynah Rink. Men's Hockey - Harvard.

Sunday

Dec. 9, 1:30PM Lynah Rink. Men's JV Hockey - Pickering Jr. B.

Dec. 9, 7:30PM Lynah Rink. Men's Hockey - Dartmouth.

Theater

Wednesday - Saturday

December 5 - 8, 8:15PM Drummond Studio. "Biedermann and the Firebugs", by playwright Max Frisch and directed by Jim Thorp. Admission is free and the seating is limited.

Bulletin of the Faculty

September 12, 1984
110 Ives Hall

The incumbent Speaker, Russell D. Martin, called the meeting to order at 4:30 p.m. and welcomed the assemblage to another year. He then introduced Dean of the Faculty, Joseph B. Bugliari.

1. REMARKS BY THE DEAN

Dean Bugliari: "First, let me welcome you all back for another year. Thank you all for coming today to this combined meeting of both the FCR and the University Faculty.

"I have just two or three things to report to you. The first is, as you know, last year an ad hoc committee appointed by the Executive Committee of the FCR was conducting a review of the so-called Stein Committee rules with respect to promotion, to tenure, full professor, reappointment, and so forth. At the end of last spring, we were not ready to report back to this body with the recommendations of that Committee. I'm happy to report that at least at the moment, according to Ken Strike, who is the chairman of that ad hoc Committee, that we will probably be able to report back with the recommendations at the October meeting. He has been working over the summer with Walter Relihan, who is the University Counsel, ironing out whatever differences existed between them. As I understand it, they have gotten them all worked out. So, you will soon be getting a copy of the proposed changes in those rules with an accompanying explanation.

"Secondly, you may have noticed if you have gone down to the Rathskellar recently, that in addition to the bulletin board that exists right over the top of where you sign your card for payment of your lunch, a new bulletin board has recently appeared courtesy of the Statler Inn. It is sort of in disrepute at the moment, but if I ever get from Kansas City the insert that is supposed to go in there and the letters that are supposed to come with it, we will have a bulletin board for the University Faculty. The idea is to have on that bulletin board announcements of University Faculty and FCR meetings and also a place to provide a reminder of concert series and the University Lecture series. We will have a key, and we will have control of the board.

"Thirdly, I know you may not believe it, but we are now at the point where we are doing the index on the Faculty Handbook, and the projected date for its appearance is now November. We will have enough copies obviously for all the members of the faculty. We will also have sufficient copies for you to send to people at other institutions who you are interested in attracting. The proposal now is that we will reproduce the handbook every two years. I know you don't believe that because the last one came out twelve years ago, but we will be in a position, once we've got it done after twelve years, to put it out every two years and keep it current on a two-year basis. We will be keeping it even more current in that we will have loose leaf copies of it with replaceable pages in the offices of all of the deans, department chairmen and the libraries. Those copies will be kept more current and every two years we will have a new one that will be available to everybody.

"The fourth thing I would like to just mention is that over the summer, spurred by a number of events that occurred last fall, we have been doing some work on looking at the question of academic integrity - how we handle cases, some of the problems that existed in some of the areas with respect to procedure and some of the questions also with respect to substantive issues. We had a very able law student over the summer who conducted a great deal of investigation among people at this institution and other institutions, and we are now in the process of getting together a proposal for some changes in the way academic integrity issues are handled. These will be coming back, I hope, to you this fall after they go through a number of committees. A second part of that project is to produce a handbook on academic integrity which will be available to every member of the faculty and every person who teaches at this institution. It will start with Step 1, if somebody does something in your class, all the way through the appeal procedure. The idea is that what you will then be able to do is to refer to this and it will take you step by step right through the whole procedure. We will not print that, of course, until we get the revisions to the Code we propose, so we can do the whole thing at once. We hope that will be available now by the spring. We have a version of it. All we have to do now is get the Code changed so we can put that with it.

"The final thing I would like to do is to report on last spring's election.

2. REPORT ON ELECTIONS

"As you know, in our system we have a double election process. First we elect members to the FCR and then after we elect FCR members to serve on various committees. The following individuals were elected to serve:"

EXECUTIVE COMMITTEE OF THE FCR - 4 seats: Richard S. Booth, W. Ronnie Coffman, Robert M. Cotts, John E. H. Sherry.

EXECUTIVE COMMITTEE OF THE FCR - 1 non-tenured seat: Kathleen M. Vernon.

ACADEMIC FREEDOM AND RESPONSIBILITY COMMITTEE - 2 seats: June M. Fessenden-Raden, Andrew Ramage.

ACADEMIC PROGRAMS AND POLICIES COMMITTEE - 1 seat: Terrence L. Fine.

ADMISSIONS AND FINANCIAL AIDS COMMITTEE - 2 seats: Peter Harriott, Robert McGinnis.

BUDGET COMMITTEE - 1 seat: Robert D. Boynton.

PHYSICAL EDUCATION COMMITTEE - 1 seat: Wilmot W. Irish.

The Dean then called on Professor John E. H. Sherry for a nomination.

3. ELECTION OF SPEAKER

Professor Sherry nominated Professor Emeritus Russell D. Martin as Speaker for another one-year term. Upon hearing no further nominations, the Dean declared nominations closed, and proclaimed Russell Martin Speaker of both the FCR and the University Faculty.

Speaker Martin stated that he appreciated the privilege of again serving as Speaker and then called on President Rhodes for announcements and remarks.

4. ANNOUNCEMENT OF DEATH OF FACULTY MEMBERS

The President began with a list of Cornell colleagues who had died since the last meeting.

Dexter Perkins, University Professor, Emeritus, May 12, 1984

Frances A. Johnston, Professor of Food and Nutrition, Emeritus, May 27, 1984

President Rhodes then invited those present to stand for a moment of silence.

5. RECOGNITION OF DISTINGUISHED TEACHING AWARD RECIPIENTS

President Rhodes: "It's always a pleasure to announce the recipients of the Distinguished Teaching Awards given by Cornell. These are for the year 1983-84. Not all the individuals are able to be with us today, but most of them are."

Agriculture and Life Sciences:

Emeritus Professor of Vegetable Crops, William C. Kelly - Edgerton Career Teaching Award - by the State College of Agriculture and Life Sciences;

Associate Professor of Agricultural Economics, Gene A. German - Professor of Merit Award - by the State College of Agriculture and Life Sciences, Cornell, given by Ho-Nun-De Kah (Agricultural Honor Society.)

Architecture, Art and Planning:

Professor of Architecture, Charles W. Pearman - Martin Domiguez Award for Distinguished Teaching.

Arts and Sciences:

Associate Professor of History, John M. Najemy - The Clark Award;



President Rhodes lists four major challenges for the year ahead.

Associate Professor of English, Harry E. Shaw - The Clark Award;

Associate Professor of Neurobiology and Behavior, Paul W. Sherman - The Clark Award;

Professor and Chairman of Astronomy, Yervant Terzian - The Clark Award.

Engineering:

Assistant Professor of Electrical Engineering, David F. Delchamps - Excellence in Teaching Award - by Cornell Society of Engineers and Engineering Tau Beta Pi.

Human Ecology:

Associate Professor of Nutritional Sciences, Virginia L. Utermohlen - Distinguished Teaching Award - by the College's Alumni Association and Omicron Nu Honor Society.

Veterinary Medicine:

Professor and Chairman of Clinical Sciences, Alexander deLahunta - Norden Distinguished Teacher Award.

The assembled faculty greeted the announcement with applause.

President Rhodes: "Mr. Speaker, Mr. Dean, I value the opportunity to speak with you early in the year. I feel a little like the coach who assembled his team and said, 'Well, here we are - unbeaten, untied, unscored upon, and ready for our first game of the season.' That's not true of the faculty, clearly, but there is a sense of excitement and a new beginning as we face the start of another academic year.

"I want to speak very briefly about where we stand, about where we're going, and especially about what I see as the four major challenges that confront us in the year ahead.

"Where do we stand? The key to that question is in the quality of the new faculty. Some of us had the privilege of meeting new members of our faculty on Saturday morning, and the quality of the

56 individuals appointed to tenure track positions this new semester seems to me to be higher than ever. I want to thank you for the care you've devoted to their selection and to say how proud we are to welcome them as colleagues. We continue to face severe competition in recruiting and not least because, increasingly, faculty members come in packages of two. Three members of this year's new faculty group are, in fact, career couples, and in one case, a couple by request shares a single appointment. We value the help that you've given us not only in recruiting but in helping us meet the opportunity of career couples.

"It's also a good year in terms of new student admissions, and I believe you'll find that your freshman classes are not only challenging, but as good or better than we've ever seen. We had almost 19,500 applications for 2,800 freshman places, an increase of seven percent over a year ago. Our yield also increased, going over the fifty percent mark - 51.2 percent - for the first time. The quality increased with it - up by two points on the verbal SAT scale and by seven points on the math scale. We're particularly pleased that minority enrollment in the freshman class increased by a remarkable 29 percent in the case of all minority members and by over 48 percent for blacks. That's a tribute to the efforts of people in many different groups including the admissions committees, and admissions deans in both the colleges and the central admissions office.

"But that reputation, that interest on the part of students is something that has to be earned again every year. And I'm very conscious that we don't achieve success by glossy recruitment brochures, but by the quality and commitment that you bring to undergraduate teaching. I want to recognize that and thank you for it. It's not universally present in every university.

"All that is the good news. The bad news is that we shall be losing Jim Scannell, our Dean of Admissions for four years, in about two months' time. He leaves us with our regrets but also with our good wishes for a vice presidency at the University of Rochester. His will be difficult shoes to fill.

"Part of our success in recruiting this year has undoubtedly been due to The Cornell Tradition, which had a banner year. This year some 379 Fellows will receive funds through the Tradition program in comparison with 290 a year ago. The total number of summer fellowships awarded increased by a third to almost 600.

"On the graduate front, our position looks equally encouraging. We don't have final figures, but both the quality and the numbers look remarkably good. To give just one snapshot, in the humanities this year, we have eleven Mellon Fellows in residence in comparison to two a year ago. This is not an exact comparison for various reasons, but it's a very welcome improvement.

"Admission inquiries this year seem to be about 30 percent ahead of a year ago; the momentum of increased interest in Cornell looks as though it will continue.

"I mentioned that we had a number of new administrative appointments this year. Bob Barker, our new Provost, is here today. Joe Ballantyne, who is not able to be here today, comes in as Vice President for Research; Barry Adams, former Chairman of the Department of English, comes in as Vice Provost with particular responsibility for undergraduate studies; and Dave Call comes to us on loan for one year from the College of Agriculture and Life Sciences to pull together our support systems in Albany and in Washington and in public affairs generally in order to strengthen the support we receive from all those sources. That support will be vital to us in the years ahead. Bob Horn retired this year as Vice President and Treasurer, having taken care of our financial affairs for fourteen years, and we are looking actively for a successor. There are two new deans whom we are happy to welcome - Bill McMinn in Architecture, Art and Planning; and Curtis Tarr in the Graduate School of Management. Bill Streett is acting dean in the College of Engineering.

"We shall need your help, and we shall probably need your forbearance as our new team settles into harness, but I want to invite your continuing support. If you have suggestions, please make them. If you have concerns, let us know. We need the strong partnership with you we now enjoy.

"One group I haven't mentioned, but I want to recognize is the large number of men and women who take over responsibility this month for chairpersonships and directorships of departments and centers. The major focus for leadership in the University is at the department and at the center level, and I am very conscious of the debt we owe to these people for assuming those particular responsibilities. I am more aware than many people that the responsibilities are not always enjoyable, but they continue to be of major importance to us.

"Let me say a word about the financial outlook as we enter the year. In general, our financial position is sound but we're certainly not as strong as we need to be. We have a balanced budget this year. Thanks very largely to Jim Spencer's careful preparation and work, we finished last year in balance; in fact, with a very modest surplus in each of our three major divisions.

"We've had a very good year, through your initiative, for research funding, with an increase on the Ithaca campus of around 12 percent in the overall level of research funding and a total of about \$120 million in external support.

"We had a remarkably good year in gifts to the University. We raised almost 73 million dollars last year, up 18 percent from the year before and up more than 40 percent from two years ago. As we gave more opportunity for colleges and departments to solicit funds aggressively during the year, the level of undesignated giving we can allocate at our discretion to units went down. So, departments and colleges have become 'richer' and the central funds have become rather less rich in spite of an all-time record. That's important as we think about the budgetary consequences in the long term.

"We held tuition to what I think was a responsible and a reasonable level, and we increased salaries to a level that isn't yet satisfactory but puts us close to our goal of getting up into the 80th percentile of our peer institutions. We shall be talking to you



"At the top of the list is to continue to undergird and reinforce the research capacity of the University."

frequently during the next six or eight months about some new proposals for flexible benefits. In a nutshell, we are trying to pay for a number of benefits, including health benefits and dependent care benefits, with pre-tax, rather than post-tax dollars. That's going to call for some informed choices on the part of faculty and staff members, but we think it's one way in which we can improve the overall compensation package. We shall be in active consultation with you and your committees about these proposals this year.

Finally, under the heading of our financial condition, let me note that, as in the past, we shall be looking at new initiatives largely as substitutions rather than as additions. That's going to be frustrating and controversial, but if we are to live within our means, that's the way it must be done. We welcome your continuing help and advice as we seek to do that.

There's a lot of untidiness on the campus at the moment as we construct a number of new facilities. Snee Hall for Geological Sciences will be dedicated next month. We have a very impressive program to inaugurate that building, and the chief speaker will be John McTague, Deputy Director, Office of Science and Technology Policy in Washington. He'll be giving a speech on national science details later. Academic II, an important addition to the campus, will come on stream progressively during the course of the year. We shall break ground this fall for the Center for the Performing Arts, still pushing to fund the remaining \$3 million of project cost. We hope to complete design work and begin construction on Academic I before the end of the calendar year, but that's not absolutely certain. I think you will find that with the help we've received from many members of the campus community, the design of Academic I is a good deal better the second time around, and that it will meet a long-term need.

But that only scratches the surface of the needs that exist on the campus, and each of you could provide your own list of unmet needs, of maintenance that has been deferred, of painting that is fifteen years overdue. From Engineering to Law, and from Architecture, Art and Planning to Veterinary Medicine, we have substantial facility needs still ahead of us. We will tackle them as well as we can, and they remain a priority, but a priority amongst others.

So that's where we stand, as the new academic year opens. But budgets and buildings are really means to an end, and I want to talk with you briefly about the four major opportunities we face together in the coming year. Two of them I raised briefly with you a year ago, and they are continuing concerns. The first, and the one I put at the top of the list, is to continue to undergird and to reinforce the research capacity of the University and with it the graduate and professional programs associated with that research capacity. There are many changes that have taken place even during the past year. The campus has been 'personally computerized' to a degree that few thought possible at the beginning of the year. That revolution will continue, and it will change the way we undertake almost every aspect of teaching and much research. With that, we now have plans, as you read in the Sun today, to take over Comstock when it is vacated by its present occupants, and to use it as the new site for two important campus facilities. One is for the telephone switch, which is bigger than it sounds, for the new campus communication system. There will be a certain amount of upheaval in the phone system during the course of the year, as we put in place a \$16 million telecommunication system, capable of transmitting not only voice but also data in other forms. This will involve some inconvenience, but there will be both short-term and long-term benefits which are considerable. We expect that the new system will

pay for itself within three to five years and that it will prevent what would otherwise be an almost impossible escalation in phone charges. Second, Biotechnology is now firmly established as a campus program under the leadership of Gordon Hammes, and we hope within a few weeks to have funding in place for a new \$30 million building for the program. We hope to build it on lower Alumni Field adjacent to other buildings in the Biological Sciences. The new facility will make possible very close interaction among people now scattered through 19 or 20 departments and it will add enormously to the teaching and research capacity of individuals from many centers.

Also on the horizon are major new research initiatives ranging from the Theory Center, which you approved last year, to upgrading CESR to an engineering research center. Big Science is going to be an increasingly significant part of life on campus, and that, of course, is both an opportunity and a challenge. It's clear that federal priorities are leaning more and more to the recognition of the needs we face for support of basic science, but it's also clear that if we pursue that to the neglect of other traditional areas of scholarship we shall create an imbalance in the University. We shall need all the wisdom we can find, and especially the help and counsel that you can give, in maintaining the centrality of the chief facility of the University, which is its library. That's especially basic, of course, to people working in disciplines ranging from law to philosophy. We must have a way of keeping not only the acquisitions base strong but of helping Mr. Martin in every way we can in the computerization of the library.

I want to move from that goal of strengthening our research capacity to a second goal and mention it openly as a problem. Over the seven years I have now had the privilege of being a member of the Cornell community, the plight of the statutory colleges has become more severe. I don't regard it as something that has reached crisis proportions; I do regard it as a matter of serious concern because it represents a steady erosion of quality. Our biggest problem is convincing those who represent us in Albany that our statutory colleges are an investment that has a priority for the State. We're closely involved at the moment in conversations with

"Making international experience a vital part of Cornell's education."

our colleagues in the State University concerning the form of our relationship with them. A Blue-Ribbon Commission, under the chairmanship of Harold Enarson, former President of the Ohio State University, is considering the future of the State University. We have met with Dr. Enarson and other Commission members, and we are presenting a strong case. During the course of the year, our state relationships will be one of our major priority concerns.

Our third goal is one that I touched on briefly a year ago. We are in the midst of rebuilding four graduate professional programs, and their needs are very different. In the Law School, the facilities need that you've read about recently remains unmet, and we're working with Dean Martin to see what we can do about funding. In the Veterinary College, a major need for new positions was met — but only in part — by funding we received during the past year, and there's an equally great need for a new clinical hospital. That's an enormous undertaking, but it has been deferred so long that the

College of Veterinary Medicine now faces very serious problems. A new clinical hospital will be a major priority for us in Albany this year.

In two other colleges we have made very significant progress during the year. We have a new dean, as you know in the Graduate School of Management, and we expect a major new initiative during the year in connection with that school. At the Medical College, the task of rebuilding the basic sciences has been made immeasurably easier by a gift of \$50 million committed to the College without restrictions. The changes that have already taken place at the Medical College are a source of great satisfaction.

I want to share with you a fourth goal, which is much more difficult to interpret in practice than to state in principle. Our goal is quite simply to move Cornell into the flagship position for undergraduate education amongst major comprehensive research universities — the flagship position, not just up in the vanguard, but the model for the rest of the fleet. I believe Cornell can now occupy that flagship position because most other great universities lack the breadth to which, through foresight and historical fortune, we are heirs. A university unconcerned with problems of world agriculture, human hunger, and human development, for example, simply cannot address the spectrum of needs of the twenty-first century as Cornell can. There is also at Cornell a devotion to undergraduate teaching on the part of the most distinguished faculty members, senior and junior, that I find unparalleled anywhere else. And we have remarkable foundation strength because of the quality of the students themselves. They teach each other, and they flourish in that kind of context. We have a superb foundation, and we must continue to work together, making what is great even greater.

There have been some initiatives during the year which I hope will be helpful as we move forward. One with enormous long-term potential is Common Learning, and I'm glad that Urie Bronfenbrenner, Dan Sisler, and Peter McClelland are going to talk about that later this afternoon. The Cornell-in-Washington Program under Arch Dotson's leadership is running at full capacity in its own facilities with a variety of new programs. That's one of the success stories at the undergraduate level. A year ago, I suggested that we should together establish another new priority for undergraduate studies, a commitment making international experience a vital part of Cornell's education. You've responded magnificently, and, under the leadership of Davydd Greenwood and Mary Katzenstein, a flying start has been made. Arch Dotson has been so successful in Washington that we've persuaded him to take the international program over this year. But I want to tell you, from a summary that he has given me, of the exciting progress that has already been made. We have agreements already with the London School of Economics and with University College, London, designating places for Cornell students. There are also looser agreements with three other major universities in Britain for similar types of arrangements, and there are informal agreements with a number of Oxford

"There are dangers if we become so preoccupied with 'Big Science' that we neglect things that are equally fundamental to our future."

and Cambridge colleges for admission of Cornell undergraduates. In fact, Dr. Nancy Waugh of Somerville College, Oxford, will be here from the 26th through the 27th of this month to talk with both faculty and undergraduates concerning study opportunities at not only Oxford but also at Cambridge. We have other free-standing schemes in both Spain and Germany, and in collaboration with The University of Michigan and the University of Seville, we are now developing a joint venture. We're in the final stages of negotiation for a joint program with the University of Hamburg. We hope by the beginning of next year to greatly expand the study possibilities at Swiss and Chinese universities. And here on campus the new language houses are up and running. They provide great opportunities, and they've got some teething problems; we must accept the one and solve the other. Special projects and pre-professional internships offer added opportunities.

Our goal here is not to assemble a series of mini-Cornell campuses in other parts of the world, but to make exposure to international experience an essential component of what it means to be a student at Cornell. That's going to mean that we regard these students in absentia as still our own students and not somehow separated from the campus. We've arranged for them to continue to receive financial aid, for example, which has been one of the major obstacles. But we need your help in counseling them, in accepting and suggesting courses that are appropriate for credit and, in fact, in interpreting Cornell's mission and commitment, which has always been international, in the sphere of undergraduate studies.

Let me mention three other areas of the undergraduate experience that are going to need attention if we are truly to become the flagship. The first of these is residence life. I believe we simply don't know as a community what we expect of residence life. Are the fraternities, sororities, and dormitories living up to what we expect of accommodation within an educational institution? We value enormously the help that some of you have given us as faculty members in residence and as faculty associates, and we'd like to expand those programs. Tell us how, because clearly they're not appealing to a large enough number of faculty members. Blanchard Rideout, one of our distinguished emeritus members of the faculty, has become a faculty associate of north campus dorms within the last year, and I wish that some time Blanchard could talk to you about his experience there. So, what do we expect of the residence system?

Second, the amenities of campus life in general have to be



"Our biggest problem is convincing those who represent us in Albany that our statutory colleges are an investment that has a priority for the state."

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improved. We are conscious that we haven't done anything for athletics at Cornell for 25 years. Our hope is that the Center for the Performing Arts will add an important new dimension to Cornell, not only for those in theatre and dance, but for every other member of the community. But beyond that, we have a challenge in undergraduate education simply to confront the mood and the pattern of the age in which we live.

"I said a moment ago that there are dangers if we become so preoccupied with 'Big Science' that we neglect things that are equally fundamental to our future. And by that I mean the concerns which have traditionally been at the center of the humanities. I want to ask you simply to help us this year to find ways in which we can develop humane and ethical concerns within every part of the undergraduate curriculum. I don't know how to do that in practice. It's a concern and a priority, but I simply don't know how to achieve it. I suspect that there is no simple integral method, but there are many different ways in which you individually can do it, and we want, with your help and your support, to bring that about. We have funds for new combinations of subjects that we haven't yet tapped, and Barry Adams will welcome suggestions on ways to integrate these concerns with professional and disciplinary training.

"That challenge seems to me, in fact, much bigger than Cornell. We live in an increasingly fragmented and divided society. We live with nuclear madness that doesn't seem to abate. We live in a world still characterized by hunger and need, and we live in an intellectual climate — at least on some campuses — of cynicism and a territorial arrogance. And if that is an accurate diagnosis of the society of which we're a part, it's equally true that the educational system at some institutions simply regards students as passive receptacles on a kind of production line where information is poured in. I hope that with your help and with the capacity now to increase and develop fresh combinations of subjects, one of our priorities in this coming year can be to give to students not only first-rate training in their particular chosen major — that's fundamental to everything else — but also a sense of self-confidence, self-discipline, of motivation and self-direction, and in stark contrast to the society they inherit, a commitment not just to professional distinction but to personal service. If we can do that, Cornell will be not only a flagship, but a model, and our society and our world will be the beneficiaries.

"Thank you."

applause

Speaker Martin: "Are there any questions for President Rhodes or Provost Barker?"

Professor Yervant Terzian, Astronomy: "I was wondering if the \$50 million to the Medical School is part of the \$70 million gift."

President Rhodes: "No, it is not. It's worth \$50 million over a period of years. It's coming in to us at the rate of \$3 million a year."

Professor Howard Evans, Veterinary Anatomy: "The President mentioned the biotechnology companies. I wondered if they are considering additions to the library per se."

Provost Barker: "There was a direct transmission of some funds to the library this first year. And, of course, like other research programs, there is indirect cost recovery which should feed back into the library system. The state money, as you are probably aware, like other state money comes without indirect cost recovery, and I think the intent was to keep some of that fee paying for services, as it were, like the library. The State's attitude on that is something that we have to explore as we go along, so I don't wish to say that it is going to be that easy."

7. PRESENTATION ON COMMON LEARNING PROGRAM

Professor Urie Bronfenbrenner, Jacob Gould Schurman Professor of Human Development and Family Studies and Psychology: "Mr. President, Mr. Provost, Mr. Dean, Fellow Workers in the Vineyard: My colleagues and I appear before you today on behalf of 14 faculty who are members of the Commission on Common Learning. It is this Commission that has had primary responsibility for designing, directing, and evaluating the Common Learning experiment.

"This is our second interim report on an experiment still under way. Our first report was sent to all members of the Faculty a year ago. At that time, all that we could present to you was the plan for the experiment. The plan involved a statement of purpose, a set of criteria, an outline of proposed procedures, and a description of three courses that, in the judgment of the Commission, met the specified criteria, and have subsequently been approved by the Educational Policy Committees of the appropriate colleges or schools. Since that time, the three courses have been taught and evaluated, so that today we are in the happy position of being able to offer you not yet the proof of the pudding, but certainly a generous taste.

"We hope that you will like this first serving as much as those

Common Learning: "The capacity to analyze and integrate knowledge and ideas from diverse intellectual perspectives and realms of human experience."

faculty and students who have had an opportunity to savor it thus far. As you no doubt recognize, there are some dangers in pursuing this metaphor much further. So let me simply say that one of our major purposes this afternoon is to report the gratifying results of the Commission's evaluation of the courses taught in the first wave of the experiment. As you shall hear, the undertaking turned out to be an exciting and rewarding intellectual adventure not only for the students in all three courses but also for the participating faculty, who frequently described the experience as one that had contributed significantly to their own intellectual development. But perhaps most gratifying was the fact that the characteristics singled out by both students and faculty as representing the most valuable aspects of all three courses were precisely those features that the Commission had designated as the primary goals of the experiment. All this you shall hear shortly in more concrete detail from Professor Daniel Sisler on behalf of a Subcommittee of our Commission that was charged with the responsibility of designing and carrying out an independent assessment of the three experimental courses taught last spring.

"I have mentioned the favorable outcome at the outset because it defines a second major aim of our presentation. Given the encouraging results of the first wave of the experiment, we cannot avoid the responsibility of seeing it through, at least into its next stage. It is in relation to this task that we much need, and therefore, once again, earnestly invite, your comments and suggestions.

"Before proceeding with these two main tasks, it would probably be useful to review briefly the origin and nature of the experiment. As many of you may recall, the idea grew out of a series of informal discussions about undergraduate education held in the various colleges two years ago at the initiation of President Rhodes. Out of these discussions, there emerged some consensus about the need to

develop and experiment with new types of courses at the junior and senior level that would serve the common educational needs of upperclass students across the University. A modest grant in support of such an effort was obtained from the Mellon Foundation, and our Commission was given the task of defining the specific aims of a pilot experiment, developing a concrete plan for its execution, and carrying it out through the indispensable cooperation of interested faculty. The purpose and the plan were the burden of our first progress report to the Faculty. Inasmuch as a year has gone by since you received it, we have made available here copies of the core section of that report — a statement of the **criteria for Common Learning Courses**. The document also contains two additional pieces of relevant information:

1. A list of existing Common Learning courses and their instructors. The list includes the three courses given last spring (the ones for which the evaluation has been completed), and the four courses being taught in the present fall semester. The courses for next spring are currently in process of development.

2. A list of the faculty members constituting the Commission. Since I am speaking for them, I should at the very least mention their names and add two additional ones from the recent past. Professor John Windmuller from the School of Industrial and Labor Relations served as a member of the Commission through last spring. A contribution of even longer standing was made by Vice Provost Palmer who helped to conceive the Common Learning idea and, until early last summer, served along with me as the Commission's co-chair. All of those who have been associated with the experiment, be it in action or in spirit, owe Larry a debt.

"I should now like to say a few words about the considerations that led us to select the particular criteria that you see listed. The Commission began by noting the rapid growth, over recent decades, of specialization in undergraduate education, particularly in the junior and senior years. It was our view that this trend, while necessary and desirable in itself, could create a situation which, if left unheeded, might place in jeopardy the achievement of a broader and equally essential goal of higher education: namely, as we formulated it, enabling students to acquire **the capacity to analyze and integrate knowledge and ideas from diverse intellectual perspectives and realms of human experience**.

"The achievement of this educational goal, we felt, had lifelong importance in at least three domains: first, in enriching the student's personal life; second, in motivating and enabling graduates to deal with the major issues confronting our nation and the world; and third — a seeming paradox — to enable our graduates to function effectively as professionals in their chosen areas of specialization. For one of the main points that had emerged from the earlier faculty discussions was the view that professionals in every field, once they completed their formal training, were increasingly faced with the necessity to deal with problems that required the capacity to understand and integrate ideas and information beyond the sphere of their particular specialty. For example, today the challenges of genetic engineering transcend the realm of biology, since they raise social and moral issues that have deep roots in history, philosophy, and culture. The understanding of such linkages is important not only for professionals but also for thoughtful citizens.

"I mention this example to remind us of the fact that there already exist on our campus a number of courses that address linkages of this kind. It was the judgment of the Commission, however, that, given the educational challenge that institutions of higher learning face today, the number of such courses is all too few — particularly those taught in classes of a size that permits the individual student actively to engage in disciplined intellectual exchange, both orally and in writing, with faculty members and fellow students from diverse intellectual backgrounds.

"This statement brings us to the core of the Common Learning concept and to the criteria that you have before you. Clearly, the goal of Common Learning is one that is shared by many of us and is reflected in a number of courses already being taught at Cornell. What distinguishes the Common Learning experiment, therefore, is the particular way in which the goal is being implemented. It is these distinctive features that are described in the criteria. I should now like to highlight several of these and relate them to the central aim of the experiment.

"1. As you will note from the list of courses, the topics selected are those that, by their very nature, require the analysis and synthesis of knowledge and ideas from a variety of intellectual perspectives.

"2. Under the leadership of the principal instructor, a team of faculty members, representing diverse perspectives, participate in the planning of the course **during the semester prior to the one in which the course is given**. Each team is expected to devote at least five meetings to this task. The primary aim of such prior preparation is to provide an arena in which experts from different fields can, through the exchange of ideas with the course instructor and each other, help to fashion the content and organization of the course. A secondary aim is to avoid a situation in which each faculty member presents material only from his or her own field, thus leaving the task of integration entirely to the students.

"3. Final decisions regarding the content and organization of the course rest with the faculty member in charge. This stipulation reflects the belief of the Commission that the integration of the course, so critical in an effort of this kind, is best accomplished by vesting this responsibility in a single person.

"4. Each course is limited in size to twenty. The purpose of this limitation is to make it possible for students to engage in disciplined

intellectual exchange, both oral and written, with faculty members and fellow students.

5. Enrollment in Common Learning courses is limited to juniors and seniors from across the University. Two considerations led to this focus on upperclass students. First, such students are far enough along in work in their major field so that they can contribute to intellectual exchange from the perspective of their discipline, one of the aims of the Common Learning experiment. Second, most Cornell courses reflecting a Common Learning goal are currently being taught at the freshman and sophomore level, with far fewer available to upperclass students, who enroll primarily in courses falling within their major or closely related fields.

Having described what a Common Learning course was supposed to be, and, I am pleased to say, now is, let me make a few comments about what a Common Learning course is not.

1. It is not a survey course in which an effort is made to cover a wide range of topics.

2. It is not a seminar in which each participant is concerned primarily with his or her own area of interest.

3. It is not a current events course preoccupied only with the here and now.

4. It is not an open-ended group discussion in which both topics and train of thought are free to emerge from the ongoing process.

It is an intellectual exercise in which, on the basis of outside readings and material presented in class, faculty and students engage in a disciplined exchange, both oral and written, about knowledge and ideas from diverse intellectual perspectives bearing on issues of significance for contemporary society.

So much for substance. There are also two important matters of process: How are the courses selected, and how are the students selected?

Common learning courses may, and have, come into being in one of two ways: The first — and preferable — way is through faculty initiative: a colleague has an idea and makes a proposal. The Commission invites and encourages you to follow this example. Any member of the Commission would be happy to hear from you, but probably the most helpful person to talk with is our Faculty Coordinator, Professor Peter McClelland.

The second way in which ideas for Common Learning courses originate is from the Commission itself, since one of our responsibilities is to consider additional topical areas in which Common Learning courses might be particularly appropriate, and then to seek our colleagues who might be sufficiently excited by the prospect to undertake teaching a course.

But whichever way the idea for a Common Learning course arises, the Commission has a further responsibility, to which it has probably devoted the most of its time; namely, to assist the instructor in a variety of ways. For example: suggesting names of

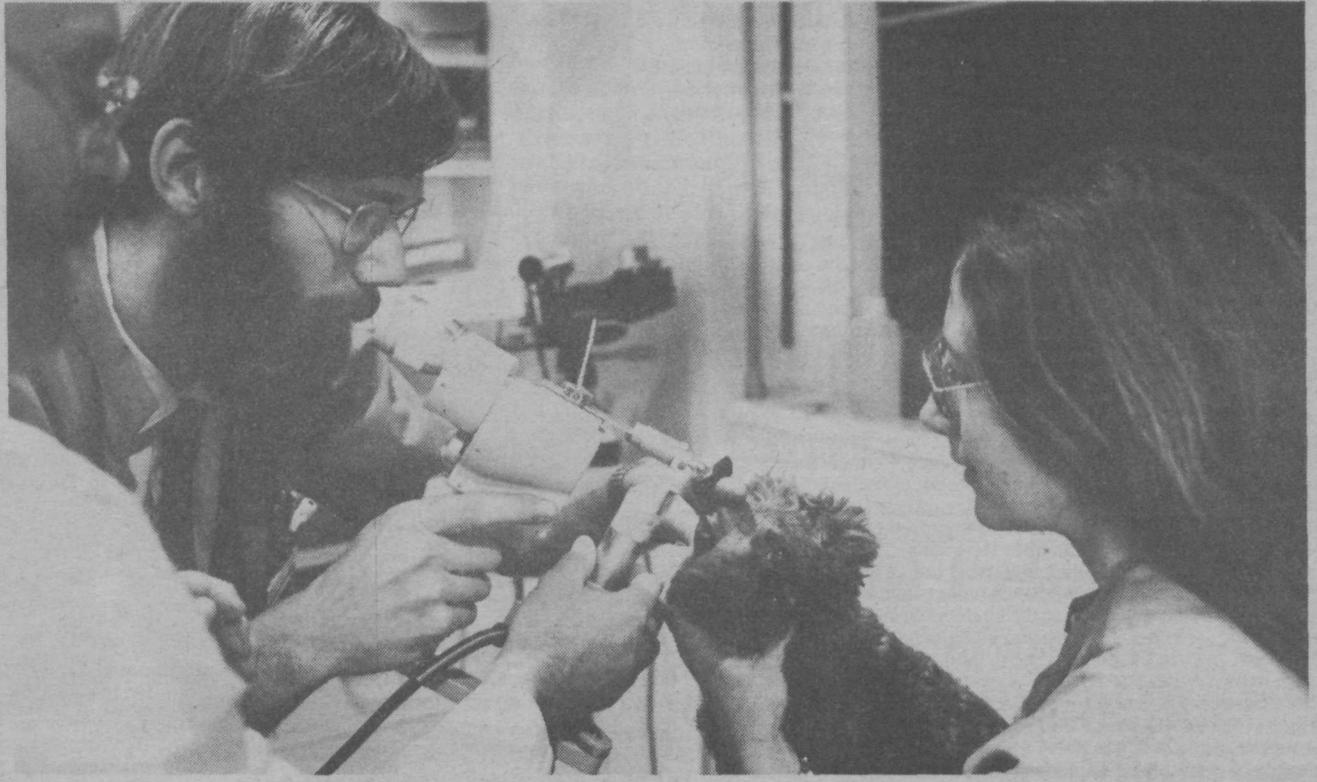
"Our principal problem thus far is that all of the courses have been heavily oversubscribed."

faculty members from other departments and colleges for consideration as members of the planning team; commenting on proposals, especially from the perspective of enhancing Common Learning goals; putting faculty with complementary interests in touch with each other, and so on.

Finally, the Commission also bears the responsibility for deciding which courses will be included in the Common Learning experiment. Our decisions are constrained by two considerations: First, we must weigh the extent to which the proposal meets the established criteria. Second, as I have already indicated, the experiment is a modest effort, so that we are not in a position to approve all of the proposals that are brought to our attention. Even those that are approved cannot become a reality until they have passed through the normal procedures established within the College or School in which they are taught. This process is further complicated by the fact that a number of our courses are considered for listing in more than one College or Department.

With respect to the selection of students, Common Learning courses are open to all juniors and seniors in the University. Our principal problem thus far is that all the courses have been heavily oversubscribed. In keeping with the goals of the experiment, the first criterion employed in selecting from among the applicants is that of maximizing academic diversity — that is, choosing students from as many different schools and colleges as possible, and, within each college, from contrasting major fields. In this respect, we have not been as successful as we would like, and therefore would welcome your assistance in bringing Common Learning courses to the attention of your upperclass students. The criterion of diversity continues to apply where the number of applicants requires further selection. Thus, most of the instructors have found it useful to ask students to fill out a questionnaire about their interests and background. The instructor then makes the final selection on the basis of the students' special capacities or the vigor and cogency of their expressed concerns. For example, in my own course on Human Development in Post-Industrial Societies, when I had to choose from among too many majors from the two Colleges in which I serve, I gave preference to those students who had a reading knowledge of the language of one or more of the other modern societies we were examining. As a result, we were fortunate to have class members who could track down and consult references in French, German, Russian, but, alas, not Japanese; there, we had to rely on our distinguished colleague and team member, Bob Smith.

Enough about what Common Learning courses were supposed to be. What happened when we tried to turn our plan into reality? For that story, I call upon my fellow Commission member Dan Sisler, who will describe the independent evaluation that was conducted by a subcommittee consisting of several of our colleagues.



"We are in the midst of rebuilding four graduate professional programs."

Professor Daniel G. Sisler, Agricultural Economics: "Good Afternoon. There is much talk here about the start of the semester. I think I at least speak for the Dean of the Faculty and others who have now completed six lectures and eleven discussion sections. We're on our way. It's here.

President Rhodes, Provost Barker, Dean Bugliari and Speaker Martin: The Common Learning experiment, as Urie outlined it, has been evaluated probably as no other set of courses have even been evaluated at Cornell. The three courses were taught by professors that are probably very well known to all of you: Vernon Briggs, in Industrial and Labor Relations, Will Provine in Science and History, and Urie Bronfenbrenner. So, we were confronted with the task of evaluating how well these three gentlemen reached through their courses the goals and objectives of Common Learning. And they were, as I'm sure Urie and Vern and Will will attest, evaluated to an unprecedented degree. How did we go about this? The week before classes started last spring, each of the three were interviewed. These interviews took approximately an hour and a half. We had some open-ended questions and asked such, I think, penetrating questions as how long did this take to get started, how much time was spent in meetings, what were some of the problems in starting up, what dilemmas occurred in the selection of students from those who tried to get into the classes which were all over subscribed. And, that done, we ended the semester by visiting each of the classrooms and not participating, but listened to at least one, and in some cases two, of the discussions in each of the three classes. We provided students with two alternate techniques of evaluation. One was a questionnaire that had twenty-two objective questions with an opportunity to scale your answers in five different categories — always or frequently — that sort of response. These objective questions had the responses double columned. The student was asked to evaluate the Common Learning course and, simultaneously, to provide an evaluation of another seminar-sized course that he or she had taken and enjoyed. So, we had a pairing of responses for the Common Learning course and another course of similar size that they had taken. The students were also asked to write an essay. There were seven open-ended questions that they were asked to respond to — broad questions, such as what will you take from this course that you did not take from other courses, questions that probed how well the professors integrated visitors, reading material, and synthesized varying points of view. And, finally, we asked each of the three faculty members if they would submit to yet another debriefing and they did, and I want to thank Davydd Greenwood, Harry Levin and Walter Lynn, who did the debriefing at the end of the program.

What sort of responses did we get? We had 59 students enrolled in the three courses, and we had 57 useful responses to the objective-type questions, and a somewhat smaller number that were useful from a standpoint of essays. I would say that the faculty fared very, very well in terms of the evaluation. The students, I would say without question felt that the faculty did a superb job of meeting the goals of Common Learning. The one thing that came through loud and clear that was not unexpected was that we had picked three fine topics for courses and three superb teachers. Now, you have before you a set of six or seven objectives or primary focuses for Common Learning, such things as the identification of a problem, the collection of evidence, adhering to canons of logic and reason, writing improvement. These were goals that we'd hoped to accomplish through the course.

How well did we fare? I would say that the top two categories of response would indicate a superb performance on the part of the faculty. Eighty percent of the students designated the goals had been reached in the two top categories. All of the time or frequently throughout the semester the faculty pulled together the material in

ways that suggested that the goals were being reached. In a comparison sense, to the courses that they identified as 'other' courses — I will call them comparison courses — the response was that about 66% of the students felt that they reached the goals most of the time or all the time. So, all of our faculty apparently are reaching common learning goals a good share of the time. But these courses were capable of reaching these goals about 80% of the time in the views of the students.

I think that a very gratifying facet of the evaluation was how students rated the written requirements. They felt that the integration of course material, the improvement in their writing and, certainly, the response that they got in written form from the faculty, both before and after, were outstanding. I would say significantly more favorable response here than in the comparison of courses. I think, also, that the students felt that the faculty did a very good job of selecting professors to provide a broader point of view, and they did a fair job of selecting readings.

Were there any problem areas that students identified? There certainly were some. I think that they suggested that it would be great if they had more input to papers prior to the papers being written. In other words, they would have liked more response to outlines, more response to tips for organization — things of that

"...students were unanimous that 20 (students) was as large as the course could be and still have the proper level of interaction."

sort. They felt this needed to be beefed up. And this creates a dilemma because a faculty member confronted with three or four pretty hefty reading assignments in the course of a term has to not only give response before these papers are written but afterwards as well. And if you wish to make the Common Learning experience available to a larger number of faculty and simultaneously upgrade response on writing, particularly before the writing is done, then you have a real dilemma, and it's one that I think we will struggle with when we consider how large the classes should be since the students were unanimous that 20 was as large as the course could be and still have the proper level of interaction.

The students felt that the interaction between faculty members was superb, but they felt that the lead professor could do a better job of keying the visiting faculty in. Some work they felt had to be done in advance so that when the visitor comes in, and it's not really a visitor it's a co-teacher, that that individual really and truly knows what has preceded and what is following and how his or her material fits in. I think that was a criticism that we did not expect in view of the way that the course was organized. By and large, the other comments were quite favorable, and I would be very pleased, as all of you would, to have the evaluations that the professors received. On the essay assessment, we got excellent responses in many, many areas, and I think that the most gratifying to me was that the students really felt in almost all instances that they took something special away from their course in terms of interacting with their cohorts and interacting with a group of vital dynamic professors. There wasn't any question about how they felt concerning whether this experiment had reached the Common Learning objectives of

Continued from Page 9

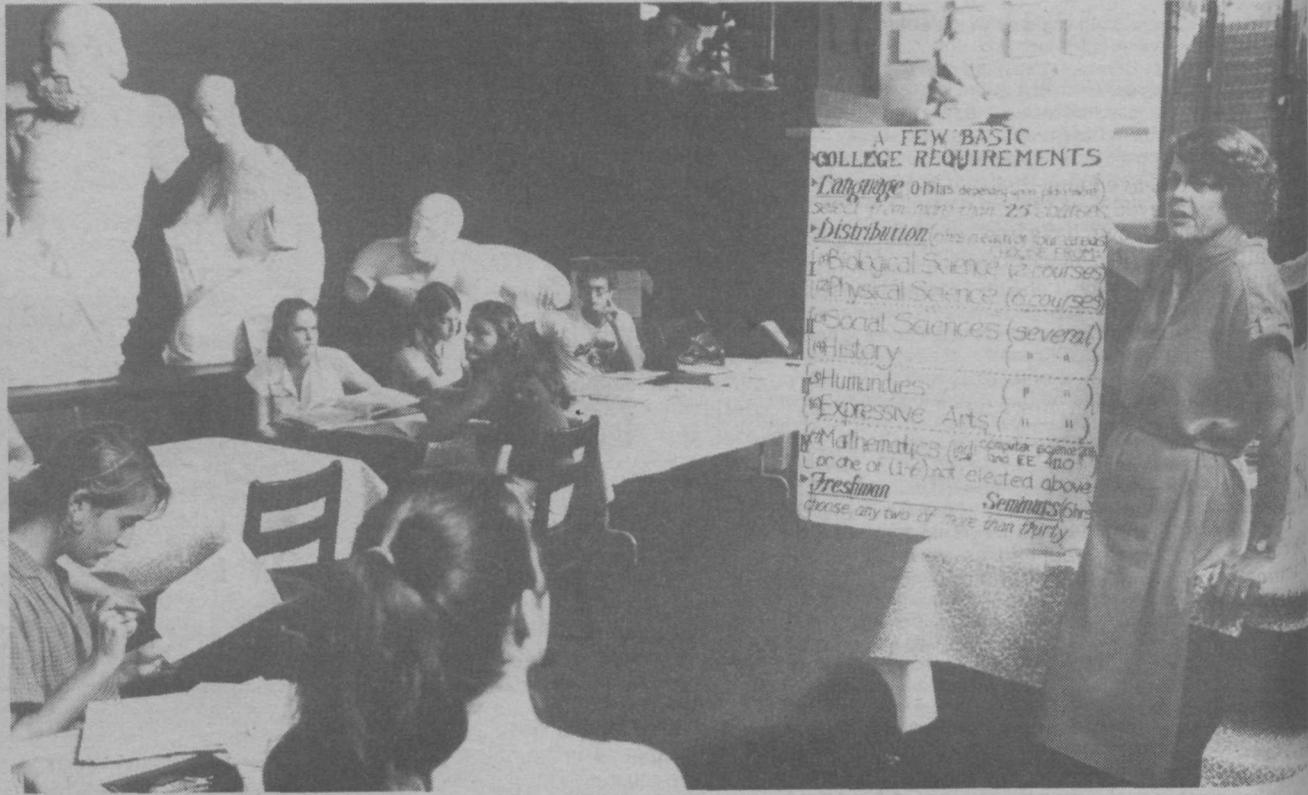
integrating views, opinions, evidence, logic from a number of different disciplines. They felt very, very strongly about it and expressed it eloquently and certainly in glowing terms for all three courses. So, that was excellent. In talking with the professors and getting their responses, they all agreed that it is a whale of a job to get one of these courses off the ground. There were usually four or five meetings with the team, and there typically were five members of the team. There were 14 professors involved in these three courses. I think that all of them felt that the time was well spent because they took something quite unique away from the start-up experience. I remember very vividly debriefing one of the three, and he said, 'Look, I would have given this a very narrow focus, and I would have overemphasized something that really and truly when I thought about it with the whole team was a small part of the integration that we were hoping to accomplish. I then went back to the drawing board and completely restructured the course on the basis of the first two meetings with my team. And that sort of experience and the broadening of familiarity of literature were just marvelous to hear in the responses from all three professors. So, I think everyone carried away a good feeling about what they got out of the experience and what they received in return for a lot of time spent. I think that all three professors very much enjoyed the interaction. There was good comradery, excellent exchange, and they all appreciated this very much. I think that all of them pinpointed the problem of improving the interaction of students from a variety of disciplines. If you registered for this course as a student from Industrial and Labor Relations, probably 17 of the other students were from Industrial and Labor Relations. The question is, how can you select the students and also cut across a lot of different disciplines so that the students bring backgrounds in agriculture, engineering, arts into an industrial and labor relations course or, in Urie's case, into one in human ecology, or in Will's case, in the sciences or history. We have to work on that, and also there is a great deal of difficulty associated with the dilemma of which students will we have to cut out. This is always tough for any professor, and it's particularly so here because you're starting with a group of very talented students, usually seniors, who want to take this course. They know about it and they've thought about it and there you are looking at 40 people who want to take it and you have to select 20 lucky ones and then, one of them you find was a shopper, and you have to go back and fill that particular slot with somebody who you had told a week ago, 'No, I'm sorry we have no more slots.' That's a problem, and I think we are addressing it. Peter McClelland has been superb in addressing this issue. Overall, my evaluation of the responses that we received from students and faculty indicate that this experiment was absolutely first rate in reaching what I consider the superior goals of Common Learning. Thank you."

Professor Bronfenbrenner: "We invite your questions and comments."

Professor Donald F. Sola, Modern Languages and Linguistics: "What was the budget, and what did it get spent on? And another question, if I understand the process here, courses are proposed, approved and then included in the announcements of regular courses. These are new courses taught by groups of people, so we seem to be going against the principle the President mentioned a few moments ago of changing by substitution. Now, will this process go on indefinitely with continued introduction of new courses of this type or will courses be dropped by some criterion as we go along?"

Professor Peter McClelland, Economics: "Your first question was, 'what was the grant?' and the answer is \$90,000, which will be spent at the end of the experiment, which is July 1 of the upcoming year. Regarding 'spent on what', I wonder if I could explain that to you later, unless many others want to know also, because that would take whatever few minutes we have, and as fascinated as I am by the numbers, I have a feeling they are rather low down in other people's priorities."

"As to your second question, we have subsidized both the activity of the teacher, because special needs arise with putting these courses into place, and there have been administrative overlays as well. In my own case, frankly, they need a faculty coordinator, which is about a half-time assignment, and that, frankly, is an unfair but fascinating trade. I thought it would be about a fair swap for one



"...to move Cornell into the flagship position for undergraduate education amongst major comprehensive research universities."

course off. It turns out to be an unfair swap, but I'd make it again. "Your next question was, 'what about these courses?' Just a couple of points which may or may not provide an answer. My own vision — one man — you don't speak for a commission of 14 distinguished people unless you're more venturesome than I am, but my vision is the following. These are upper level undergraduate courses, 300 and 400 level. It will always remain a small package of a larger package. That package was 948 courses last year. If you asked about those 948, you'd find a popular misconception that while Common Learning involves only 20 students, the rest are larger and thus you get the more strain on these bigger courses. But what in fact was the average size of these 948 upperclass courses? I asked the Registrar, and the answer came back the arithmetic mean is 27, and the median is 14. So, we are numerically about the average size for upper level courses. I just talked with Vernon Briggs in the I&LR School a few days ago and his vision is as follows: 'I will give the Common Learning course again as a Common Learning course from time to time but I can't do it when it imperils the big bread and butter courses. I can't do it this coming spring since I'm on leave this fall and I've got to do bread and butter courses. But next year, 85-86, I will trade back. What will I trade? Instead of giving a more specialized I&LR upper level course which happens to be my special interest and one of those fringe intellectual courses which the professor is especially interested in but is less than a bread and butter course, I will give this Common Learning course.'"

Associate Professor Richard S. Booth, City and Regional Planning: "What was the normal format? Did they run as a seminar once a week or did they run several times a week?"

Professor McClelland: "Yet another numerical question, and the answer is, it depends. You can't say to 12 faculty people, 'come on, give us a hand, take on a tough job and by the way, you've got to give

us 3 times a week for 50 minutes.' We say to them, precisely because they are skilled at what they're doing, 'you figure out how you want to do it.' So, for example, Will Provine's course met as an upper level honors seminar once a week, and I think it ran for 2-1/2 hours or more, and, frankly, it was often 'or more' because discussions were so vigorous. If I could reveal to the faculty, Carl Sagan, who was not a member of Will Provine's team started to drop in and got so interested, he kept dropping by as did a number of other faculty members and that kept it going, I'm told, well through pizza on some evenings."

"Other courses were given twice a week, usually in the standard time of an hour and fifteen minutes. Again, flexibility in Vernon Briggs' case was built in so that he could run an extra length if he

"...if the question is, what is the format, how long, how many times, the answer is, the professor and the team worked that out..."

had a guest speaker brought in to deal with a topic. But again, if the question is, what is the format, how long, how many times, the answer is, the professor and the team worked that out and the commission was not a party to that decision."

Professor Booth: "My question is how hard is it for students to fit this into their schedule which is built around standard blocks of time?"

Professor McClelland: "And a good question that is. And again, remember the kind of savvy you're dealing with with senior professors. That was the first thought of, say, Vernon Briggs or Will Provine, 'if I'm going to do it this way, that is, say, in one chunk of a big block of time, I don't want to get in the way of other courses, so I will give it toward the middle of Wednesday afternoon.' They did think through these problems."

The Speaker said time remained for one question because there is a mandatory 6:00 p.m. adjournment time.

A question was asked as to how the courses were approved; was the regular procedure followed?

Professor McClelland: "Let me emphasize how regular that procedure is. After the Commission chooses, it is the instructor's responsibility to get approval by the regular process through the school or college with which he or she is associated — the normal EPC approval process."

Professor Bronfenbrenner: "We are dealing here with the nuts and bolts — they're vital. I wouldn't want to close on this topic without conveying to you that this was an exciting adventure for students. They said to us, 'This is what a university is supposed to be — a place where you learn how to think.' That was our objective. That's why we felt it was an adventure, an experiment that now deserves your careful attention and, we hope very much, your participation."

The Speaker announced that if there were other questions, they would be entertained after the meeting, which was adjourned at 6:00 p.m.

Respectfully submitted,
Joseph B. Bugliari
Dean of the Faculty
Secretary pro tem



Protect Against Intestinal Infections

Researchers Here Discover Antibodies in Mothers' Milk

A particular class of antibodies responsible for delivering protection against intestinal infections caused by parasites has been identified by Cornell researchers. Moreover, they have found that the antibodies are conveyed in mothers' milk.

These findings could have important public health implications because serious intestinal infections, such as diarrhea, annually cause more than 4.5 million deaths worldwide, mainly among children in underdeveloped nations.

Details of this work are described in the Oct. 5 issue of "Science" magazine by Judith A. Appleton and Douglas D. McGregor, both of the James A. Baker Institute for Animal Health of the State College of Veterinary Medicine.

They used rats infected with *Trichinella spiralis*, a small worm that causes trichinosis, as a model for studying resistance to infection. The worms — about the size of the dot on this "i" — infect rats, other animals, and people through their intestinal systems, if the animals don't have adequate immunological defenses. The worm, which is not a serious threat to human health in the United States, serves as a model for studying immunity to intestinal infection.

The Cornell researchers found that a particular class of antibodies (IgG) conveyed protection against the infection by the worms. A popular notion until this time was that a different class of antibodies (IgA) probably was responsible for mediating this type of immunity, because of the well-known resistance of IgA antibodies to the harsh digestive enzymes of the gut.

"Our work will focus increased attention on the role of IgG in protecting against intestinal infections," Appleton said.

Appleton stressed that if the protection offered by antibodies could be shown in one species, it is likely that the antibodies

mediate a similar response in other species, including humans.

It has been known for some time that adult rats previously infected with *Trichinella* worms exhibit powerful immunity; an immune rat can expel in its feces up to 99 percent of the worms within a few hours.

"The worm larvae somehow know that the intestine is not the place to set up housekeeping," said Appleton. "Our research identified a factor that discourages the larvae from establishing a parasitic relationship."

The Cornell researchers explored the well-known — but poorly understood — immunity of newborn rats to *Trichinella*. They found that this immunity was conferred by mother's milk because rats born to immune mothers, but suckled by mothers without such protection, are susceptible to infection. This confirmed that antibodies to *Trichinella* could be passed through milk, and emphasized the importance of mother's milk to the health of young animals and human beings.

The immunological studies at the New York State College of Veterinary Medicine are among the most recent of a long series of experiments in this field. Many immunological discoveries made with animal studies have had profound benefits for humans.

For example, during the late 1940s, Dr. James A. Baker of Cornell and Dr. Theobald Smith, of the Rockefeller University, were among the first to recognize the importance of colostrum — the milk produced during the first few days after birth — in providing immunity against numerous illnesses of the newborn. Cornell's institute for animal health is named for Baker.

The research by Appleton and McGregor is supported by the National Institutes of Health.

Campus Judiciary Review Unit Seeks Community 'Input'

The Presidential Commission to review the Cornell University Campus Judicial System is seeking information from all members of the Cornell community.

Peter W. Martin, dean of the Cornell Law School and chair of the commission appointed by President Frank Rhodes early last month, said the commission "urges members of the Cornell community with information and views that might assist the commission in its work to share them with the commission in writing."

Martin said, "The commission is eager to receive written statements from students, staff, and faculty with information and perspective on how the present campus code is understood and applied." Statements should be addressed to the Commission to Review the Cornell Judicial System, Myron Taylor Hall, Ithaca, N.Y., 14853.

Before the commission's review is completed, it will hold an open meeting to hear from members of the community, Martin said. The 13 member commission is scheduled to report to the president by April 1.

The commission's review covers the campus code of conduct and the campus judicial system. Except as questions of overlap arise, the commission's charge does not extend to the University's Academic Integrity Code.

Wilson Wins Fermi Prize

Continued from Page 1

the Pupin Professor Emeritus at Columbia.

Commenting on Wilson's contributions to particle physics, long-time colleague Boyce D. McDaniel, now director of Wilson Laboratory, described Wilson as an "exceptional" and dynamic leader and innovator.

He added, "I'm delighted that Bob has received this long overdue recognition for his contributions to high energy particle physics and to accelerator technology. He has played a leading role in the development of new accelerator concepts and has pioneered the use of superconducting magnets in large facilities, a necessity for the next generation of accelerators."

Cornell Vice President for Research Joseph M. Ballantyne said: "Professor Wilson established and guided a group of world-class physicists at Cornell, which has held a leadership position in the design of particle accelerators. The Cornell tradition that he established in this area has set the pace for the rest of the world. It places Cornell as the only U.S. institution which awards Ph.D.'s in accelerator physics."

Wilson was born, March 4, 1914 in Frontier, Wyoming. He earned the bachelor's (1936) and doctor of philosophy (1940) degrees at the University of California at Berkeley, where he studied with the late Ernest O. Lawrence, Nobel Prize winner and inventor of the cyclotron.

As an instructor of physics at Princeton University in 1940, he collaborated with Enrico Fermi on some of the earliest measurements of the neutron-absorbing properties of uranium. After inventing the Isotron method for separating the isotopes of uranium, he was placed in charge of developing it at Princeton.

At Los Alamos Laboratory in New Mexico in 1943, Wilson was named director of the Cyclotron Group, and then head of the Experimental Nuclear Physics Division, a position he held in 1944 and 1945.

Wilson served briefly as an associate professor of physics at Harvard University, helping design a cyclotron there. In 1947, he came to Cornell as professor of physics and director of the Laboratory of Nuclear Studies.

The first electron synchrotron built at Cornell by Wilson and his colleagues was the pioneering 300 million electron volt machine. Their 1.2 billion electron volt machine was the first to use the "strong focusing" principle in accelerators, and a 2 billion electron volt machine followed as physicists pursued ever higher energies.

Fermilab, constructed by the consortium of American institutions called the Universities Research Association, was notable from the start: it reached completion two years ahead of schedule and at two-thirds the expected cost. It ultimately achieved an energy level more than twice its original specifications, and was later supplemented by another Wilson-designed machine, the

Tevatron with its superconducting magnets.

Under Wilson's guidance, Fermilab became an artistic as well as a scientific achievement. The laboratory's auditorium, personally designed by Wilson, is known for its excellent acoustics and for its cost — half that predicted in architects' original plans. Sculptural works by Wilson, who received some of his formal art training at Rome's Accademia Belli Arte in 1960 and 1961, adorn the reflecting pool at Fermilab, the Institute of Advanced Studies Quadrangle at Princeton, and Cornell.

Wilson's concern for peaceful uses of atomic energy was demonstrated early in his career. While still at Los Alamos, he helped form the Federation of American Scientists, insisting that atomic energy be controlled by a civilian agency. He was a member of the first group of American physicists to make, in 1959, an official visit to the Soviet Union, a move that prompted years of collaboration and exchange of scientific information.

Wilson helped to form the International Committee for Future Accelerators which is seeking a collaboration of many nations to build the next generations of high-energy physics machines.

Wilson will serve as president of the American Physical Society in 1985.

Honors of the Cornell physicist include election to the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Philosophical Society. In 1973, he was awarded the National Medal of Science.

Campus Chest Has \$1,000-Plus to Date, Seeks More Funds

The Cornell Campus Chest has raised more than \$1,000 this fall in a letter solicitation of university faculty and trustees.

Total funds raised to date this year exceed \$2,400, according to Benjamin S. Leung, '86, vice president of Alpha Phi Omega, the co-ed service fraternity which sponsors the Chest.

Each year APO allocates Chest monies to various organizations on campus, particularly the Student Relief Fund, a source of emergency funds for students administered through the Office of Financial Aid.

The Chest still needs additional donations for this year, Leung said. Donations may be made to the Chest in person or by mail through Alpha Phi Omega, which has offices at 208 Willard Straight Hall.

Other organizations which benefit from the Chest include Suicide Prevention, Empathy Assistance and Referral Service (EARS), CIVITAS and the International Student Office.

Historic Designation

Continued from Page 1

Fund. It is our information that the record owner of the buildings did not receive notice until Nov. 23, 1984.

"Cornell University respectfully objects that the Landmark Preservation Commission is without authority under state enabling legislation or its own ordinance to consider such a designation on three grounds: first, the buildings are owned by the state and the state must give express authority for regulation of state property before a municipality may act. Second, the buildings are not within the public view nor visible from a public way. Third, with respect to six of the buildings, this hearing is a rehearing of one held five years ago and there has been no change in the facts or conditions of the properties.

"Cornell University also respectfully notes that even if the building were to be

designated landmarks by the Common Council of the City of Ithaca, the Landmarks Preservation Commission is without authority to review any change in use or appearance of the buildings or to issue a certificate of appropriateness since Section 375(3) of the State Education Law exempts State University projects from local regulation.

"Further, Cornell University notes that all buildings are currently subject to the New York State Historic Preservation Act of 1980. In fact, comprehensive reviews are either under way or about to be commenced by the State Department of Parks, Recreation and Historic Preservation at the request of the State University Construction Fund.

"Finally, the law of New York State has long recognized that local regulation must give wide berth to the fulfillment of charitable and educational purposes."

Potato Association Honors Plaisted

Cornell scientist Robert L. Plaisted, who specializes in potato breeding, has been elected an honorary life member of the Potato Association of America (PAA) for his many accomplishments and contributions to the nation's potato industry.

PAA also cited Plaisted for his meritorious service to the organization. He is one of four scientists so honored this year at the PAA's 68th annual meeting at the University of Maine at Presque Isle. In 1971-72, Plaisted served as president of the group, which has more than 1,700 members in the United States and 80 other countries.

Plaisted is a professor of plant breeding in the State College of Agriculture and Life

Sciences. He served as chairman of Cornell's department of plant breeding and biometry from 1964 to 1979.

Plaisted is on a team of Cornell scientists that has developed several new potato varieties including "Bake-King," a baking variety of exceptional culinary quality, and "Rosa" and "Hudson" that have built-in resistance to the golden nematode, an important potato pest in New York State. Another golden nematode-resistant variety developed by the same group is being readied for commercial use soon.

Please Post

Cornell University

University Personnel Services
Day Hall
Ithaca, New York 14853
607/256-5226

Please Note:

Job Opportunities is a publication of Staffing Services and is distributed each Thursday through the Cornell Chronicle. Job Opportunities lists current vacancies within the University, consistent with the University's commitment to promotion from within, affirmative action, and equal opportunity employment.

Applications for employment are available at Cornell University's employment office at East Hill Plaza at the intersection of Ellis Hollow Road and Judd Falls Road in Ithaca, from 9:00 a.m. to 12:00 noon, Monday through Friday. Applications can be submitted through the mail to University Personnel Services, Staffing Services, 160 Day Hall, Ithaca, N.Y. 14853. For more information on jobs listed, contact Staffing Services (607) 256-5226.

N.Y. 14853. For more information on jobs listed, contact Staffing Services (607) 256-5226.

Employee Transfer Applications: Employees who wish to transfer to other jobs within the University should complete a separate Employee Transfer Application form for each position and submit them to Staffing Services. Individuals with official University layoff status will be given preference in referrals.

This listing is also available on CUINFO

Cornell University's computerized information service. For further CUINFO details, contact the Information and Referral Center at 256-6200 or Computer Services.

New vacancies are listed for two weeks in Job Opportunities.

*Asterisks identify jobs that were not listed last week.

Full-time jobs are 39 hours per week unless otherwise indicated. Jobs listed as SO, U1 and U2 are represented by bargaining units.

requirements, course selection, placement and other academic matters. Prepare descriptive material for admissions.

Requirements: Master of Professional Studies (MPS) degree in hospitality field or equivalent required. Minimum of four years of hospitality work experience is preferred. Supervisory and public relations experience helpful. Please send cover letter and resume to Ralph D. Jones by November 30, 1984.

Minimum Starting Salary: \$13,625
Job Number: PA466

Position: Data Communications Specialist
Department: Computer Services - Network Communications

Description: Design and implement new and monitor old campus-wide communications networks including twisted pair circuits as well as broad band and base band local area networks; do performance and capacity analysis; provide consulting to campus customers and other computer professionals; do planning and product evaluations.

Requirements: Bachelor's degree or equivalent in electrical engineering or related field. Five to eight years experience with digital and analog hardware and associated protocols (including SNA, Synchronous and Asynchronous). Considerable knowledge of local area networks. Demonstrated excellent written and oral communications and interpersonal skills. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT468

Position: Research Support Specialist II (Repost)
Department: Human Development & Family Studies

Description: Provide supervisory and technical assistance for the project director of a new study of child abuse and neglect reports in New York State. Will be involved in all aspects of the study including data collection and analysis, as well as writing reports and publications. One year appointment.

Requirements: Master's degree or equivalent in the social sciences or equivalent combination of education and experience. Research experience and some statistical expertise necessary. Experience in supervising support and temporary field staff useful. Ability to oversee data entry and perform data analysis on Cornell's mainframe computer essential. Please send cover letter and resume to Cynthia Smithbower.

Minimum Starting Salary: \$16,500
Job Number: PT432

Position: Business Manager
Department: Physical Education & Athletics

Description: Oversee the planning and management of the business and financial aspects of the Physical Education and Athletics Department including accounting, budgeting, payroll and personnel functions. Oversee \$5 million-plus budget. Responsible for administrative services including central office and computer systems.

Requirements: Bachelor's degree in business or equivalent required. Master's degree preferred. 3-5 years supervisory and financial management experience. Knowledge of computerized systems and enterprise operations desired. Strong financial planning and analysis skills. Send cover letter and resume to Ralph D. Jones by November 30, 1984.

Job Number: PA442

Clerical

All applicants interested in positions requiring testing must take an official University test. Tests are given Mondays and Wednesdays at 8:00 a.m., Room 337, Statler Hall. Please contact Staffing Services for an appointment.

Position: Administrative Aide, GR20
Department: Physical Education & Athletics

Description: Administrative Aide to Director of Athletic Public Affairs and assistant. Analyze and compile confidential records; review monthly expense statements; order office supplies; compile and maintain office budget; type and compose correspondence; arrange travel; handle special assignments as needed. Full-time regular until June 30, 1988.

Requirements: High school diploma or equivalent. Associate's degree or equivalent. Heavy typing. Knowledge of word processor, minicomputer. Excellent interpersonal and communication (written and oral) skills. Bookkeeping/accounting experience. Shorthand and dictaphone skills essential. Background in fund raising.

Minimum Starting Salary: \$11,739
Job Number: C477

Job Opportunities

Cornell University is an equal opportunity, affirmative action employer.

Administrative/Professional

The minimum salaries listed are for recruitment purposes only.

*Position: Dean, Admissions and Financial Aid

Department: Admissions and Financial Aid
Description: Direct, plan and facilitate the admissions and financial aid operations of the University. Work with the University community including staffs of college admissions offices, faculty, students and alumni.

Requirements: Ph.D. or equiv. desired. Comprehensive knowledge of contemporary admissions practices with significant experience in a major university. Candidates must possess high energy level with proven organizational and managerial skills. Please send cover letter and resume to Judith Morgan by December 7, 1984.

Job Number: P479

*Position: Administrative Manager II

Department: Engineering Dean's Office
Description: Assist the Director in preparation and monitoring of College budgets; oversee Dean's Office and department accounts; process academic and non-academic appointments; maintain personnel, account, facility and gift files; represent College on several University committees.

Requirements: Bachelor's degree or equivalent in business or related major. Technical background helpful. Familiarity with data base management on a computer essential. Knowledge of Cornell accounting, personnel and administrative procedures also essential. Extensive Cornell experience (10 years or more) desirable. Please send cover letter and resume to Ralph D. Jones by December 13, 1984.

Job Number: PA473

*Position: Systems Analyst II (Repost)

Department: Education
Description: Performs systems development in design and development of PC software, including selection of software packages and modification of existing programs and development of new programs for instructional packages; program documentation and preparation of student study guides; supervises part-time student programmers; develops program and documentation of IBM personal microcomputers dealing with biology laboratory simulations.

Requirements: Bachelor's degree or equivalent in biology with course work in computer science. Master's degree preferred. Programming ability in Pascal and IBM PC as well as familiarity with systems development and documentation necessary. Please send cover letter and resume to Cynthia Smithbower.

Minimum Starting Salary: \$18,000
Job Number: PT386

*Position: Applications Programmer II

Department: University Registrar
Description: Provide on-line computer applications development on mainframe (ADABAS), minicomputer and microcomputer systems. Programming support for ad hoc queries. Development of comprehensive system of batch and on-line computer reports.

Requirements: Bachelor's degree with computer-related courses or equivalent combination of education and experience. Familiarity

with IBM JCL, COBOL, NATURAL, MARK IV, MVS, CMS, MSDOS; experience with on-line computer applications and systems analysis/design techniques. Please send cover letter and resume to Cynthia Smithbower.

Minimum Starting Salary: \$17,656
Job Number: PT472

*Position: Applications Programmer II (Repost)

Department: Agricultural Economics
Description: Responsible for assisting users utilizing a variety of mainframe as well as mini- and microcomputer systems and applications in research, teaching and extension activities. Responsible for analysis, design, implementation and maintenance of new applications programs and systems as well as maintenance of existing systems.

Requirements: Bachelor's degree with computing-related courses or equivalent training and experience. Applicants must possess at least entry level skills and be familiar with IBM VM and MVS environments, have substantial experience with microcomputing systems, have a knowledge of data and file management processes and/or be competent in the use of statistical computing procedures and software packages such as SAS, MINITAB, TROLL, etc. One year's experience working in a professional data processing environment essential. Please send cover letter and resume to Cynthia Smithbower.

Minimum Starting Salary: \$16,500
Job Number: PT415

*Position: Executive Staff Assistant I

Department: Unions and Activities
Description: Administrative Assistant to the Director of Unions and Activities. Will function as office manager. Coordinate production of clerical work; schedule meetings and appointments; draft responses to correspondence, minutes of meetings, position papers, proposals and documents.

Requirements: Associate's degree or equivalent. Bachelor's degree preferred. 4-6 years as an administrative assistant, office manager or executive secretary. Ability to organize work of several others. Light typing. Please send cover letter and resume to Ralph D. Jones by December 13, 1984.

Minimum Starting Salary: \$13,625
Job Number: PA474

*Position: Executive Staff Assistant

Department: Law School
Description: Provide, under general supervision, executive staff support to the Dean and Associate Dean for Student Affairs of the Law School. Work independently with a high level of confidentiality on letters, reports, speeches, memoranda and class materials.

Requirements: Associate's degree or equivalent. Bachelor's degree or equivalent preferred. At least 5-7 years executive secretarial experience. Strong verbal and written communication skills. Knowledge of word processing on IBM PC desired. Medium typing. Please send cover letter and resume to Esther Smith.

Job Number: PC477

*Position: Research Support Specialist II

Department: Integrated Pest Management, Geneva, NY
Description: Provide programming expertise and technical assistance to a project whose

objective is to construct an expert system for use in fruit crop protection.

Requirements: Bachelor's degree or equivalent. Computer course work and general scientific training and background. Expert level knowledge of microcomputer systems. Experience with Pascal, Fort and Lisp-Prolog programming language. Background in knowledge engineering. Some familiarity with artificial intelligence concepts. Ability to write well. Please send cover letter and resume to Cynthia Smithbower.

Minimum Starting Salary: \$13,625
Job Number: PT475

Position: Associate Counsel

Department: University Counsel
Description: Provide legal services regarding taxation, estate planning, gifts, estates and trusts. Responsibilities include contact with donors, drafting of legal instruments, providing legal advice in wide range of tax and related business and corporate matters affecting the University.

Requirements: Law degree and admission, or eligibility for admission, to New York State Bar necessary. Five years of relevant experience. Please send cover letter and resume to Judith Morgan by December 15, 1984.

Job Number: P467

Position: Personnel Officer

Department: Campus Store
Description: Responsibilities include recruiting and selection of staff; formulation and implementation of personnel policies, procedures and practices; employee relations; staff training and development; payroll and appointment processing. Act as liaison with University Personnel Services.

Requirements: Bachelor's degree or equivalent education and experience in personnel-related field. Three to five years varied and progressive experience in personnel. Demonstrated excellent verbal and written skills. Organizational skills, knowledge of retail environment and business record keeping preferred. Please send cover letter and resume to Judith Morgan by November 30, 1984.

Job Number: P469

Position: Business Manager (Repost)

Department: Transportation Services
Description: Assumes primary responsibility for all financial and business operations of the department. Assist in the development of \$3 million operating budget and \$8 million capital budget. Responsible for financial planning, cash handling, internal controls, accounting, budget, records and statistical analyses.

Requirements: Bachelor's degree in business administration or equivalent. Master's degree preferred. At least three years progressive experience in a business setting. Strong background in accounting, financial management, understanding of on-line computing and micro-computer operations. Please send cover letter and resume to Ralph Jones by November 30, 1984.

Job Number: PA433

Position: Director, Master of Professional

Studies (MPS) Program
Department: School of Hotel Administration
Description: Recruit and administer the selection of approximately 50 new students each year. Counsel and advise enrolled students on degree

*Position: Administrative Aide, GR20
 Department: University Development
 Description: Provide secretarial and administrative assistance to the Associate Director of Capital Projects. Type correspondence; arrange travel and meetings; file; answer telephones; handle special assignments as needed.
 Requirements: Associate's degree or equivalent with several years work experience. Medium typing. Excellent communication (written and oral) skills. Good organizational and public relations skills required. Discretion in dealing with confidential materials. Proofreading ability.
 Minimum Starting Salary: \$11,739
 Job Number: C475

*Position: Secretary, GR19
 Department: Animal Science
 Description: Type and assemble teaching materials, books, manuscripts, grant proposals, progress reports and correspondence; arrange schedules of appointments for professors and staff; order research supplies; issue requisitions and process bills for payment; handle extensive telephoning relative to professors' positions in campus and national affairs; arrange travel plans; maintain a scientific bank of references in the field of psychology.
 Requirements: High school diploma or equivalent. Business or secretarial school preferred. Heavy typing. At least 3-5 years experience in a busy office where person handles pressure of multiple deadlines. Highly experienced in and enjoys the challenge of adapting word processor to multiple needs. Experience in dealing with people from many countries and with technical and scientific terms.
 Minimum Starting Salary: \$11,125
 Job Number: C4715

*Position: Office Assistant/Receptionist, GR18
 Department: Career Center
 Description: Handle all incoming calls and schedule appointments; assist and direct students to appropriate resources; provide support for on-campus recruiting program; responsible for daily mail distribution and compiling monthly office statistics; handle occasional special projects. Other duties as assigned.
 Requirements: High school diploma or equivalent. Light typing. Some experience in a fast-paced office environment with heavy telephone and visitor traffic. Familiarity with office procedures. Excellent communication skills essential. Willingness to learn a variety of tasks.
 Minimum Starting Salary: \$10,500
 Job Number: C4722

*Position: Office Assistant, GR18
 Department: Dean's Office, Arts and Sciences
 Description: Provide secretarial and administrative support to the Dean, his staff assistant and other members of the College staff. Type correspondence; make travel arrangements; process academic personnel records; keep accounting records. Other duties as assigned.
 Requirements: High school diploma or equivalent. Heavy typing. Ability to maintain confidentiality. Excellent interpersonal and communication (written and oral) skills. Attention to detail. Ability to work under pressure and keep accounting records.
 Minimum Starting Salary: \$10,500
 Job Number: C4716

*Position: Secretary, GR18
 Department: Agricultural Economics
 Description: Provide secretarial support for two teaching faculty members. Answer telephones; maintain calendars; assist in management of 4-5 courses; coordinate teaching assistants; keep class records; collect assignments; recording grades; type class work and notes; responsible for handling routine matters generated by students who come in the office.
 Requirements: High school diploma or equivalent. Medium typing. Knowledge of or willingness to learn IBM PC-XT and Word Perfect. Strong interpersonal skills. Ability to oversee and coordinate activities of 10-15 teaching assistants. Strong organizational skills.
 Minimum Starting Salary: \$10,500
 Job Number: C4721

*Position: Secretary, GR18
 Department: Pharmacology
 Description: Provide secretarial support to the Administrative Manager. Type complex technical manuscripts, abstracts, correspondence; operate word processors, microcomputers; answer and screen calls; arrange meetings, appointments and travel; handle mail; maintain files; perform library reference tasks. Other duties as assigned.
 Requirements: High school diploma or

equivalent. Business or secretarial school preferred. Heavy typing. At least 1-2 years experience. Excellent interpersonal and communication skills. Knowledge of medical terminology helpful. Knowledge of word processors and microcomputers desirable.
 Minimum Starting Salary: \$10,500
 Job Number: C4713

*Position: Secretary, GR18
 Department: Center for International Studies
 Description: Type and proofread correspondence, reports, meeting notices and agendas; assist in organizing special meetings such as Open House, special alumni meetings, etc.; voucher preparation; organize and maintain files; screen telephone calls and answer inquiries; schedule appointments; assist visitors, students, etc.; share in common duties of the Center staff; mail sorting; opening and closing Center.
 Requirements: High school diploma or equivalent. Medium typing. At least 1-2 years office experience. Knowledge of word processing. Good telephone techniques. Excellent interpersonal and organizational skills. Ability to work under pressure and to handle confidential information. Attention to detail.
 Minimum Starting Salary: \$10,500
 Job Number: C4712

*Position: Secretary, GR18
 Department: Ecosystems Research Center, Center for Environmental Research
 Description: Provide typing (word processing) and some secretarial support to the Director, Associate Director and support staff of the Ecosystems Research Center. Word processing will constitute the largest percentage of time.
 Requirements: High school diploma or equivalent. Business or secretarial school preferred. Heavy typing. Excellent typing and word processing skills. Good spelling and grammatical skills. Accuracy highly important.
 Minimum Starting Salary: \$10,500
 Job Number: C472

*Position: Editorial Assistant, GR18
 Department: University Press
 Description: Act as assistant to Acquisitions Editor responsible for acquisition, development and maintenance of product line of scholarly books. Routine office duties of typing, filing, follow-up. Regular, full-time two year appointment, renewable.
 Requirements: Associate's degree or equivalent. Bachelor's degree preferred. Heavy typing. Prior experience with book publishing helpful.
 Minimum Starting Salary: \$10,500
 Job Number: C476

*Position: Secretary, GR19
 Department: Entomology - Geneva, NY
 Description: Type manuscripts, reports, research papers on word processor including text editing, formatting and producing drafts into final copies; some machine transcription; type general correspondence; answer telephone; assist with requisition and invoice typing; maintain reprint files and mailing lists. Other duties as assigned.
 Requirements: High school diploma or equivalent. Heavy typing. At least 3 years office experience. Familiarity with office procedures and machines. Word processing experience helpful. Excellent secretarial skills.
 Minimum Starting Salary: \$10,500
 Job Number: C471

*Position: Secretary, GR17
 Department: Cooperative Extension Administration
 Description: Provide secretarial support for two professional staff. Open and sort mail; transcribe and type materials; maintain calendars; handle routine correspondence and inquiries; assist with filing and general office workload; assist with compilation of 4-H monthly newsletter; xeroxing of materials.
 Requirements: High school diploma or equivalent. Medium typing. At least 2-3 years office experience. Knowledge or willingness to learn operation of various office equipment such as copiers, mimeograph machine, xerox word processor/computer. Good proofreading and editing skills.
 Minimum Starting Salary: \$9,967
 Job Number: C473

*Position: Secretary, GR17
 Department: Cooperative Extension Administration
 Description: Provide receptionist and secretarial support for 4-H office. Type correspondence, reports, development materials; maintain files; make travel arrangements; assist with distribution of monthly 4-H newsletter; handle xeroxing and mail. Assist with other duties as assigned.

Requirements: High school diploma or equivalent. Medium typing. At least 2-3 years office experience. Experience with or willingness to learn word processor, preferably Xerox. Accuracy and proofreading skills essential. Ability to work with a variety of people and work under pressure. Good communication (written and oral) skills.
 Minimum Starting Salary: \$9,967
 Job Number: C474

*Position: Secretary, GR16
 Department: Preventive Medicine
 Description: Type and xerox class and research materials, manuscripts, grants and research for the department; answer telephone; handle mail.
 Requirements: High school diploma or equivalent. Medium typing. Excellent typing (50 wpm) and accuracy. Some office experience. Word processor experience helpful.
 Minimum Starting Salary: \$9,494
 Job Number: C4710

*Position: Secretary, GR16
 Department: Computer Services (APS)
 Description: Provide general secretarial and clerical services to staff in Administrative Programming Services and Administrative Production Control. Duties include acting as receptionist; answering telephones; handling mail; typing; copying; filing.
 Requirements: High school diploma or equivalent. Medium typing. Excellent interpersonal and communication skills. Some office experience.
 Minimum Starting Salary: \$9,494
 Job Number: C4717

*Position: Records Assistant, GR16
 Department: Catalog Department - Olin Library
 Description: File and type catalog cards; input bibliographic records in RILIN computer system. Other duties as assigned.
 Requirements: High school diploma or equivalent. Medium typing. Ability to do detailed work with skill and accuracy. Previous library experience desirable.
 Minimum Starting Salary: \$9,494
 Job Number: C4720

Position: Administrative Aide, GR23
 Department: Vice President for State and Federal Relations
 Description: Provide administrative support for the Office of the Vice President and the Office of Government Affairs. Handle correspondence; arrange travel; schedule meetings and appointments; maintain accounting records; prepare payroll; maintain filing system and order supplies. Assist in the preparation of various reports.
 Requirements: Associate's degree or equivalent. At least three to five years related experience. Heavy typing. Ability to interact well with all levels of staff within the University. Strong organizational, interpersonal and communication skills. Ability to work in an active, complex environment. Ability to operate word processor and IBM Personal Computer.
 Minimum Starting Salary: \$13,928
 Job Number: C4618

Position: Administrative Aide, GR20 (Repost)
 Department: University Development
 Description: Provide administrative and secretarial assistance to the Associate Director of Capital Projects: Types correspondence; arranges travel and meetings; files; answers telephones; handles special assignments as needed.
 Requirements: Associate's degree or equivalent with several years work experience. Medium typing. Excellent communication (written and oral) skills. Good organizational and public relations skills required. Discretion in dealing with confidential materials.
 Minimum Starting Salary: \$11,739
 Job Number: C388

Position: Administrative Aide, GR19
 Department: Veterinary Teaching Hospital
 Description: Assist the Patient Coordinator in contacting hospital clients regarding patient discharge appointments, charges for service and payment arrangements. Monitor internal billing system; act as liaison between the Veterinarian and client with regard to other than medical problems. Other clerical duties as assigned.
 Requirements: High school diploma or equivalent. Considerable experience dealing with the public. Ability to handle delicate situations with clients. Background in hospital work and/or accounts collections helpful. Excellent interpersonal and communication skills.
 Minimum Starting Salary: \$11,125
 Job Number: C4616

Department: Physiology
 Description: Responsible for several accounts: process travel vouchers and purchase orders; filing; new equipment inventory; shared responsibility for grant management; provide receptionist support; some typing of general correspondence.
 Requirements: High school diploma or equivalent. Some college course work in accounting desirable. Medium typing. At least one to two years of accounting and/or bookkeeping experience necessary. Good telephone skills. Excellent organizational skills.
 Minimum Starting Salary: \$10,500
 Job Number: C469

Position: Secretary, GR18
 Department: Mechanical and Aerospace Engineering
 Description: Provide secretarial support for department. Prepare purchase orders, accounts payable documents, journal vouchers and internal billings; type correspondence, proposals, budgets, research papers and technical manuscripts (Greek, equations and charts); handle travel and mailings. Special projects as assigned.
 Requirements: High school diploma or equivalent. Business or secretarial school preferred. Heavy typing. At least one year experience as a secretary/accounts clerk. Familiarity with Cornell's procedures. Knowledge of word processor, dictaphone and calculator.
 Minimum Starting Salary: \$10,500
 Job Number: C467

Position: Senior Records Assistant, GR18
 Department: Hotel Administration
 Description: Supervise all technical processing; interface with Olin Library Technical Services which includes orders for monographs, serials and receiving same; bindery preparation; responsible for file cards; compile lists on data processor of M.P.S. monographs, illustrations or any other kinds of collections requiring bibliographic control; back-up Circulation/Reserve Supervisor at desk; assist with training of students.
 Requirements: Associate's degree or equivalent. Light typing. Library experience, especially technical services, highly desirable. Knowledge of French and/or German desirable.
 Minimum Starting Salary: \$10,500
 Job Number: C468

Position: Accounts Assistant, GR18
 Department: Statler Inn
 Description: Input daily charges on Wang computer to generate billing statements and reports of accounts receivable for Statler Inn and Club. Handle all relevant correspondence and telephone inquiries. Oversee part-time student employee doing microfilming.
 Requirements: High school diploma or equivalent. Some college course work in accounting or bookkeeping preferred. Medium typing. At least one to two years of accounting or bookkeeping experience necessary. Knowledge of Cornell procedures desirable. Adept in use of ten key calculator. Familiarity with computers helpful. Good interpersonal, organizational and communication skills required. Ability to work independently.
 Minimum Starting Salary: \$10,500
 Job Number: C4611

Position: Editorial Assistant, GR18
 Department: Media Services
 Description: Provide production and editorial support for Publications and Visual Communications unit. Proofread printouts, galleys and page proofs for grammatical correctness and spelling; process reprints; proof jobs originating in Design Studio; provide back-up for office systems specialist; keyboard material from publications unit.
 Requirements: High school diploma or equivalent. Heavy typing. At least two to three years experience. Excellent keyboarding and proofreading skills. Familiarity with word processor (Xerox 860) helpful.
 Minimum Starting Salary: \$10,500
 Job Number: C4617

Position: Secretary, GR17
 Department: Human Development and Family Studies - Family Life Development Center, New York City
 Description: Prepare vouchers and purchase orders; type reports and proposals; arrange travel, appointments and meetings; mail pick-up and distribution; general office duties as assigned.
 Requirements: High school diploma or equivalent. Medium typing. Some secretarial experience. Knowledge of or willingness to learn word processor. Excellent interpersonal skills.

Job Opportunities

Continued from Page 13

Ability to work under pressure.

Minimum Starting Salary: \$9,967
Job Number: C4615

Position: Secretary, GR16

Department: Microbiology

Description: Text entry for manuscripts; answer information requests; keep mailing lists up to date; maintain reprint filing system; provide clerical/secretarial support as needed to assist staff.

Requirements: High school diploma or equivalent. Medium typing. Some office experience. Good organizational, interpersonal and communication (written and oral) skills. Knowledge of or willingness to learn Microm word processor and computer terminal.

Minimum Starting Salary: \$9,494
Job Number: G4613

Position: Binding Assistant, GR16

Department: Serials - Olin Library

Description: Prepare and apply call number labels for newly acquired volumes; prepare monographs and serials for binding; assist with adding new volumes to holdings records in Serials Catalog. Other duties as assigned.

Requirements: High school diploma or equivalent. Medium typing. Ability to perform detailed work with accuracy and speed. Manual dexterity.

Minimum Starting Salary: \$9,494
Job Number: C4612

Position: Secretary, GR16

Department: NYSSILR Extension and Public Service

Description: Provide clerical support to staff members of project on Programs for Employment and Workplace Systems. Type correspondence; file; machine transcription; arrange travel; xerox; answer telephone; prepare and submit standard vouchers; occasional library work. Term appointment until 8/29/85.

Requirements: High school diploma or equivalent. Medium typing. Some secretarial and bookkeeping experience (in a state university system would be helpful). Knowledge of or willingness to learn word processor (WordStar). Good organizational skills. NYS driver's license desirable.

Minimum Starting Salary: \$9,494
Job Number: C465

General Service

*Position: University Service Officer, CUSEU GR-2 (GR21)

Department: Public Safety

Description: Responsibilities include prevention and detection of criminal behavior; external and internal patrol of University property within his/her area for fire, safety and crime hazards; enforcement of parking regulations occurring on the property of Cornell University.

Requirements: High school diploma or equivalent. Further formal education, training and/or experience in the law enforcement field preferred. Satisfactory completion of basic University Service Officer training. Knowledge of Cornell University rules and regulations; U.S. citizenship; eyesight 20/40 corrected to 20/20; no record of convictions other than minor traffic infractions; NYS driver's license; ability to obtain a NYS pistol permit within 90 days of employment. Must pass physical examination.

Minimum Starting Salary: \$6.06/hour
Job Number: S474

*Position: Material Handler, SO18

Department: Veterinary Administration

Description: Ship, receive and check all shipments via UPS, Federal Express and other carriers. Order and cut dry ice. Maintain records for departmental charges. Daily gassing and minor maintenance of Administration vehicles. Maintain records and issue keys to employees in Vet Research Tower. Provide assistance to building coordinator (answer phone in absence). Order, monitor and change oxygen cylinders for central oxygen system. On limited basis, provide errand service. Monday Thursday, 8:00 a.m. - 4:30 p.m.; Fridays, 8:00 a.m. - 3:30 p.m.

Requirements: H.S. diploma or equivalent. Valid NYS driver's license. Must be able to lift 50 lbs. Some bookkeeping or accounting experience. Shipping and receiving experience helpful.

Minimum Starting Salary: \$5.41/hour
Job Number: S475

*Position: Animal Attendant, SO16

Department: Clinical Sciences

Description: Responsible for feeding and cleaning a 50 horse herd and a 50 pony herd. Clean and maintain barn. Assist Veterinarians with animals. Monday - Friday, 6:00 a.m. - 2:00 p.m.; some holidays.

Requirements: High school diploma or equivalent. Experience with large animal handling with ability to repair fences and feed bunks. Ability to operate tractor and lift 50 lbs.

Minimum Starting Salary: \$4.84/hour
Job Number: S473

Position: Copy Preparation Specialist, GR20

Department: Graphic Arts Services

Description: Will be responsible for professional quality preparation of mechanical layouts for camera production. Perform occasional design and layout assignments in Graphic Arts. Perform some typesetting on a computer-generated photocomposition system. Perform proofreading functions and other relevant work assignments as assigned.

Requirements: Two year community college course work in graphic arts or equivalent desirable. Two to four years experience in graphic arts. Should have commercial art and mechanical drawing training. Must be familiar with layout techniques, preparation of rough and comprehensive dummies, type and type specifications. Should be qualified to produce camera ready mechanicals including color overlays, tints, color trapping and must be accurate in all preparation procedures. Must be familiar with proofreading functions.

Minimum Starting Salary: \$11,739
Job Number: S466

Position: Short Order Cook, SO18

Department: Cornell Dining

Description: Prepare and serve food directly to customers from a short order area.

Requirements: High school diploma or equivalent with at least six months related experience. Familiarity with short order cooking equipment. Ability to prepare a variety of foods under pressure. Demonstrated good customer relations.

Minimum Starting Salary: \$4.98/hour
Job Number: S463

Technical

Applications for Technical positions should include the following information:

- Scientific/technical courses completed
- Lab techniques and/or equipment (knowledge of)
- Special skills (e.g. knowledge of computer language)

*Position: Technician, GR19

Department: Physiology

Description: Carry out radioimmunoassays, column chromatography, blood sample collections and preparations, reproductive evaluations and endoscopy of dogs and canine semen collection and evaluation. Monday - Friday, 8:00 a.m. - 5:00 p.m.; some nights and weekends.

Requirements: Bachelor's degree or equivalent. Some related college course work. Some previous work experience in techniques listed in job description desirable.

Minimum Starting Salary: \$11,125
Job Number: T473

Position: Research Assistant

Department: Boyce Thompson Institute - Contact Department Directly - See Below

Description: Responsible for carrying out routine and assigned tasks in a cell biology laboratory devoted to a study of the differentiation process in the rust fungi, a group of plant parasites. Typical tasks include the separation of proteins, RNA and DNA using affinity and exclusion columns, gel electrophoresis, gradient centrifugation and the use of radioisotopes. Antibodies will also be produced, primarily in rabbits, to a variety of fungal antigens. Perform immunization procedures necessary for the production, screening and characterization of antibody preparations. Careful record keeping and data collection will be necessary. Limited greenhouse work will also be expected.

Requirements: Bachelor's or Master's degree in biology or relevant field. Candidates with experience with protein separation and some experience with gene cloning techniques will also be preferred, although on-the-job training will also be provided as needed.

Minimum Starting Salary: \$11,200

CONTACT: Dr. Richard Staples, Boyce Thompson Institute, 257-2030

Position: Computer Operator, GR22

Department: Animal Science

Description: As third shift operator, will independently maintain necessary records relevant to the operation of an IBM 4381 computer and determine cause of malfunctions. 11:30 p.m. 8:00 a.m., Tuesday - Saturday.

Requirements: Associate's degree or equivalent in data processing. 2-3 years operating experience essential. Familiarity with DOS/VSE multiprogramming environment, POWER/VSE, CICS and utility packages preferred. Ability to schedule jobs in above environment requiring full working knowledge of JCL essential.

Minimum Starting Salary: \$13,141

Job Number: T455

Position: Technician, GR20

Department: Agricultural Engineering

Description: Will participate in apple pomace anaerobic methane digester model design, construction and instrumentation; planning, design, execution and laboratory analysis of experiments; maintenance and operation of laboratory instruments; data analysis and computer manipulation; general laboratory upkeep; report preparation. Until 9/30/85.

Requirements: Bachelor's degree or equivalent experience in engineering or related sciences. One year experience involving wet chemistry analysis, operation of gas chromatography instruments, solids analysis, automatic scales and other complicated laboratory equipment; use of computer for data storage and analysis; experience in conducting biological experiments with bacteria.

Minimum Starting Salary: \$11,739

Job Number: T452

Position: Technician, GR20 (Repost)

Department: Agronomy

Description: Perform quantitative analysis of soils, plant tissue, water and other materials.

Requirements: Bachelor's degree or equivalent in chemistry or related science with course work in analytical chemistry. Proficiency in wet chemical preparative and analytical laboratory techniques essential. Experience with atomic absorption spectroscopy, colorimetry and other routine lab instrumentation essential. Experience with Technicon Auto Analyzers and CHN elemental analysis desirable.

Minimum Starting Salary: \$11,739

Job Number: T421

Position: Research Aide, GR20

Department: Chemistry

Description: Oversee the collection, synthesis and analysis of mass spectral data. 20-39 hours per week (flexible).

Requirements: Bachelor's degree or equivalent in chemistry. Familiarity with organic chemistry; ability to learn the mass spectrometry of organic compounds and understand the organic structural data. Familiarity with scientific computing.

Minimum Starting Salary: \$11,739

Job Number: T437

Part-time

*Position: Office Assistant, GR18

Department: Ornithology

Description: Under supervisor's direction, provide administration and maintenance of a correspondence course in bird photography. Administers sales of the Laboratory's photographer's observation blind; process applications for home study course; handle deposits; input data; maintain course enrollment. Other duties as assigned. Part-time hours to be arranged.

Requirements: High school diploma or equivalent. Medium typing. Knowledge of personal computers helpful. Accuracy and attention to details required. Excellent organizational skills. Ability to keep track of daily operations. Good communication skills very helpful.

Minimum Starting Salary: \$10,500/annual

equivalent
Job Number: C4718

*Position: Secretary, GR18

Department: Center for International Studies

Description: Type and proofread correspondence, reports, etc.; arrange meetings and activities, conferences; handle all travel and lodging arrangements and reimbursements; screen telephone calls; organize and maintain files. Monday - Friday, 12:00 noon - 5:00 p.m.

Requirements: High school diploma or equivalent. Medium typing. At least 1-2 years office experience. Excellent interpersonal and

organizational skills. Ability to work under pressure and handle confidential information. Good telephone techniques. Knowledge of word processing.

Minimum Starting Salary: \$10,500/annual

equivalent
Job Number: C4711

*Position: Collections Representative, GR17

Department: Controller's (Accounting)

Description: Telephone collections. Responsible for contacting debtors during evening hours. Monday - Friday, 4:00 p.m. - 8:00 p.m.

Requirements: High school diploma or equivalent. Previous experience helpful. Excellent communications skills a must.

Minimum Starting Salary: \$9,967/annual

equivalent
Job Number: C478

Position: Research Support Specialist I

Department: Division of Nutritional Sciences

Description: Identify nutrition education needs of nurses, physicians and other health practitioners through interviews and other means of information gathering. Coordinate and implement public relations and information program on a maternal nutrition course. Interview pregnant and lactating women. Part-time, temporary until 6/30/85, days and hours to be determined.

Requirements: Bachelor's degree, certification as a Registered Nurse. Three years experience in pediatric or obstetric nursing with some involvement in patient or professional education. Please send cover letter and resume to Cynthia Smithbower.

Job Number: P463

Position: Extension Support Aide

Department: Human Development and Family Studies, Family Life Development Center, New York City

Description: Assist in developing, compiling, promoting and disseminating training and operations resource package for school-based programs to prevent child abuse and neglect. Monday - Friday, 9:00 a.m. - 3:00 p.m. until 1/31/86.

Requirements: Bachelor's degree or equivalent education and experience in social services or communications. Ability to organize and disseminate education and promotional materials. Writing, editing and interpersonal skills. Please send cover letter and resume to Ralph D. Jones by November 30, 1984.

Minimum Starting Salary: \$18,000/annual

equivalent
Job Number: PA462

Position: Extension Support Aide

Department: Human Development and Family Studies - Family Life Development Center

Description: Provide supportive services and assist in applied research in the field of child protective services. Maintain national contacts, develop and prepare course outlines and maintain current inventory of trainee training materials. Also responsible to deliver training in Crisis Intervention and core curriculum. Monday - Friday, 8:30 a.m. - 1:30 p.m. until October 1, 1985.

Requirements: Bachelor's degree in social sciences or equivalent combination of education and experience. Some experience in an educational role or related work experience in child protective services and a demonstrated ability in written communications. Please send cover letter and resume to Ralph D. Jones by November 30, 1984.

Minimum Starting Salary: \$13,625/annual

equivalent
Job Number: PA465

Position: Office Assistant, GR17

Department: Human Development and Family Studies - Family Life Development Center

Description: Prepare monthly and quarterly reports; distribute training materials; control of copyright system; prepare vouchers, purchase orders, consultant contracts, correspondence; handle telephone coverage and mail distribution. Monday - Friday, 8:30 a.m. - 2:00 p.m. until September 31, 1985.

Requirements: High school diploma or equivalent. Medium typing. General office skills. Strong interpersonal skills. Ability to work under pressure and meet deadlines.

Minimum Starting Salary: \$9,967/annual

equivalent
Job Number: C4610

Position: Office Assistant, GR16 (Repost)

Department: Unions and Activities

Description: Assists in making room reservations for all non-academic events at Cornell which includes lectures, films, dances, concerts

... rallies, etc.; assists campus organizations in arranging set-ups and audio visual equipment and other special services. Monday - Friday 8:00 a.m. - 2:00 p.m., 30 hours per week. Ten month appointment.
 Requirements: High school diploma or equivalent. Medium typing. Some experience with computer terminals helpful. Good interpersonal skills.
 Minimum Starting Salary: \$9,494/annual equivalent
 Job Number: C354

Temporary

TEMPORARY OPPORTUNITIES: Cornell University has an ongoing need for qualified individuals willing to work on a temporary basis. We frequently need individuals to work as word processor operators, secretaries, typists, recep-

tionists, office assistants, account clerks and data entry clerks. Requirements for these positions range from medium to heavy typing, some office/secretarial experience and knowledge of word processing equipment. If you have an interest in working on a temporary basis, please contact Tambi Benzon, Staffing Services, 256-5226, for more information.

*Position: Temporary Lab Technician, T-3
 Department: Avian & Aquatic Animal Medicine
 Description: Assist in investigations assessing possible interactions of environmental pollutants such as PCBs with disease resistance and immune responses of rainbow trout. Perform immunologic assays (mitogen stimulation and chromium release assays); maintain fish tissue cultures for virus isolation and perform virus isolation on fish tissue samples; prepare and collect tissues from fish for virological, im-

munological and histological analysis; perform calculations and statistical analyses of data collected. Monday - Friday, 8:00 a.m. - 5:00 p.m.; approximately six months.
 Requirements: Bachelor's degree or equivalent in biological or biomedical sciences. Knowledge of fundamental tissue culture and aseptic techniques. Experience performing immunologic assays (mitogen stimulation) and in tissue culture and histology. Knowledge of fish anatomy.
 Minimum Starting Salary: \$5.00-\$6.00/hour
 Job Number: T471

Academic

Please contact department directly.
 *Position: Postdoctoral and Research Associate Positions

Department: Institute for the Study of the Continents (INSTOC)
 Job Number: A472
 *Position: Faculty Position - Theriogenology
 Department: Clinical Sciences, NYS College of Veterinary Medicine
 Job Number: A471
 Position: Reference Librarian
 Department: School of Hotel Administration Library
 Job Number: A461
 Position: Assistant Librarian
 Department: Law Library
 Job Number: A462

Israel Dig Shows Urbanization Dates to 3000 B.C.

Like the multi-layered skin of an onion, levels of Israelite civilization are being continuously uncovered at the ancient site of Aphek-Antipatris, located in a suburban Tel Aviv park in the town of Petah Tiqwa.

But a new discovery at the site made by a Cornell archaeologist and his Israeli colleagues is one of the most significant to date, for it proves that ancient Israel's urbanization process began in 3000 B.C., centuries earlier than previously thought.

For the past six years, David I. Owen, professor of Near Eastern studies here, has helped excavate the 25-acre mound of Ras el-Ayn which encompasses the debris from a sequence of destroyed ancient cities — including Aphek, the original settlement, and Antipatris, a Roman city built over Aphek's ruins by Herod in 7 B.C.

While finds at the site have been spectacular in their beauty and historical importance, time and inflation were about to bring an end to the project, according to Moshe Kochavi, a professor at Tel Aviv University's Institute of Archaeology. He has directed the project since its beginning more than a decade ago.

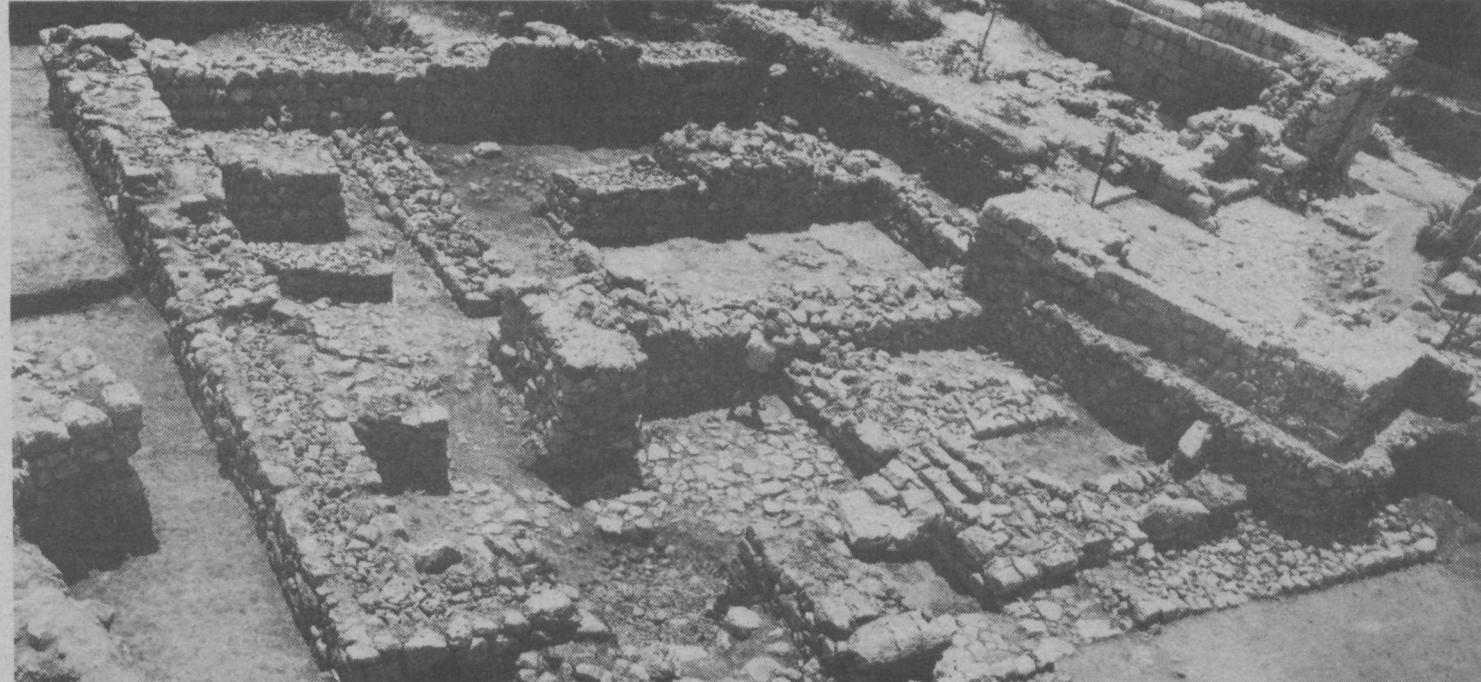
Then, during a recent six week dig, excavators exposed the architectural remains of a guard tower dating back to the Early Bronze Age around 3000 B.C. In light of this find and the promise it holds, Owen and Kochavi have decided to continue work at the site, also known as Tel Aphek, for at least one more season.

The historical significance of this new find cannot be overstated, Owen says, for it "demonstrates that large scale urban settlements with major architectural units began at the very beginning of the Early Bronze Age."

Stately houses, a cult center from the 16th century B.C. where gifts were presented to gods, an undisturbed cemetery site from the 17th century B.C., palaces, pottery, and inscriptions, all are evidence of once thriving cultures at Tel Aphek.

A brief chronology of the site, which held a strategic position guarding the narrow pass between the Yarkon River and the hills of Samaria, helps to illustrate its uniqueness over 5,000 years:

- Chalcolithic or Copper Stone Age (3500-3000): scattered pottery from this period indicates settlement began at this time.
- The Early Bronze Age (3000-2200 B.C.): the discovery of a large rectangular tower erected on virgin soil in the southwest corner of Tel Aphek dating back to the end of the fourth millennium indicates an organized town that needed protection instead of a loose grouping of villages. A major walled city covering the entire area of the mound, 25 acres, characterizes the discoveries from this long period.
- The Middle Bronze Age (2200-1550): this period, often called the "Age of the Patriarchs," is distinguished by the discovery of three major palaces. The name Aphek appears for the first time in Egyptian texts. The city is large and walled and



Overall view of Egyptian governor's palace after restoration. Built by Ramses II, this fortress-palace contained most of the inscriptions excavated at Aphek.

is characterized by rich pottery and burials along with major architecture, including a huge palace discovered in the eighth season of digging and a cemetery of the 17th century found in the twelfth season.

- The Late Bronze Age (1550-1200): a Canaanite cult center containing more than 100 complete vessels from the 16th century, a large Canaanite palace, and a later Egyptian governor's residence from the 13th century B.C. mark this as the most extensively excavated period at the site. Major inscriptions in Sumerian, Akkadian, Canaanite, and Egyptian were made in this level.

- Iron Age (1200-586): important Philistine remains, supporting the biblical reference to Aphek in I Samuel 28: 1 and 29: 1, and Israelite houses from the period of the monarchy characterize the finds from this period.

- Roman and Byzantine (37 B.C. - 650): Herod built the city of Antipatris in honor of his father on the ruins of ancient Aphek. The main street with its shops and porticos has been extensively revealed. A small Roman theatre called an odeon was discovered; it is the first theatre of this type ever found in Israel.

The highpoint of Owen's work at Aphek-Antipatris was his discovery and publication of a 41-line "letter" written in Babylonian cuneiform on a clay tablet during the 13th century. The letter is unusual in that tablets aren't often found in Israel. The discovery of this tablet ties, for the first time, the archaeology of 13th century Canaan with the history of Syria and Egypt.

The unearthing of the diplomatic correspondence from Syria, destined for a governor in the Tel Aphek region which was then under the control of Ramses II, gave



Alumni and students digging together are (from left) Bernard Yudowitz '55, Linda Bregstein '85, Dot Fast '49, Prof. D. I. Owen, Ed Levine '84.

rise to hopes that a major diplomatic archive would be found in one of the five palaces thus far uncovered. Such an archive has not been found — yet.

The site, which was heavily occupied from 3000 B.C. to 400 A.D., was ultimately destroyed by an earthquake in the 4th century. Many of the ceramic vessels that survived the disaster will go on permanent display at Cornell next year. A small study collection of pottery sherds gathered at the site is already available to students.

Some of the pottery from Tel Aphek was unearthed by Cornell students participating

in the University's summer field archaeology program. Owen, Cornell alumni, and many Cornell students have been taking part in the dig for six of the past 12 years that the project has been conducted. Plans are now under way for the 13th and final excavation season in July 1985.

The National Parks Authority in Israel is completing a conservation and restoration project at Aphek-Antipatris in hope of cultivating an interest in the historical importance of the site and making it a regular tourist attraction.

Lisa H. Towle

Brief Reports

Bloodmobile Scheduled At Vet Tower Dec. 3

A Bloodmobile visit is scheduled from 10 a.m. to 3:45 p.m. Monday, Dec. 3, in the Research Tower Cafeteria of the New York State College of Veterinary Medicine.

Walk-ins will be welcome, or for an appointment persons may call the Red Cross office at 273-1900.

Holiday Decorations: A Policy Reminder

With the approach of the holiday season, members of the Cornell community are reminded of the policy governing holiday decorations.

University Senate legislation, adopted in 1972 and which continues in effect, states that Cornell cannot sponsor or provide direct support for the display of religious symbols.

Any area which gives the impression that a symbol is associated with the university should not be used for the purpose of display. In particular the external surfaces of buildings cannot be used for such displays; however, individuals are not prohibited from having private displays in their own offices or living quarters.

Stars displayed at Christmas time are considered religious symbols, according to the legislation. Decorated trees, however,

are not considered religious symbols unless the decorations include such religious symbols as stars.

The legislation also requires that any decisions concerning application of the guidelines be made by the Vice President for Campus Affairs. Any related questions should be addressed to William D. Gurowitz, 313 Day Hall, telephone 256-4166.

Gurowitz has requested that, in conjunction with Cornell's energy conservation program, decorations be non-electrical.

Drummond Studio Plans Play by Max Frisch

Human gullibility and ignorance are the themes of the upcoming Drummond Studio production, "Biedermann and the Firebugs."

Written by Max Frisch, the work depicts two vagabond arsonists who are freely invited into the home of their next victim. The playwright explores the questions of human vulnerability, naivete, and stupidity in this modern-day setting.

"Biedermann and the Firebugs," directed by Jim Thorp, will be presented Wednesday, Dec. 5, through Saturday, Dec. 8, at 8:15 p.m. The play is free and open to the public. Seating is on a first-come, first-serve basis.

New Documentary Film To Have Its Premiere

"Family Matters," a new documentary film produced by the Department of Human Development and Family Studies and the Family Matters Project will have its premier showing at 5 p.m. Thursday, Dec. 6, in Uris Auditorium.

The film is a portrait of two families struggling for survival in a society that is indifferent to their needs. It was conceived by Prof. Moncrieff Cochran, directed by David Gluck and edited by Peter Carroll.

Refreshments at 4:30 p.m. will precede the premiere showing.

Second VDT Vision Screening Planned

The second annual employee eye screening for visual display terminal operators has been planned for Jan. 2 to Jan. 8, 1985 from 8:30 to 11:15 a.m. at University Health Services.

To schedule an appointment call 256-4082 between 8:30 a.m. and noon or between 1:30 and 4:30 p.m. instead of the number previously listed in Networking.

SAGE CHAPEL

Amherst Chaplain Will Give Talk

George Cadigan, chaplain at Amherst College and bishop of the Protestant Episcopal Church, will speak at Sage Chapel at 11 a.m. Sunday, Dec. 2.

Bishop Cadigan received his degrees from Amherst College, the Episcopal Theological School and Cambridge University. He received honorary degrees from Hobart, the University of the South and Hofstra University.

He was assistant chaplain at Amherst during 1936-37. From 1937-42 he was rector at St. Paul and priest-in-charge at St. Matthew in Brunswick, Maine. He was rector at Grace Episcopal Church in Salem, Mass., from 1942-48 and rector at St. Paul in Rochester, N.Y., from 1948 until 1959. In 1959 he was consecrated bishop of Missouri, where he stayed until becoming chaplain at Amherst in 1975.

Music for the service will be provided by the Sage Chapel Choir under the direction of Donald R.M. Paterson, university organist and Sage Chapel choirmaster.

Off-Campus Housing Notes



A training and planning session for mid-year off-campus housing counselors will be held Thursday, Nov. 29 at 4:45 p.m. in 103 Barnes Hall. For further information contact Neff Casaburri or Cindy Wright at 256-5373.

The Off-Campus Life Committee will meet immediately after the off-campus counselor training and planning session to finalize the spring housing survey format.

The Collegetown Neighborhood Council will meet on Tuesday, Dec. 11 at 4 p.m. in 314 Anabel Taylor Hall. Agenda items will include spring internships, Eddygate and preliminary planning for NeighborFair activities.

Appointments with the off-campus housing legal adviser will be available on Thursday

afternoons through Dec. 20. This service is available to registered students only. Call Cindy Wright at 256-5373 for further information or to request an appointment.

Now is the time to list your spring semester availabilities with the Off-Campus Housing Office. To place a listing, call 256-5373 or drop by 103 Barnes Hall between the hours of 9 a.m. and 5 p.m.

There is no need to be discouraged if your spring semester property has not been taken or if you haven't found the right place. The rental activity should start picking up late November and gradually increase as the new year approaches.

Museum Plans 'Environmental Music'

The people at the Herbert F. Johnson Museum of Art are not asking you to stop and smell the roses; rather, they want guests to stop and hear the building.

A specially composed piece of music, designed to give the listener an auditory-musical voyage through the museum, will be featured in two performances, at 8:15 p.m. Friday, Nov. 30, and at 3 p.m. Saturday, Dec. 1.

"Environ III: November Music" was written by William Bradbury, a doctoral student in composition at Cornell. The three-part piece was designed for percussion and electronic tape.

It begins outdoors with noises from Harry Bertoia's sound sculpture and then travels into the museum. After passing through the main gallery, there are recordings of noises made by water fountains, temperature indicators, sinks, coat racks, and various machines. The piece closes back in the sculpture garden. All the noises have been electronically altered.

Gordon Stout, an Ithaca College professor of percussion, will provide percussion accompaniment and counterpoint to the sounds which represent the auditory

environment at the museum.

A reception will follow the Friday evening concert. At 2 p.m. Saturday, preceding the afternoon performance, Bradbury will give a lecture and demonstration on environmental composition.

The performance is made possible by grants from Meet-the Composer, Inc., and Cornell's Council of the Creative and Performing Arts.

The Week in Sports

Three Home Events This Weekend Highlight Winter Sports Slate

By BILL HOWARD
Sports Information

The winter sports schedule swings into action this weekend with three home events. Saturday, the women's gymnastics team opens its season with the 10th annual Cornell Invitational at 1 p.m. in Teagle Hall. At 7:30 p.m. the men's basketball team takes to the Barton Hall court to entertain Elmira College. Sunday, the men's and women's track teams begin their schedule with the annual Cornell Relays, which will start at 1 p.m.

The women's basketball team will be the only other Big Red squad at home this week. After traveling to St. Bonaventure on Saturday, the cagers return home Tuesday to take on Colgate at 7:30 p.m. in Barton Hall.

Seven other teams will be competing on the road this weekend. The men's hockey team has an important two-day road trip,

traveling to Clarkson Friday night and St. Lawrence on Saturday for key ECAC competition; the men's and women's swimming teams are both at Army; the wrestling team will participate at the Penn State Invitational; the men's gymnastics team is at Springfield College; the women's hockey team has two road games, at Yale on Saturday and Princeton on Sunday; and the men's squash team will be at the Williams Tournament.

The women's gymnastics team will continue with tradition and begin its 1984-85 schedule with the Cornell Invitational, which began in 1975. Four teams which took part in the event a year ago are returning to Ithaca this weekend. Maryland is one of the top teams in the East, and it won the meet with an impressive team score of 170.95 points. Ithaca College, which finished third behind Cornell with 157.25 points last year (the Big Red had 163.45), finished eighth at

the NCAA Division II championships in 1983-84. Rhode Island had a team total of 154.40 points at last season's meet and should once again field a strong squad.

Saturday night, the Big Red men's basketball team will face Elmira College for the first time ever. Cornell began its season this past Friday on a very successful note, defeating Utica College in Ithaca, 70-54. It marked the first time the Red has won its season opener under the direction of fifth-year coach Tom Miller.

The men's and women's track teams will entertain several schools in the state at the Cornell Relays. The men will be led by senior co-captain Chris Chrysostomou and sophomore Darren Roach in the long jump and triple jump, senior Tom Basting in the middle distance events, seniors Mike Crawley and Jim Lem in the sprints, Mike Franz and Tim Tribble in the high jump, Mark Hursh in the pole vault and junior

Grant Whitney in the distance running events. Among the women's top performers are senior Lauren Kulik in the jumps, sophomore Amy Bragdon in the sprints, junior Elise Jones in the middle distance running events and senior Nancy Schmidt in the longer distances.

The women's basketball team got off to a very good start by defeating LeMoyne on Saturday in its season opener, 78-56. It was the first time the Big Red has won its season opener since 1979-80. Leading the way was last year's leading scorer, junior Karin Dwyer, who had 22 points. Heidi Johnson scored 16 points, while senior Julie Crotty and sophomore Mary Browne each contributed 10. Tuesday night's game with Colgate should be a season one. The Red Raiders defeated Cornell last season, 74-63, in Hamilton.