

Cornell CHRONICLE

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Keeping apples crisp



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Initiatives:
round four

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Simulating
the outer planets



Cornell engineer Chuck Henderson inspects the undulator, an X-ray beam intensifying device, developed by Argonne National Laboratory, Cornell and Spectra Technology. *Jill Peltzman*

New device enables biochemists to take X-ray snapshot of protein

Cornell biochemists have taken X-ray diffraction pictures of biological molecules one million times faster than has ever been done with an X-ray beam.

Their achievement — using flashes one tenth of a billionth of a second long — marks the beginning of the use of superfast X-ray pulses to reveal the structure of molecules undergoing biological processes.

Of wider significance, the experiment also establishes that a beam-intensifying device called an undulator, which is the key component of the country's most ambitious facil-

ity for X-ray studies, will work as planned.

The facility, the Advanced Photon Source (APS), which will provide X-ray beams 10,000 times brighter than is now possible, is to be built at Argonne National Laboratory beginning in 1989, funded by the Department of Energy. The undulator was designed by scientists and engineers at Argonne and Cornell and operated at the Cornell High Energy Synchrotron Source (CHESS).

By analyzing how samples of molecules diffract high-

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Hong Kong theater performs work by student playwright

A drama written by Chinese playwright Yan Hai-ping is being performed in Hong Kong this summer, and she expects the reaction of Westernized audiences to deepen her understanding of the world and her my own cultural traditions.

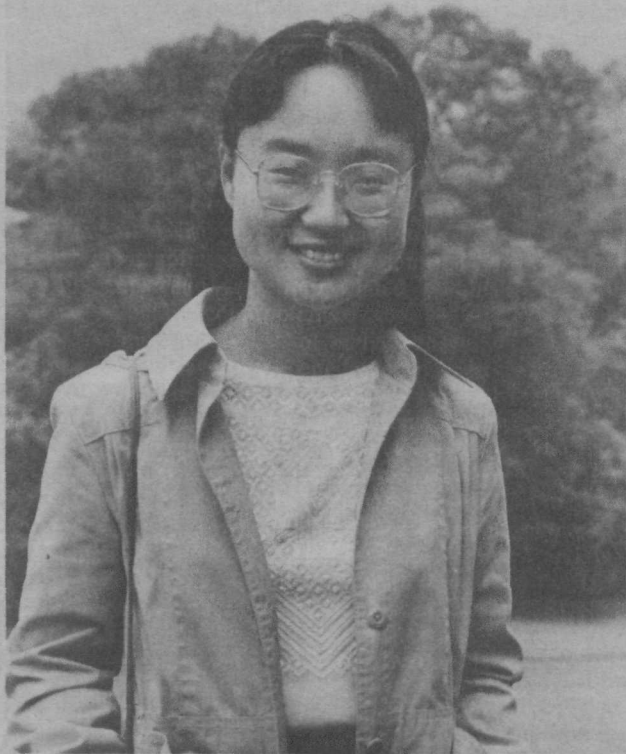
Yan, 31, a Ph.D. candidate, found her education in China blotted out for 10 years when the Cultural Revolution forced scholars to perform menial work and universities were filled with students selected for party loyalty rather than academic ability.

She was 20 years old when the Cultural Revolution of the 1960s and 1970s collapsed, normalcy returned to China and she was able to enter college in Shanghai. But she was far behind in her reading.

"The Cultural Revolution had already started when I entered high school in 1969. Before then, I was too young to read much Chinese history, and many books dealing with our history and culture were banned and destroyed during the Cultural Revolution, or rewritten," she said.

Her serious reading into China's vast history, which reaches back more than 4,000 years, did not start until she

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Yan Hai-ping

Claude Levett

Clark to curtail 2d stint as dean of Hotel School

John J. Clark Jr., dean of the School of Hotel Administration, has decided to leave that office on Jan. 1, 1990, rather than complete his second five-year term in June 1991.

"I hope to complete the school's \$35 million capital campaign and then return to teaching and research, my first love," Clark said, adding that he expects to remain in the Hotel School and will take a leave of absence and begin planning new teaching and research priorities.

"Jack Clark has been an extraordinary dean, and his achievements far exceed those that I could have hoped for when he was first appointed to the position seven years ago," said President Frank H.T. Rhodes. "I understand his desire to return to scholarship and am very pleased that he has agreed to continue as dean for the critical remaining portion of the capital campaign."

Provost Robert Barker praised Clark for doing "an outstanding job of bringing this school into, and partway through, a period of unparalleled evolution and rebuilding. With the help of the faculty, he has developed a new curriculum and has now seen that curriculum implemented."

"He has completed the most demanding planning for the total restructuring of the teaching and hospitality facilities of the school, and has been able, in cooperation with other colleges and the university, to include an executive education center," Barker continued.

Clark, who received a Ph.D. in electrical engineering here in 1969, taught in Northeastern University's electrical engineering department for three years before joining the Hotel School faculty in 1972. He became dean in 1981 and has taught engineering courses related to the hotel industry, including mechanical and electrical systems, development and design of hotels, management of physical plants and environmental control.

—Albert E. Kaff

Albany relieves state university budget anxieties

A three-year salary-increase plan that will affect almost 3,000 employees of the university's state-supported colleges has been approved in principle and probably will be implemented in October, according to Nathan Fawcett, director of statutory college affairs.

For the 1,468 faculty and professional staff and for the 1,435 clerical and technical employees, the new plan provides a pool for increases in base salary of 5 percent for the first and second years and 5.5 percent for the third year.

In other money-related news out of Albany, the Legislature brightened the financial-aid picture somewhat and relieved the pressure on the State University of New York, which had been ordered to cut expenses because of a statewide revenue shortfall for the current fiscal year.

In a flurry of activity before recessing last Saturday, the lawmakers approved a revised plan for the new Liberty Scholarship program proposed by Governor Cuomo last January and raised the maximum limits of student aid grants under the Tuition Assistance Program (TAP). The former would serve students from low-income families; the latter helps middle-income families. The Legislature also increased SUNY's spending authority from all revenue sources by \$15.3 million, which should relieve earlier cuts somewhat.

Cornell officials were still seeking this week to quantify the effects here of the financial aid and budget relief actions.

The salary-increase pool, which does not include additional performance and merit payments, is keyed to the size of the recent settlement between New York State and its

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Notables

Gerald E. Rehugler has been elected a fellow of the American Society of Agricultural Engineers, a distinction shared by only 2 percent of the ASAE's 11,000 members. Rehugler has been a member of the Cornell faculty since 1958 and chairman of the Department of Agricultural Engineering since 1984.

The ASAE cited Rehugler for his work in a number of areas, including egg handling and cabbage harvesting devices and tractor and agricultural vehicle dynamics.

David M. Galton, associate professor of dairy management, has won The New York Farmers' 1988 Award in recognition of outstanding contributions to agriculture. Founded in the 1920s, The New York Farmers is a group of some 50 persons living in New York City who also own farms and have an active interest in the improvement of agriculture. They cited Galton for his development of a series of undergraduate courses at Cornell in dairy production and management emphasizing applied techniques.

Under Galton's leadership, Cornell's Dairy Management Program has come to be recognized as one of the best in the nation.

Ian B. Mylchreest has won Cornell's 1988 Messenger-Chalmers Prize for his doctoral dissertation, "The Anglo-American Dialogue on Constitutionalism, 1860-1920." The prize, which carries with it a \$750 cash award, was established in 1902 to recognize through a universitywide competition the doctoral dissertation "giving evidence of the best research and most fruitful thought in the field of human progress and the evolution of civilization during some period in human history or during human history as a whole."

A native of Sydney, Australia, Mylchreest received his Ph.D. in history in May. He received a bachelor's degree in history in 1979 at the University of Sydney, where he also did graduate work in history and law before coming to Cornell.

Three Cornell faculty members, **Satya P. Mohanty**, **Peter J. Katzenstein** and **Richard W. Miller**, have received fellowships from the American Council of Learned Societies. Mohanty, an assistant professor of English, is studying "Modalities of the imperial subject: Kipling, Curzon, Conrad." Katzenstein, a professor of government, is researching "Domestic structures and the exercise of power: West Germany and Japan in the postwar world." Miller, a professor of philosophy, is studying "Equality, objectivity and political justification: the nature of balanced judgment in the face of conflicting needs."

ACLS is a private, non-profit federation of 46 scholarly associations devoted to the advancement of humanistic studies in all fields of learning.



Claude Levett

Three botanists from the Main Botanical Garden of the U.S.S.R. Academy of Sciences visited Cornell last week to study North American plants, with the hope of introducing some to the Soviet Union. Valeriy I. Nekrasov, left, and Boris N. Golovkin, center, confer with Edward A. Cope, a research support specialist with Cornell's L.H. Bailey Hortorium, as they stand in Minns Garden along Tower Road. A third visiting researcher, Rimma A. Karpisonova, is not pictured. The botanists toured Cornell Plantations and the Agricultural Experiment Station in Geneva during their visit. Their three-week stay in the United States is part of a 16-year-old annual exchange of Soviet and American botanists.

No long-term damage seen from chemical spill in creek

No long-term, adverse environmental effects are expected in Fall Creek, where clean-up crews spent a week removing settled materials from water-treatment-chemical spills, according to environmental health officials at Cornell.

At least 3,000 fish — mostly minnows, suckers and some small-mouth bass — were killed, and wading in the creek was discouraged after approximately 3,800 gallons of a mixture of water and 17 percent aluminum sulfate, or alum, escaped through drain lines from the Cornell Water Filtration Plant July 8 and 9. The chemical, which causes suspended solids in water to coagulate, temporarily raised the acidity of Fall Creek water in the Forest Home neighborhood and deposited aluminum hydroxide on the creek bottom.

A specialized contractor was hired by the university to vacuum the aluminum hydroxide deposits from the creek, while experts from the state Department of Environmental Conservation (DEC) and the Cornell Office of Environmental Health monitored water quality and clean-up progress. By July 15, the DEC expressed satisfaction with the clean-up.

"Any deposits that might remain in the creek bottom will wash away eventually. There is virtually no risk to human health from this material," Judith A. Crawford,

university director of environmental health, reported to Forest Home residents.

"The consensus opinion of Cornell experts is that there should not be long-term adverse effects on the environment due to the spill," Crawford said, citing an on-site inspection by Ray T. Oglesby, professor and chairman of the Department of Natural Resources. "Deposited material left in the stream is not in a form that is toxic to humans or fish. The creek is at normal pH, and there is no residual acidity from the spill."

The university lifted the recommendation against wading in that section of Fall Creek, while noting that swimming in Cornell-owned creek gorges — downstream of the affected area — was never permitted under any circumstances.

Cornell utilities officials blamed a malfunctioning valve and human error for the spills from the Water Filtration Plant. The DEC has yet to determine whether the university will be fined for the spills.

Community reaction in the Forest Home area during the spill clean-up "ranged from extremely irate to feeling very secure," said Bruce Brittain, president of Forest Home Improvement Association, which helped university environmental officials warn residents in some 125 homes of the possible health risk in the creek.

Briefs

■ **Black literature:** The National Endowment for the Humanities has awarded a \$129,230 grant to the 30-volume Black Periodical Literature Project at Cornell. The project, under the direction of Henry Louis Gates Jr., the W.E.B. DuBois Professor of Literature, will publish fiction and poetry that first appeared in black periodicals between 1827 and 1919. Publishing of the project by Oxford University Press began this year. The NEH grant will be used to support the preparation of an annotated bibliography and on-line data base that will result in an index to the collection.

■ **New newsletter:** Financial and managerial research being conducted in the School of Hotel Administration and its academic developments will be shared with hospitality industry executives through Cornell Hospitality News, a newsletter to be launched this summer.

The inaugural issue will contain articles on Hotel School research into the stock market, recruiting, hotel room pricing, information services, interns, listening skills, airline meals and accuracy of restaurant checks, according to Frederick Antil, the school's director of corporate relations and placement and senior editor of the new newsletter. The newsletter also lists graduate student research monographs that are available to the industry, and it will be mailed to senior executives in hotels, restaurants and other organizations in the hospitality industry.

■ **Office of Human Resources:** Recent reorganization of the Office of Human Resources has included naming E. Peter Tuford an associate director with responsibility for coordinating employee relations and compensation functions, effective July 1. He had been manager of employee relations. Marge Swiercz Clark, formerly assistant to the director, Lee M. Snyder, and a senior employee relations specialist, is now manager of employee relations. Anita Harris, a senior compensation associate, has replaced Karen Canfield, who has moved to New Mexico, as manager of compensation. The former manager of employee benefits, Marilyn Paluba, is now an associate director responsible for coordinating employee benefits and human resource information as well as overseeing staffing functions.

■ **Cooperative education:** David L. Call, dean of the College of Agriculture and Life Sciences, will be a principal speaker at the 1988 National Institute of Cooperative Education (NICE) July 26 through 29 at the Convention Center in Rochester. More than 1,400 conference participants are expected.

Call will address a luncheon meeting scheduled for July 27 at the center. He will discuss the role of research and education in improving cooperative performance. The NICE convention, which will focus on the theme of "Designing for Opportunity," is being cosponsored by the American Institute of Cooperation, Cornell Cooperative Extension and the New York Council of Farmer Cooperatives. Bruce L. Anderson, an associate professor of agricultural economics at Cornell, assisted in organizing the convention.

■ **Memorial service:** A service in memory of Albert W. Laubengayer, an emeritus professor of chemistry, is scheduled for 4 p.m. July 24 in Room 200 of Baker Laboratory, followed by a reception in the lobby. Laubengayer died June 15. He was 89.

■ **Facility closed:** The distribution facility of the Microcomputers & Office Systems at 152 Langmuir Laboratory near the Tompkins County Airport will be closed all day July 26 for inventory.

■ **Participants to visit:** About 40 teenagers from Rochester and Dryden who are participating in a Cornell study on the role of mentors in adolescents' development were scheduled to visit campus on July 20. The young people, ranging in age from 13 to 15 years, will be paired with adult volunteer mentors this fall to help measure the importance to adolescents of having non-related adults as helpers in their lives. The students toured campus facilities and listened to lectures during their day-long visit. The study is being led by Stephen F. Hamilton, associate professor of human development and family studies.

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Obituaries

Lloyd P. Smith

Lloyd P. Smith, a key figure in the development of physics at Cornell before and after World War II, died June 17 in Menlo Park, Calif., from a blood infection. He was 84.

A member of the Cornell physics faculty from 1932 until he left for private industry in 1956, Smith played a major role in bringing Hans Bethe to the Cornell faculty in 1935. He first met Bethe in Munich in 1931 while on a research fellowship to Germany. Bethe, who is still active on the Cornell faculty as an emeritus professor, received the 1967 Nobel Prize in physics.

Following World War II, Smith was instrumental in creating Cornell's School of Engineering Physics. He had served as chairman of the Department of Physics and also director of engineering physics for 10 years when he left Cornell.

After leaving Cornell, he headed research operations at AVCO Manufacturing Corp., then Ford (later Philco) Aeronautics Laboratories. From 1965 to 1969, he was vice president of the physical science section of the Stanford Research Institute. After his retirement in 1969, he remained active as a consultant until his death.

Smith was born in Reno, Nev. He earned a bachelor's degree in electrical en-

gineering at the University of Nevada in 1925 and a doctorate in physics at Cornell in 1930.

Charles C. Russell

Charles C. Russell of Fort Smith, Ark., who was chairman of the Department of Communications Arts from 1972 to 1974, died July 8 at the Sparks Regional Medical Center in Fort Smith. He was 68.

Russell joined the faculty of the Department of Communications Arts in 1959 and was elected a professor emeritus in 1978.

Born in Belleville, Ark., Russell earned a bachelor's degree in journalism in 1948 and a master's degree in 1949 from the University of Texas and a Ph.D. in 1968 from the University of Missouri.

He headed the Department of Journalism at the University of Arkansas from 1957 to 1959 and held public relations positions with the Portland Cement Association in Chicago and at Howard College in Birmingham, Ala., earlier in his career. He served with Naval Intelligence during World War II.

Survivors include his wife Mary Barnard Russell of Fort Smith, and two daughters, Patti Hill of Fort Smith and Kim Brueggemann of Baltimore.

Kosher dining, renovations to enhance Jewish life

Cornell, some of its alumni and the Young Israel organization are cooperating to enhance Jewish life here by building a new kosher dining hall that will open in the fall and by renovating the two Victorian houses that serve as Young Israel House.

The dining hall will offer a full range of kosher foods, and because it will be operated in consultation with Cornell Dining, students on the university's Co-op meal plan will be able to charge meals there with Co-op cards.

Young Israel's refurbished and expanded residences will have room for about 40 undergraduates and graduate students, plus a residential scholar. Some 20 students live there now. Guest rooms are being added, as are a sanctuary, study hall, lounge, recreation areas, offices and a Judaica library with more than 6,000 titles.

Tapestries by Israeli artist Kopel Gurwin will hang in the dining hall, Jewish art will be exhibited in the entryway and between the two houses and the dining hall will be a cobblestone courtyard, reminiscent of traditional Jewish community centers in Europe.

Although the three new kitchens — one each for dairy, meat and the Passover holiday — will be supervised to keep them strictly kosher, the new dining hall/Jewish center is intended to be a place where Orthodox, Conservative and Reform Jews — and non-Jews — all can feel comfortable, said Norman Turkish, a Cornell alumnus and Ithaca resident who is spearheading the project.

"This will be a place where students can use the library, the study rooms and the music practice rooms, even two working fireplaces. It will be elegant collegiate living. . . . Some students, if they wish, will be able to take a leadership role in conducting Jewish services. This will be a place where they can really take part in Jewish life," Turkish said.

For years, dinners have been served at Young Israel House — a self-governing co-operative for traditionally observant Jewish students that is affiliated with Young Israel, a national federation of modern Orthodox congregations. But the facilities were not as good as they could be, Turkish said. He and others responded to the need for the



An artist's rendering of the new kosher dining hall, at left, being built adjacent to the renovated residences of Young Israel.

campus to offer three kosher meals a day, plus snacks around the clock.

The new residence and dining hall should be among the best facilities at any major university and make Cornell more attractive to traditional Jews who have decided against attending in the past, said Rabbi Laurence Edwards, the Jewish chaplain at Cornell and director of the campus chapter of B'nai B'rith Hillel, a national group that organizes activities to promote Jewish life, culture and religion.

The 9,500-square-foot dining addition will have seating for about 250. Its kitchens

have been designed by Professor Michael Redlin of the School of Hotel Administration, with rabbinical advice. Other members of the Cornell faculty will be serving on an advisory board on how to make Jewish life at Cornell more vibrant.

An estimated 3,000 students, or 16 percent of Cornell's student population of 18,200, are Jewish. Edwards noted that a considerably smaller number follow the traditional Jewish dietary laws strictly, "but there are many more who follow them to some degree and for whom this will make it easier," he said. The new facility also

should "help build a sense of community," Edwards added.

A kosher kitchen at the university will enable Cornell to be host to conferences of Jewish organizations and may encourage some groups to hold meetings here, Turkish said, adding that the new dining hall also will be available for weddings and other occasions.

To date, alumni, parents and friends have raised approximately \$360,000 toward the project's goal of \$1 million to \$1.25 million.

—Carole Stone

Retail storage packages keep apples fresh for months

Cornell researchers have developed retail-size food packages that can keep apples fresh in refrigerators in stores and homes for up to six months.

The system is expected to be a boon to the nation's apple industry because it offers growers a convenient, low-cost method of storing apples in tip-top condition far beyond the season and allows supermarket operators to keep them in good condition until sold.

The invention also raises the possibility of using similar packaging systems for other fruits and for vegetables.

The prototype is made of a specially designed heavy-duty plastic tray with 12 pockets that hold the apples. Once the apples are placed in the tray, the top is sealed with a computer-tailored plastic film. The film and tray create the right storage conditions for apples within a week to 10 days by letting atmospheric gases such as oxygen and carbon dioxide pass through.

This typically results in an atmosphere including 3 to 5 percent oxygen and carbon dioxide each, which minimizes the rate at which apples "breathe" in oxygen and "exhale" carbon dioxide continuously.

"My dream is to deliver New York-grown apples in mint condition to downtown Tokyo where fresh apples fetch premium prices."

— Syed S.H. Rizvi

"Each package simulates a miniature controlled-atmosphere storage system," said the inventor, Syed S.H. Rizvi, an associate professor of food science in the College of Agriculture and Life Sciences. The amount of atmosphere to be adjusted inside the package is designed to be so small that Rizvi calls the system "modified micro-atmosphere packaging."

Although simple bags made of the specially formulated plastic film also work, the fruit inside such a bag could be bruised easily during handling, and "the plastic trays are sturdy enough to be stacked up on top of one another in cold storage rooms without causing bruises to the fruit," he explained.

The concept of using modified atmospheres to extend the shelf life of fruit and vegetables is not new. In fact, apples are routinely left for more than six months in large storage rooms filled with a mechanically controlled atmosphere. The technology for this process — known as "con-



Jill Peltzman

Food scientist Syed S.H. Rizvi displays his modified micro-atmosphere package containing a dozen apples. The package, made of a specially designed plastic tray and film, works as a mini-storage system by adjusting the atmosphere within the package.

trolled atmosphere storage," or CA storage for short — was made practical by Cornell scientists in the 1940s. All fresh apples available to consumers this time of year come out of CA storage facilities.

Cornell researchers are the first to demonstrate that the concept works effectively on a small scale in handy retail-size micro-atmosphere packages, said Rizvi, who is planning to apply for a patent on the system.

In Cornell experiments, Crispin apples were kept successfully for as long as eight months in such packages

stored in general cold rooms.

According to Rizvi, the micro-atmosphere system has several potential attributes over the CA storage system, including these:

- Once air-tight CA storage rooms are opened, apples start losing their eating quality rapidly, whereas a micro-atmosphere package does not have to be opened until the consumer is ready to take out an apple. "All retailers have to do is keep those apples in refrigerated sections or in general cold storage rooms," he said. "Steady low temperatures ranging from 32 to 38 degrees Fahrenheit must be maintained in cold rooms to hold the fruit in top condition."

- Apples cannot be kept in CA storage facilities with other commodities because their storage requirements differ. But apples kept in micro-atmosphere packages can be stored in refrigerated rooms with other commodities.

- CA storage requires mechanical equipment to maintain controlled atmospheres, including while the apples are being shipped overseas, "but our system does not require such equipment," Rizvi noted. "Our system takes advantage of what Mother Nature does."

Despite these advantages, Rizvi does not think that his method will entirely replace the CA system. The new system, however, offers growers, wholesalers and shippers a low-cost, convenient storage technology that can be used as an adjunct to the CA storage system.

Although economic analyses of the micro-atmosphere packaging system are yet to be made, Rizvi said that the Cornell system should not cost more than the CA system, and might cost less.

"The cost of the plastic trays and film used as packaging materials can be reduced by using cardboard trays impregnated with plastic, and thus the total packaging cost should amount to no more than a penny or so an apple," Rizvi added.

Based on the success of experiments conducted over the past several years by Rizvi's research team which included several students and research associates, the Cornell scientist believes that extending the shelf-life of other fruits and vegetables is a distinct possibility.

"For example, it would be fantastic to have fresh corn on the cob during the Thanksgiving holiday and beyond," Rizvi said.

"We have talked to NASA people about our system, and they are interested in using the system to provide fresh fruit and vegetables to astronauts during long space flights," he added.

"My dream is to deliver New York-grown apples in mint condition to downtown Tokyo where fresh apples fetch premium prices," he said.

—Yong H. Kim

Two alumni win 1988 MacArthur 'Genius Awards'

Two Cornell graduates, novelist Thomas Pynchon and physicist Helen T. Edwards, are among 31 recipients of 1988 MacArthur Fellowships, known as the "genius awards."

Pynchon, a 1959 graduate and author of three novels, was cited for "his power of language and theme, and for his mastery of history, the sciences, politics and art," according to the announcement by the John D. and Catherine T. MacArthur Foundation.

Edwards, the head of the Accelerator Division of the Fermi National Accelerator Laboratory in Batavia, Ill., was cited for her work in design, development, installation and commissioning of Tevatron, "the world's highest-energy superconducting particle accelerator" and the "first successful superconducting proton accelerator."

The MacArthur Fellowships, founded in 1981, provide up to \$375,000 over five years, with no strings attached. Pynchon, 51, will receive \$310,000 and Edwards, 52, will receive \$315,000.

Edwards and Pynchon join nine other Cornell alumni who received MacArthur Fellowships in previous years. Three current faculty members — Archie R. Ammons, the Goldwin Smith Professor of Poetry; Henry Louis Gates Jr., the W.E.B. DuBois Professor of Literature; and physics Professor Mitchell J. Feigenbaum, who is on leave at Rockefeller University — have

won MacArthur prizes.

This year's winners include people in the fields of agriculture, jazz, military history, puppet theater, seismology, entomology, paleontology, feature and documentary film, ecological history, Ethiopian studies, fiction and community development, according to the foundation.

Pynchon is the author of the novels "V" (1963), which he began while a student at Cornell; "The Crying of Lot 49" (1966); and "Gravity's Rainbow" (1973), which won a National Book Award; as well as many short stories.

Pynchon spent his first two years at Cornell studying engineering physics before switching to a major in English because "he was interested in writing," recalled James R. McConkey, the Goldwin Smith Professor of English who became Pynchon's academic adviser.

"Sometimes we get transfer students who haven't done especially well in engineering," McConkey said. "But when he came to my office, he brought along his transcript; there was nothing below an 'A.'"

Pynchon's scientific background is obvious in his writing, which "displays an extraordinary range of interest and control of material," McConkey added. "He masterfully takes scientific principles such as entropy and applies them to the human world through complex characters. He has been

the most influential writer at Cornell during my time here."

Pynchon is known to place a high value on his privacy. "He simply doesn't like publicity," McConkey said. "I don't believe he ever spoke in my class," said English Professor Walter J. Slatoff. "He didn't even like to read aloud his own stories."

But when Slatoff read aloud one of Pynchon's short stories, "Mortality and Mercy in Vienna," the class applauded — "the only time it's happened," Slatoff said. That short story was published in the Spring 1959 issue of *Epoch* magazine, making Pynchon one of a handful of Cornell undergraduates to have work published in the national literary periodical published by the English Department.

"He's remembered here with enormous respect and affection," McConkey said. "He never showed any pride over the pride that we took in him. I'm awfully glad to hear of the award."

Edwards earned a bachelor of arts in 1957, and a master's degree in 1963 and a Ph.D. in 1966, both in physics, and then worked as a research associate during her years at Cornell. She specializes in designing and operating the huge atom smashers used for the high-energy-physics studies of particles and forces within atomic nuclei.

Boyce D. McDaniel, an emeritus professor of physics and Edwards' Ph.D. adviser

at Cornell, recalled her "high level of analytical capability" and "enormous amount of commitment. She is very clever in manipulating the tools of high-energy physics," said McDaniel, past director of the Newman Laboratory of Nuclear Studies.

"There are very few really qualified accelerator physicists and engineers in the world, and Helen Edwards is one of them," he said. Noting that Edwards spent "more years than most" getting her Cornell degrees, McDaniel said "she actually completed two theses, an experimental thesis and a theoretical thesis, trying to understand it."

Edwards studied cosmic rays for her master's degree and the production of the subatomic particles called K-mesons for her Ph.D. Following her graduation, Edwards stayed with the high-energy-physics group at Cornell, where she designed and built elements of the injection system for the 12 GeV (12-billion-electron-volt) synchrotron. "More than anyone else, Edwards was responsible for commissioning that synchrotron in 1967 and '68," McDaniel said.

Edwards joined the Fermilab staff in 1970 and became head of its Accelerator Division in 1987. In 1986, she won the E.O. Lawrence Award of the U.S. Department of Energy for "her leadership in the construction and commissioning of the Tevatron."

— Mark Eyerly and Roger Segelken

Economist recalls role in Japan's reconstruction

Paul M. O'Leary, who helped stabilize Japan's currency 39 years ago, saw his first Japanese automobiles chugging, puffing and smoking along Tokyo's streets in 1949. With fuel supplies exhausted during the nation's World War II devastation, the cars were powered by charcoal burners installed in the rear trunk.

Now 86, O'Leary finally has traded in his own Detroit automobile for a vehicle he never dreamed would exist: a Japanese-made car that performs with the best.

"Forty years ago, none of us could have expected what worked out in Japan," said O'Leary, a professor emeritus of economics.

O'Leary was one of the bankers and economists sent by President Harry S. Truman to occupied Japan to unscramble the foreign exchange and budget mess left over from Japan's 1945 defeat and the destruction of many of its cities and most of its industry.

He served in the mission headed by Detroit banker Joseph M. Dodge that in three months brought an end to Japan's financial chaos, enabling the nation to rebuild its factories and propel its foreign trade into the world's second-largest free economy.

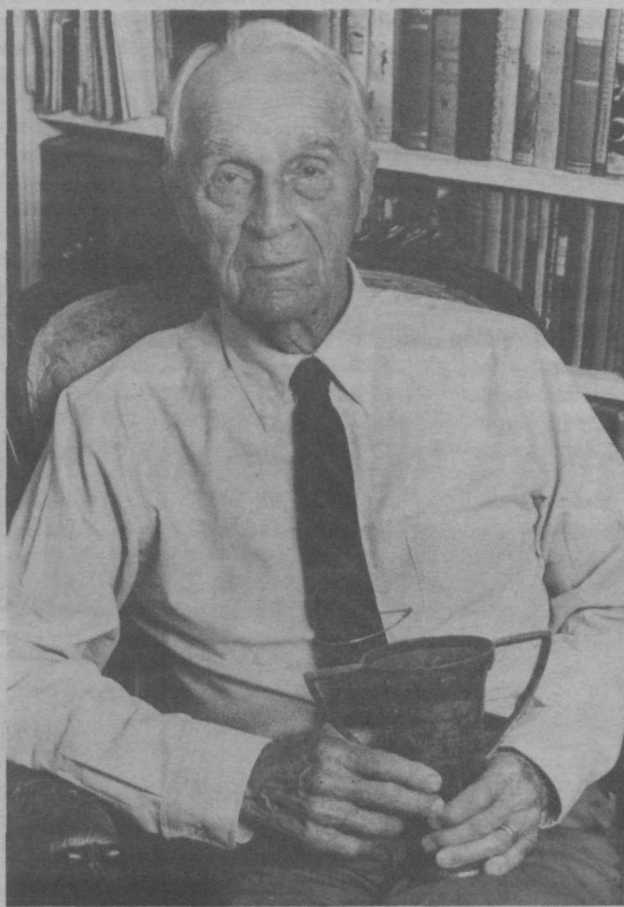
"We put the Japanese economy on an even keel, and now they are running us ragged," O'Leary said in an interview. He offered a prescription for the American economy.

"We need to modify and simplify the income tax with a high personal exemption and no other deductions, and levy more taxes on consumption except for such essentials as food, medicines and shelter so as not to weigh too heavily on the poor," he said. "With credit cards and home equity loans, we've become consumption crazy. We are over balanced on consumption and under balanced on savings."

When O'Leary arrived in Tokyo with the Dodge mission, "You could see the destruction from our bombers everywhere," he recalled.

"The Japanese nation was using multiple yen-dollar exchange rates in an attempt to stimulate trade and become competitive overseas," he said. "They wanted to import coking coal, iron ore, steel scrap and cotton, so Japan's banking system under government control sold dollars to Japanese importers at a low rate, say 40 yen for one U.S. dollar. To export ships, textiles and finished steel products, Japan would pay its manufacturers a lot of yen for dollars received in overseas sales, say 600 yen for one dollar."

This was no way to do business, the American economists believed. The Dodge mission studied consumer, agri-



Paul M. O'Leary

Claude Levett

cultural, industrial and import prices and then computed averages to come up with a fixed exchange rate of 360 yen to one U.S. dollar. That rate remained constant from the late 1940s into the early 1970s, the period during which Japan rebuilt its industries and launched its invasion of world markets.

"Except for water power and timber, Japan is dependent on imports for its energy and raw materials," O'Leary said. "We had to establish foreign exchange rates so they could

buy iron ore, cotton and coal and get their workshop economy growing and become self-supporting and not dependent on relief from the United States.

"We expected Japan to develop in textiles, steel and shipbuilding, but we never dreamed that they would become world leaders in automobiles and electronics. They did have good optics, largely supplied to them by Germany during the war. Well, they developed cameras and took that business away from Germany, and they took watches away from Switzerland. I never dreamed that would happen."

O'Leary lives in the same apartment that he has had for 44 years, about a 20-minute walk from the campus. He joined the Cornell faculty in 1924 and retired in 1967.

O'Leary served as dean of the College of Arts and Sciences from 1952 to 1957 after six years as the first dean of the university's Graduate School of Business and Public Administration. During 1942 and 1943, he was in Washington as deputy administrator of the Office of Price Administration, administering wartime rationing.

Two silver cups, now tarnished black, that commemorate the professor's days as an athlete stand on one of several bookcases in his living room.

One cup was won at Oxford Boys School in 1911 for a 100-yard dash among boys under 10. Another cup, dated April 22, 1922, marks the quarter-mile record he established at the University of Kansas: 50 seconds, slow by today's standards, but in his day they ran on cinder tracks without marked lanes. In addition to teaching, O'Leary, a Phi Beta Kappa and 440-yard-dash champion in the Missouri Valley Conference in 1921, was an assistant Cornell track coach from 1925 to 1931.

O'Leary's never returned to Japan since stabilizing its currency, but his memories remain strong. He recalled Gen. Douglas A. MacArthur, commander of the Allied occupation forces.

"Immediately after arriving in Tokyo, we were taken to see MacArthur," O'Leary said. "He was relaxed, friendly, and he chatted with us in an informal way. Then he lit his corn cob pipe and turned towards a window, displaying for us his famous profile."

"His voice dropped a few tone levels, and in a dramatic voice he told us about his island-hopping campaigns through the Pacific. Then he said that on Aug. 15 'seven million Japanese surrendered to me.' Not to the Allied forces, but 'to me.' He was a man with two personalities."

— Albert E. Kaff

Yan continued from page 1

was a freshman in Fudan University in Shanghai, where she majored in Chinese language and literature. She earned her bachelor's degree at Fudan and, for one year, was an assistant professor of Chinese literature there before coming to Cornell.

"In reading the history of my country, I came to understand that events that happened in the Cultural Revolution could be related to events that occurred centuries earlier," Yan said.

History so gripped her that she wrote "Li Shimin, Prince Qin of Tang," a 10-act drama that focuses on the Tang Dynasty.

The play was staged by the Shanghai Youth Theatre Company in 1981 and ran for 90 performances. Later, it was produced as a TV serial on China's Central Television, and it won the 1981-1982 first

prize for excellence in drama from the Society of Chinese Dramatists and China's Ministry of Culture.

This summer, her play opened to the more Europeanized audiences of Hong Kong, the Chinese territory ruled by Britain since the 19th century as one of the world's freest and most capitalistic societies.

"The performance in Hong Kong is very important to me, because it is the first time that my work has been seen outside China," Yan said. "Today China is becoming a part of the world. Its closed-door policy will never return, and I hope to use my points of view to write and contribute constructive criticism of the world situation."

Cornell's Office of International Students and Scholars and the university's East Asia Program provided the funds that en-

abled Yan to fly to Hong Kong in June for the opening performance of her play by the Hong Kong Theatre Company.

Yan started her Cornell graduate studies four years ago, shifting from Chinese literature to Western drama. She earned her master's degree in the history and theory of dramatic literature last year, and now is researching and writing her doctoral thesis on Irish poet and playwright Samuel Beckett.

"My interests are in the relation of comparative literary studies to the social history of ideas, particularly 19th and 20th century Chinese literature in which contact with the West became a major issue, not to say a crisis, in Chinese culture," she said.

Yan's play tells how Li Shimin, a popular military general and the second son of the Tang Dynasty's first emperor, used his

intimate knowledge of the Chinese people to defeat a palace coup in 626 A.D. and become emperor in place of his elder brother, the legal heir to China's throne.

"The soldiers Li commanded were peasants, and from them he gained an understanding of how previous dynasties went to pieces because their emperors were out of touch with the common people," Yan said.

"In a famous quotation, Li compared people with water: 'Water can make a boat float or swallow it.' In his political ideas, Li understood the relations between the emperor and the people. Li encouraged officials under him to speak openly without fear of retaliation, and he avoided the nepotism which had caused so many upheavals throughout Chinese history."

— Albert E. Kaff

Fund for Educational Initiatives broadens its focus

The President's Fund for Educational Initiatives, which has supported 69 faculty proposals for enhancing undergraduate education, will shift gears this fall. In an effort to foster programs of wide scope, it no longer will consider proposals from individual faculty members.

In a letter to all faculty, President Frank H.T. Rhodes hailed the achievements of the first three semesters of funding and then said that proposals for the next two semesters should focus on "programs sponsored by colleges, programs and centers, rather than by individual faculty members."

Through a gift from anonymous donors, the president was authorized to distribute \$1 million a year for five years to promote

the university priority of improving quality and vitality in undergraduate education.

Since the spring term of 1987, the fund has supported the development of 21 new courses and the redesign of eight, nine proposals to purchase and improve instructional facilities and equipment, seven to improve the training of graduate teaching assistants, six for software development, four to aid advising, and 14 to support speakers and programs in fields as diverse as writing for engineers, ethnic studies, library improvements and jazz.

"The impact of this funding upon the scope and quality of undergraduate education has already been significant," Rhodes told the faculty, noting newly developed

courses on evolution, design fundamentals for non-majors and Third World literature, and introductions to China and to the study of medicine. Fund-generated courses also include Islamic-Judaic relations, Korean literature, and color, light and art.

But Rhodes said in his letter to the faculty that, as "good as these programs have been," he decided to invite proposals of such scope as to affect "approaches to undergraduate learning" rather than individual courses or projects.

He invited deans and directors to consult widely with faculty, giving "serious consideration to courses that serve to bridge the gaps between colleges." He asked that proposals be submitted by Sept. 14 to Vice

President Larry I. Palmer.

While the fund supported an average of 23 proposals during the first three rounds, Palmer said he expects far fewer proposals now. And, whereas maximum funding for any proposal was formerly \$75,000, he said there are no limits or guidelines under the new arrangements.

"Our total outlay will remain at \$500,000, but we are deliberately leaving open the shape and size of proposals we'll consider," Palmer said. "Our main interest is ideas that will help us cross the barriers of departments and colleges in order to affect a larger segment of undergraduate education."

— Sam Segal

Astronomers reproduce alien worlds under glass

From the complex brown organic haze of Titan to the fluffy methane-ice frosts that may cover the moons of Uranus, bits of alien worlds are simulated in Cornell's Laboratory for Planetary Studies.

Director Carl Sagan and associates Reid Thompson and Bishun Khare use small cylinders of simple gases, intricate mazes of glassware, liquid nitrogen, dry ice and high-voltage coils to reproduce the climates, geology and atmospheres of the dim, frigid worlds of the outer solar system.

In a trio of papers in last December's *Journal of Geophysical Research*, they detailed their simulation of three aspects of the outer planets:

- They showed how the high-energy electrons of the aurora of Uranus produce a rich mixture of hydrocarbon gases in that planet's atmosphere.

- They created a reddish organic haze that could exist in the stratospheres of Uranus and Neptune.

- They demonstrated how the brownish color of comets and some regions on the outer planets and their moons could be caused by the darkening of a methane-ice frost as it was irradiated with charged particles from the sun, cosmic rays and the planets' magnetic fields.

The simulation of the atmosphere of Uranus represented an important step in mimicking alien atmospheres, said Sagan, who is the David Duncan Professor of Astronomy and Space Sciences.

"The apparatus developed by Thompson, Khare and their co-workers represents a major improvement in our ability to analyze gases that might occur in planetary atmospheres. Before they developed the continuous-flow system, we did experiments in closed vessels, and there was the danger that we were 'overcooking' the experiment," he said.

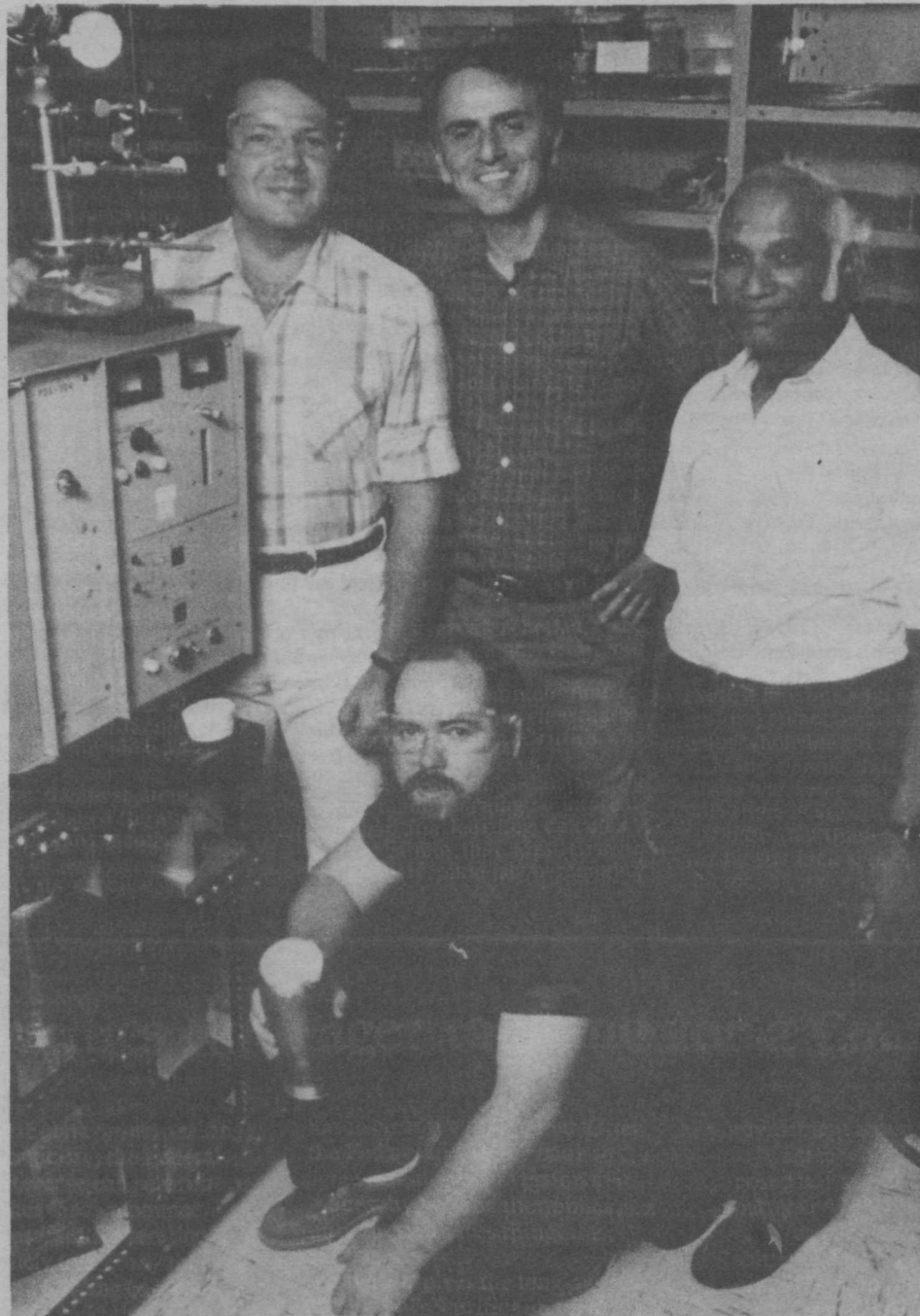
In the laboratory, molecules of simple gases, at low pressures characteristic of the stratospheres of the outer planets, are zapped and broken down by a "plasma" of electrons, like those that occur in the Uranian aurora.

Like the earth's magnetic field, those of the outer planets capture and accelerate such electrons and other charged particles, creating aurorae that are cascades of these particles streaming in from space. When the Voyager 2 spacecraft flew by Uranus in 1986, it detected just such aurorae.

Thompson, Khare, Sagan and their colleagues used a methane-hydrogen-helium mixture to simulate the planet's atmosphere.

When they irradiated the gases, activated methane and hydrogen molecules combined to form dozens of organic compounds.

After several days, these rare compounds condensed in a series of cold traps,



Claude Levett

Scientists working together to simulate the conditions of the outer planets are, from left, Reid Thompson, Carl Sagan, Bishun Khare and Kelly Brower (front).

and the scientists analyzed them using gas chromatography/mass spectrometry, or GC/MS.

"Since there are thousands of possible molecules that could result from this simulation, despite our technique's sensitivity, we're sure there are many we've just not detected," Thompson said.

Still, the five dozen or so compounds the scientists detected represent more data they

can use to build theories about the atmosphere of Uranus. The nature and abundance of these laboratory-spawned compounds will fit into models of the temperatures, atmospheric structure, clouds and even the "rain" of hydrocarbons down into the Uranian interior.

The palette of colors that give the outer planets their subtle hues is another mystery the scientists are probing.

Ground-based telescopes and the Voyager images had indicated that the upper atmosphere of Uranus is tinted by a reddish "smog."

The question was whether such a color could be produced by high-energy electrons from the Uranian magnetic fields irradiating methane in the atmosphere.

In the laboratory, Khare and Edward Arakawa and Paul Votaw of Oak Ridge National Laboratory exposed various mixtures of methane, hydrogen and helium to plasma electrons for periods up to a week. On glass slides in the reaction chamber, they collected the yellow-to-deep-brown-red organic films that resulted from the chemical reactions.

The films were tested to determine how they transmit and reflect light, and the result was a close agreement with the so-called "optical constants" of aerosols on Uranus,

as determined from NASA's Voyager 2 space probe in January 1986.

This mysterious reddish Uranian gunk — which the scientists call "Uranus tholins" — was not the first synthesized by the group. Sagan and Khare first coined the term in two 1979 papers on organic solids in interstellar space and in the atmosphere of Jupiter. Tholins is their word for the solid organic material produced from irradiation of gases or ices containing methane or other simple carbon compounds.

The planetary studies experiments on methane-nitrogen atmospheres proved successful, because the optical properties of the laboratory-made "Titan tholins" matched closely those revealed by the Voyager 1 and 2 spacecraft when they flew past Titan, the largest of Saturn's moons.

Still, the Titan tholins and those from Uranus hold great mysteries.

"The composition of such tholins is complex, heterogenous and largely unknown, just as the precise composition of coal is still unknown," said Sagan, adding that tholins could be plentiful on Titan.

"There may be a layer hundreds of meters thick, laid down as submarine deposits on the floor of a hydrocarbon ocean," Sagan continued.

The prospect of exotic scientific riches has led Sagan and other scientists to advocate the Cassini Mission to Titan, which would feature an entry probe to collect data on the Titanian atmosphere and clouds while it descends by parachute. In follow-on missions, other probes could be launched to examine the surface.

The hue of a planet, moon or comet can indicate more than its chemistry, the Cornell scientists have found: it also can hint at the existence of the icy equivalents of geological upheaval, erosion or atmospheric haze.

One important source of color in such bodies in the cold reaches of Saturn and beyond is a water-methane compound called clathrate. The material consists of molecules of methane or other organic molecules imprisoned within the lattice of ice crystals, and in its pristine state it is pure white.

But when clathrates on the surface of a planet, moon or comet are bombarded by the high-energy electrons and atoms of the solar wind or the planet's magnetic fields or cosmic rays, they darken to a yellowish-to-brownish material.

Using experimental strategies developed by Khare and his co-workers, the group confirmed this darkening when, in the laboratory, they bombarded small patches of methane-water frost with energetic electrons, producing the ice-imprisoned tholins that might color the surfaces of the frozen planets, moons and comets.

They discovered, however, that these frosts lost color and darkened further when bombarded for too long a time — the planetary equivalent of a few thousand years.

"This means that, for such relatively bright bodies as Pluto and Neptune's moon, Triton, there must be some dynamic process maintaining that color by exposing fresh ice. It may be atmospheric motion, erosion or geological upwelling," Thompson said.

To Sagan, understanding the strange processes that build and erode the surfaces of these frozen bodies means full-scale laboratory studies of the chemistry of such substances as clathrates.

"What we're hoping to do is to explore the vast range of ices, irradiation sources and times. So far, we've barely touched the problem," he said.

— Dennis Meredith

WSKG to air Sagan's Olin Lecture

Public radio station WSKG will broadcast an edited recording of the Spencer T. and Ann W. Olin Lecture by Carl Sagan, the David Duncan Professor of Astronomy and Space Sciences, today at 1 p.m. The talk, in which Sagan outlined goals for a more benign 21st century, was delivered in Bailey Hall on June 10 as part of the Reunion Weekend program.

Sagan also took part July 8 in a British television discussion on the origins of the earth, the goal of exploring Mars and other cosmic issues. Also participating were Professor Stephen Hawking of Cambridge University, author of the best-selling "A Brief History of Time: From the Big Bang to Black Holes," and Arthur C. Clarke, the prolific science fiction writer.

Cornell's satellite uplink made it possible for Sagan to participate from the campus studios and to see and be seen by the other participants who were in Birmingham, England. The program, edited to one hour, will be offered to public television in the United States after it is seen in Britain.

CALENDAR

All items for the calendar should be submitted (typewritten, double spaced) by campus mail, U.S. mail or in person to Chronicle Calendar, Cornell News Service, Village Green, 840 Hanshaw Road, Ithaca, NY 14850.

Notices should be sent to arrive 10 days prior to publication and should include the name and telephone number of a person who can be called if there are questions.

Notices should also include the sub-heading of the calendar in which the item should appear.

DANCE

Cornell Folkdancers

The Cornell community and the general public and beginners are welcome to join in folkdancing. Admission is free, unless stated otherwise.

Instruction and request dancing, July 24 and July 31, 7-9:30 p.m., Memorial Room, Willard Straight Hall.

Summer Session

"An Evening with the Ithaca Ballet" will be presented July 28 and 29, 8:15 p.m., Barnes Hall auditorium.

EXHIBITS

Johnson Art Museum

The Herbert F. Johnson Museum of Art, on the corner of University and Central avenues, is open Tuesday through Sunday from 10 a.m. to 5 p.m. Admission is free. Call 255-6464 for further information.

"Knots and Nets," featuring more than 70 works that trace the use of knots and nets from functional and ceremonial objects of the 18th, 19th and 20th centuries to contemporary art objects of unexpected form and scale, through Sept. 25. Works by well-known crafts artists Joanne Segal Brandford, Tim Harding, Diane Iiter, Rebecca Medel, John McQueen and Jane Sauer will be on display.

"Articipation-on-the-Commons" with members of the museum's education department demonstrating and teaching various netting techniques, July 21-23, 10 a.m. to 5 p.m.

Joanne Segal Brandford, one of the featured artists in the "Knots and Nets" exhibition will give a gallery talk and demonstration on July 31, 2 p.m., at the museum. The event is free to museum members; a fee of \$2.50 will be charged to non-members.

Olin Library

"Alexander Pope Tercentenary," early editions and portraits celebrating the 300th anniversary of the celebrated English poet, will be on view through July 30, Monday-Friday, 8 a.m. to noon and 1 p.m. to 5 p.m.

FILMS

Unless otherwise noted, films are sponsored by Cornell Cinema. An (*) indicates that admission is charged.

Thursday, 7/21

"Elena Et Les Hommes" (1956), directed by Jean Renoir, with Ingrid Bergman, Mel Ferrer and Jean Marais, 8:30 p.m., Uris.*

Friday, 7/22

"Betty Blue" (1986), directed by J. Beineix, with Beatrice Dalle and J. Anglade, 7 p.m., Uris.*

"Radio Days" (1987), directed by Woody Allen, with Danny Aiello, Jeff Daniels and Mia Farrow and Seth Green, 9 p.m., Anabel Taylor.*

"Blade Runner" (1982), directed by Ridley Scott, with Harrison Ford, Rutger Hauer and Sean Young, 9:45 p.m., Uris.*

Saturday, 7/23

"Betty Blue," 9:45 p.m., Uris.*

"Radio Days," 9 p.m., Anabel Taylor.*

"Blade Runner," 7 p.m., Uris.*

Sunday, 7/24

"True Heart Suzie" (1919) with musical accompaniment by David Borden, directed by D.W. Griffith, with Lillian Gish, Robert Harron and Clarine Seymour, shown with "Musketeers of Pig Alley," directed by D.W. Griffith, co-sponsored by Summer Sessions, 8:30 p.m., Uris.*

Monday, 7/25

"North by Northwest" (1959), directed by Alfred Hitchcock, with Cary Grant, Eva Marie Saint and James Mason, 8:30 p.m., Uris.*

Tuesday, 7/26

"Pierrot Le Fou" (1965), directed by Jean-Luc Godard, with Jean Paul Belmondo and Anna Karina, 8:30 p.m., Uris.*

Wednesday, 7/27

"The Great Gatsby" (1974), directed by Jack Clayton, with Robert Redford, Mia Farrow and Bruce Dern, 8:30 p.m., Uris.*

Thursday, 7/28

"Kagemusha" (1980), directed by Akira Kurosawa, with Tatsuya Nakadal and Tsutomu Yamazaki, 8:30 p.m., Uris.*

Friday, 7/29

"Breathless" (1959), directed by Jean-Luc Godard, with Jean-Paul Belmondo and Jean Seberg, 7:30 p.m., Uris.*

"Silkwood" (1983), directed by Mike Nichols, with Meryl Streep, Kurt Russell and Cher, 9 p.m., Anabel Taylor.

"From Russia With Love" (1964), directed by Terence Young, with Sean Connery, Daniela Bianchi, Lotte Lenya and Robert Shaw, 9:45 p.m., Uris.*

Saturday, 7/30

"Breathless," 7:30 p.m., Uris.*

"Silkwood," 9 p.m., Anabel Taylor.*

"From Russia With Love," 9:45 p.m., Uris.*

Sunday, 7/31

"High Noon" (1952), directed by Fred Zinnemann, with Gary Cooper, Grace Kelly, Lloyd Bridges and Lon Chaney, 8:30 p.m., Uris.*

Monday, 8/1

"Sugar Cane Alley" (1983), directed by Euzhan Palcy, with Garry Cadenat, Darling Legitimous and Douda Seck, 8:30 p.m., Uris.*

Tuesday, 8/2

"The Decline of the American Empire" (1986), directed by Denys Arcand, with Dominique Michel, Dorothee Berryman, Pierre Curzi and Remy Girard, 8:30 p.m., Uris.*

Wednesday, 8/3

"Waltz of the Toreadors" (1962), directed by John Guillermin, with Peter Sellers, Margaret Leighton and Cyril Cusack, 8:30 p.m., Uris.*

Thursday, 8/4

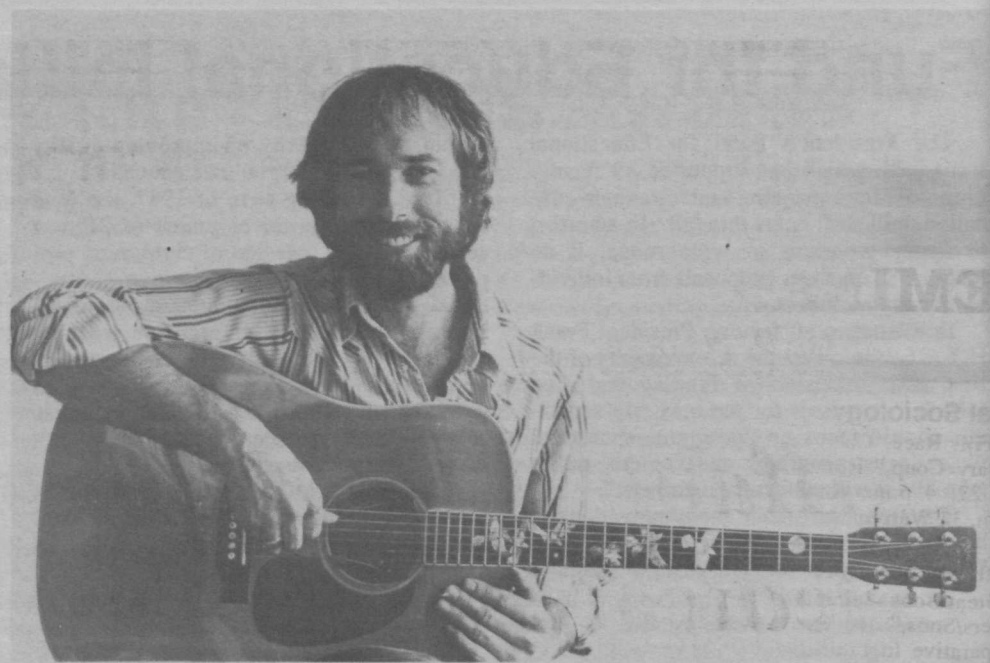
"The Deer Hunter" (1978), directed by Michael Cimino, with Robert DeNiro, John Savage, Meryl Streep and John Cazale, 8:30 p.m., Uris.*

LECTURES

Summer Session

CANCELLED: "Flight Past the Edge of the Earth," Joseph P. Allen, executive vice president, Space Industries, Inc. and former astronaut, July 27, 8:15 p.m., Bailey Hall.

"Flight in the Animal Kingdom," Colin J. Pennycuik, biology, University of Miami, Aug. 3, 8:15 p.m., Bailey Hall.



Geoff Bartley, a singer and songwriter from Cambridge, Mass., will give a concert on July 26 at 7 p.m. on the Arts Quad. Rain location: Kaufmann Auditorium.

MUSIC

Bound for Glory

Geoff Bartley, singer/songwriter from Cambridge, Mass., July 24; Orealis, Montreal-based Celtic trio, July 31. Bound for Glory presents three live sets, at 8:30, 9:30 and 10:30 p.m., Sundays at the Commons Coffeehouse, Anabel Taylor Hall. Admission is free. The show can be heard from 8 to 11 p.m. on WVBR-FM93.

Summer Session

The Ithaca Art Ensemble will present "A Festival of Ithaca Composers: Old and New," including works by Ephraim Reed, William Dillon, Steven Stucky and Trevor Stephenson, July 21, 8:15 p.m., in Barnes Hall auditorium.

The Ithaca Opera Association will present Elizabeth Swados' "Nightclub Cantata," a musical revue of 20 songs featuring poems by Pablo Neruda, Sylvia Plath, Frank O'Hara and Delmore Schwartz, July 22, 8:15 p.m., in Barnes Hall auditorium.



Pianist Jonathan Shames

Jonathan Shames, a lecturer in the department of music and an award-winning performer, will give a piano concert of music by Bach, Beethoven and Moussorsky on July 25, 8:15 p.m., in Barnes Hall auditorium.

Outdoor concerts will be given on the Arts Quad (Kaufmann Auditorium, Goldwin Smith Hall in case of rain) at 7 p.m. on the following days: July 26, Geoff Bartley, singer, songwriter and fingerstyle acoustic guitarist; Aug. 2, Sparky Rucker, folk and blues.

The Malvern Trio, flute, cello and piano concert, with Paul Thompson, Sara Edgerton and William Cowdery, will perform on Aug. 1, 8:15 p.m., Barnes Hall auditorium.

Jazz pianist Oliver Jones will give a concert on Aug. 4, 8:15 p.m., in Barnes Hall auditorium.

Schubertiade

The Ithaca Camerata, with assisting artists from the Ithaca Art Ensemble, will present a

concert of works by Schubert on July 23, 8:15 p.m., in Barnes Hall auditorium. The program will include excerpts from the song cycle "Schwanengesang (Swansong)" performed by bass-baritone Keith Earle, "Der Hirt auf den Felsen" (The Shepherd on the Rock) performed by soprano Marian MacCurdy with clarinetist Sarah Adams, and "Impromptus" op. 90 for solo piano performed by Trevor Stephenson.

RELIGION

Sage Chapel

Robert C. Fay, professor of chemistry, will be the speaker for the July 24 interfaith service, beginning at 11 a.m. in Sage Chapel. Unitarian Universalist Chaplain John A. Taylor will be the speaker for the July 31 service.

Catholic

Mass: Every Saturday, 5 p.m., every Sunday, 10 a.m., Anabel Taylor Auditorium.

Daily Masses will be announced on a weekly basis.

Christian Science

Testimony Meeting: Every Thursday, 7 p.m., the Anabel Taylor Founders Room.

Episcopal (Anglican)

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

Friends (Quakers)

Worship will be at the Hector Meeting House, Perry City Road, at 10:30 a.m. Rides available in Anabel Taylor parking lot at 10 a.m.

Jewish

Conservative/Egalitarian Services: Friday 7:30 p.m., Saturday 10 a.m., Anabel Taylor Founders Room.

Orthodox Shabbat Services: Saturday 9:15 a.m., Anabel Taylor Edwards Room Young Israel, 106 West Ave. Call 272-5810 for time.

Korean Church

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

Muslim

Sunday through Thursday, 1 p.m., 218 Anabel Taylor Hall. Friday 1 p.m. Anabel Taylor Edwards Room.

Protestant

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

Baptist Campus Ministry (SBC): Every Tuesday, 7:30 p.m., Anabel Taylor Chapel.

Zen Buddhism

Zazen meditation: Tuesdays at 7 p.m., Edwards Room, Anabel Taylor Hall. Every Thursday 5:10 p.m., Anabel Taylor Chapel. For more information or to arrange beginner's instruction, call Ian Dobson at 277-4364.

SEMINARS

Rural Sociology

"Fiji: Race, Class and the World's Latest Military Coup," Ron Witton, visiting faculty, July 22, 4 p.m., Robert A. Polson Seminar Room, 32 Warren.

Summer Session

Great Books seminars, "Mothers/Daughters/thers/Sons," led by Jonathan B. Monroe, comparative literature, will be held Tuesdays noon in 110 A.D. White House. Woolf's "To the Lighthouse" will be discussed on July 2, and Kafka's "Letter to His Father," together with Gordimer's "Letter from His Father," on Aug. 2.

"The Flying Prince and the Pomegranate Princess: What Folktales Reveal," Edward Mower, visiting assistant professor of comparative literature, July 21, noon, 213 Ives Hall.

"Flight: News Gathering via Bird and Plane," Irwin M. Chapman, executive director and editor-in-chief, Cornell News Service, July 28, noon, 213 Ives Hall.

"Honey Bee Swarm Orientation," Roger A. Morse, chairman of the department of entomology, Aug. 4, noon, 213 Ives Hall.

THEATER

William Shakespeare's "A Midsummer Night's Dream," will be presented by the Hanar Theatre Company on July 30 and 31 at 8:15 p.m., in Barnes Hall auditorium.



Jon Reis

The Ithaca Art Ensemble will present "A Festival of Ithaca Composers: Old and New," including works by Ephraim Reed, William Dillon, Steven Stucky and Trevor Stephenson, tonight at 8:15 p.m. in Barnes Hall auditorium as part of the Summer Session Performing Arts Series.

MISC

Campus tours

A tour of the Bailey Hortorium Conservatory will be given by the hortorium staff on July 25. The tour will depart at noon from the rear of Miss Minn's Garden on Tower Road.

A tour of the Willard Straight Rock Garden, situated between Willard Straight Hall and Gannett Health Center, will be given by Robert G. Mower, professor of floriculture and ornamental horticulture, on Aug. 1.

A tour of the A.D. White House garden will be given by Professor Robert G. Mower, department of floriculture and ornamental horticulture, on Aug. 1 at noon.

A series of tours of the university's architecture will be given by Maurice S. Luker III, a graduate student in the history of architecture program, on July 25 and Aug. 1. The tours depart at 6:30 p.m. from the statue of Ezra Cornell on the Arts Quad.

Tours of Unis Library presenting its history and architecture will be conducted by staff members on July 25 and Aug. 1 at 4 p.m. All tours begin in the main lobby.

Tours of the Cornell National Supercomputer Facility, designated by the National Science Foundation as one of four National Advanced Scientific Computer Centers, will be given on July 27 and Aug. 3, beginning at noon. Advance sign-up is required. Call Donna Smith at 255-9862 to reserve a place.

Cornell Waste Watchers

Cornell Waste Watchers, a group of staff, students and faculty working for an expanded university-sponsored recycling program and for solid-waste reduction on campus, will meet on July 21 at 4 p.m. in Room 314 of Anabel Taylor Hall. For more information, call Paul Aeschleman at 255-7832.



The Malvern Trio, from left, Paul Thompson, William Cowdery and Sara Edgerton, will give a recital on Aug. 1 at 8:15 p.m. in Barnes Hall auditorium.



Members of the Ithaca Ballet Company, Cindy Reid, Lavinia Reid and E. Van Vleck, in "Vocalise." The company will perform in Barnes Hall July 28 and 29 at 8:15 p.m.



Sparky Rucker will give a concert on Aug. 2 on the Arts Quad.

CORNELL in the News

The New York Times May 26, 1988

College Extends Honor Roll to High-School Teachers

By LEE A. DANIELS

Special to The New York Times

ITHACA, May 25 — Cornell University today did something rare among the nation's colleges: It honored some of the high-school teachers of its top undergraduates.

As a result, Brenda Brunelle, a business teacher from Nanuet (N.Y.) Senior High School, shared the dais at Cornell's Willard Straight Hall with Hillary Brodsky, whom she remembered from her classes as "bright, charming, very special."

Experiences Remembered

And James Barton, a science teacher from Bel Air (Md.) High School, reminisced with Eric Huang, discovering that they both remembered school experiences each thought the other had long forgotten.

William Schiavo, an English teacher from Central Islip (L.I.) High School, marvelled that Cheryl Yancey, one of his former prize pupils, had selected him, even though her field of study at Cornell had been industrial relations.

"It just shows you," he said, "that as a teacher you often never really know the tremendous impact you can have on your students."

Group of 35 Seniors

The occasion for the two days of receptions, seminars, and remembrances that ended today was Cornell's Presidential Scholars award ceremony, held to recognize the high grades and extracurricular achievements of a select group of 35 of the university's 2,800 graduating seniors.

The five-year-old program has always identified those Cornell faculty members the students said most inspired them.

But this year, for the first time, Cornell administrators asked the students to identify their most inspiring high-school teachers as well.

The university, at its expense, in-

The educators are selected as most inspiring.

vited the teachers to the campus as part of weeklong festivities that are to culminate Sunday in its commencement.

Invitation Arrives by Messenger

Twenty-five of the teachers, whose subjects range from physical education to calculus, came to the scenic, hilly campus from as far away as California, Oklahoma, Indiana and Maryland.

"I am just thrilled to be here," said Beverly Griffith, a mathematics teacher from Glendora (Calif.) High School, who had come at the invitation of Randall Verhoef, a chemical-engineering major who next fall will be in graduate school closer to home, at the California Institute of Technology.

Mrs. Griffith, who has taught for 32 years, said with delight that the special invitation from Cornell had been delivered to her classroom by messenger, and news of it, once she informed her principal, had spread quickly among her colleagues, the city school board, and the local news organizations.

"It caused a great reaction," she said. "Everyone thought it was a great honor."

Mr. Verhoef, in a comment that reflected the views of his classmates, said the honor for Mrs. Griffith was long overdue.

"She had so much enthusiasm in class, she made learning so interesting; we had fun learning calculus," he said, recalling that Mrs. Griffith had a decidedly pixie-ish personality

that she used to charm and inspire students.

He said her teaching technique included such innovations as "classroom coupons," which were earned for excellent work. They gave students the privilege of leaving class early or being late to class without penalty or, the ultimate, their favorite candy bar.

At the same time, Mr. Verhoef spoke of Mrs. Griffith's "absolute dedication and discipline" in teaching mathematics. "There was no doubt that you were in her class to learn," he said.

Not surprisingly, that combination of discipline and intellectual rigor along with a concern for the student's personal well-being was a common theme when students spoke of why the teachers were so important to them.

"She's always been a good friend, always been available," said Debora Wood, an art major, of Laurie Kenney Franzese, her humanities teacher from Bishop McGuinness High School in Oklahoma City, whose class she first took as a high-school freshman.

NEWSDAY
May 29, 1988

Commending Teachers at Commencement

Did you have a special teacher when you were a kid, one who saw some particular talent in you and encouraged it — and changed your whole life?

Many people did, and wish later on that there was some way to say "thank you." Usually there isn't.

So Cornell University rates applause for inviting the high school teachers who most influenced its top graduating seniors to

"She emphasized taking the broad view, not just of literature, but of all of American culture," Ms. Wood said, "and I've continued that approach at Cornell."

In recent years a number of colleges, including Georgetown University and Williams College, have begun honoring secondary-school teachers at graduation or other universitywide exercises.

Educators at Cornell and elsewhere said that Cornell's effort apparently is the largest of those in terms of the number of teachers honored at one time.

Frank H. T. Rhodes, Cornell's president, alluded to those considerations in saying today that one purpose of the awards was "to emphasize the continuity of teaching, not just in the conveyance of knowledge, but in the inspiration of students as well."

"Teachers have been getting beat up lately," he continued, referring to numerous reports that public school teachers as a group are held in low esteem by the general public. "We wanted to point out that many are worthy of praise, and say that we value what they're doing and respect what they've done for our students."

commencement week this year, to share the limelight with their former students.

"It just shows you," said one honored guest, "that as a teacher you often never really know the tremendous impact you can have on your students."

Teachers get plenty of criticism these days; Cornell is showing the best of them how much they really count. It's an idea worthy of duplicating at other schools.

Fed Critics Not Eager to Stand for a Count

WHEN it comes to taking criticism, the Federal Reserve can be a rubber house. Stones thrown bounce back, so most faultfinders don't object publicly to the way the Fed handles bank holding company applications.

Take longer than the 91 days Congress gave the Fed to process applications? Withhold approvals for applications until the bank agrees to do it the Fed's way? Sure, bankers whisper, just don't overexamine my bank or get too meticulous about my reserves.

But Cornell University Law School professor Alfred C. Aman Jr. dared to be different last week, and the Fed's long-time general counsel, Michael C. Bradfield, was there to defend the central bank.

The scene was the 36th plenary session of the Administrative Conference, a 24-year-old federal agency that suggests ways for regulatory agencies to improve administrative procedures.

The conference made two recommendations: 1) the Fed should extend its 91-day deadline for action on applications only when it gets significant new information; and 2) the Fed should publicize any promises it secured from a bank prior to approving an application.

When a bank holding company wants approval to establish a subsidiary or offer a new product, it

has to clear it with the Fed. Often the Fed's staff gets the bank to agree to a modified version of its request by holding the application until the bank sees things the staff's way.

An example is the long-awaited promise of securities underwriting powers that several banks wrung out of the Fed in April 1987. The banks agreed, among other things, not to grab more than 5% market share of any of the newly authorized securities.

"During the negotiation phase of these proceedings, each of the bank holding companies had 'voluntarily' consented to market-

An Insider's Guide
To Capital Issues



share limitations while protesting that they were not legally required or economically constructive," Mr. Aman notes

in a study of the Fed he did for the Administrative Conference.

Mr. Aman recounts a hearing on the matter. Vice Chairman Manuel Johnson had asked a banker why he accepted the market-share cap. The banker had replied: "We did that reluctantly because we think the market-share test has very little to do with" whether banks can legally enter the world of

investment banking.

"I agree with that, but you proposed it. I'm just asking," a perplexed Mr. Johnson responded.

"We proposed it, yes, but with some reluctance," the banker admitted. Mr. Johnson asked why the banker proposed the limitation if he opposed it. "To expedite the applications," came the reply.

Another example of the Fed establishing conditions involved a California acquisition.

The Fed on May 4 qualified the acquisition of Sonoma Valley Bank and Bank of Lake County by Napa Valley Bancorp by getting Napa's pledge to comply with any future Fed regulations on real estate. The Fed allowed the bank to continue some real estate activity, but not as much as California state law allows.

THE Administrative Conference's recommendations, derived from Mr. Aman's study, are designed to strengthen the 91-day rule and thus limit the Fed staff's ability to procrastinate until a bank capitulates to various conditions.

However, the conference backed off Mr. Aman's strongest recommendation — that the Fed be forced to enumerate any conditions it places on application approvals so that the bank could appeal the decision.

Peter L. Strauss, a conference member who is a professor at Co-

BANKING WEEK
June 13, 1988

lumbia University's law school, proposed an amendment to incorporate this suggestion.

Mr. Bradfield objected. Warren Belmar, a lawyer with Fulbright & Jaworski, argued against the amendment. "The committee was persuaded by the eloquent Mr. Bradfield," he said. "The committee was sensitive not in any way to hamper the flexibility of the Fed."

When a voice vote on the Strauss amendment was called, the ayes drowned out the nays. The conference chairman ruled that the amendment had passed. Someone requested a recount by a show of hands, and when all the arms had been raised, the amendment was defeated.

It's easier to stand up to the Fed when you're not being counted.

After the vote, Mr. Aman and Mr. Bradfield squared off in the hallway.

After the Fed counsel told this reporter that the conference just patted the Fed on the back, Mr. Aman requested Mr. Bradfield's opinion of his study. It's no good, Mr. Bradfield replied, launching into a lengthy defense of the Fed's procedures.

"A good lawyer never overstates his case," Mr. Aman observed.

"A good professor would have a decent report," Mr. Bradfield shot back.

— Barbara A. Rehm

Job Opportunities

July 21, 1988
Number 26
Office of Human Resources
Cornell University
160 Day Hall
Ithaca, New York 14853-2801

In compliance with the Immigration Reform and Control Act of 1986, Cornell University is now required to check the identity and employment eligibility of all new hires.

Effective June 1, 1987, if you accept a position, you must show documents on or before your first day of work, that indicate your identity and employment eligibility; for example, a state issued driver's license and a birth certificate. For more information, contact Staffing Services, 255-5226.

-DURING THE SUMMER, JOB OPPORTUNITIES WILL BE PRINTED SEPARATELY ON JULY 28, AUGUST 11 & 18. THE CORNELL CHRONICLE RESUMES ITS WEEKLY SCHEDULE AUGUST 25.

-Interviews are conducted by appointment only.

-Send cover letters & resumes to Staffing Services, 160 Day Hall, Cornell University, Ithaca, NY 14853.

-Employment & employee transfer application forms are available at both Staffing Services locations-160 Day Hall & East Hill Plaza.

-Requests for referral &/or cover letters are not accepted unless specified in the ad.

-Cornell University is an Affirmative Action/Equal Opportunity Employer.

-This listing is also available on CUINFO. Terminals are situated in main lobbies of Day Hall & Gannett Clinic, & the Olin, Mann & ILR Libraries.

-DEPTs.-Deadline for submission is noon on Thursday for following week's Job Opportunities.

-Minimum salaries listed are for recruitment purposes only.

-S=Statutory; E=Endowed

Administrative and Professional

FINANCIAL ANALYST II (PA2705) Asst. Treasurer-E

Provide analytical support in capital budgeting, investment analysis & project financing.

Req.: MBA pref. or BS w/5 yrs. financial analysis in business or univ. environ. Exp. w/spreadsheet programs (e.g. Excel or Lotus) req. Strong analytical & exc. comm. skills nec. Prior exp. making investment decisions & project development (analysis, design/implementation/maintenance) pref. Letter & resume to Cynthia Smithbower by 8/5.

RESEARCH SPECIALIST III (PT2705) Vet. Microbiology, Baker Inst.-S

Provide cell & particle separation & analysis svc. for faculty; maintain lab. equip.; schedule facility users; train fac./students in comp. use.

Req.: BS in electronics, elec. engr., comm. sci. or equiv. 1 yr. exp. in electronics maint. or w/laser & computer based instruments. Knowl. of electronics repair, instrument operation & maint., & basic computer prgrmg. Bkgrnd. in bio. & familiar w/optics desir. Letter & resume to Judi Baker.

RETAIL MGR. II (PA2704) Lab of Ornithology-E

Manage, oversee, coord. all aspects of Crow's Nest Bookshop. Maximize operation growth & profitability. Assist in marketing Lab programs.

Req.: BS in mktg., busn. mgmt. or equiv. exp. Proven ability to handle merchandising & catalogue operation. Catalogue & retail sales exp., plus advertising bkgnd. nec. Prior exp. in overall enterprise mgmt. useful. Letter & resume to Cynthia Smithbower by 8/5.

RESEARCH SUPPORT SPECIALIST II (PC2717) NYSSILR Catherwood Library -Rochester, Utica-S

Work w/Dir., LMDC & local advisory comm.; survey labor unions in Rochester or Utica/Rome area willing to cooperate w/VanArsdale Labor History Project. Visit union, survey materials & gather info. Prepare draft historical essays, complete survey forms. Advise staff, manage files & preserve records.

Req.: Min. BA in ILR. Adv. degree w/labor history concentration pref. or equiv. exp. Archival exp. &/or course work, knowl. of AMC format highly desir. Willing to relocate to survey area. Letter, resume to Michele Draiss, 235 Olin Hall.

PUBLIC AFFAIRS ASST. (PA2706) Law School Development & Public Affairs-E

Reporting to Asst. Dean, plan, develop, & implement programs related to increasing Law School support. Work closely w/alumni, friends, faculty, students, staff in capital fund raising & annual giving programs.

Req.: BS or equiv. Exp. in event/mtg. planning desir. Exc. comm., interper., org. skills; knowl. of computing data-based info. systems. Letter & resume to Cynthia Smithbower by 7/28.

ADMIN. SUPERVISOR I (PC2712) Copy Centers-E

Coord. daily operations of 5 quick Copy Ctrs., 1 Mailing Ctr. & spvs. employees.

Req.: AS in graphic arts or BS in busn. Valid motor vehicle operator's lic. Min. 2 yrs. supv. exp. of 3+ employees. Exc. org. & interper. skills. Some microcomputer exp. helpful. Letter & resume to Esther Smith by 7/29.

ASST. TO THE DIR. (PC2709) Career Center-E

Provide overall admin. support to Dir. Compose & edit coord. & reports; serve as psnl. ofcr., handle p/r; oversee off. facil. & major equip. purchases; supv. receipt. & stud. assts.; coord. admin. projects; interact w/employers, staff & alumni.

Req.: BA or equiv. Min. 3 yrs. exp. in admin. support position. Exc. org. & interper. skills; superior writing skills (sample req.). Familiar w/WP pref. Project-oriented. Letter, resume, 1 writing sample to Esther Smith by 7/29.

SR. TECHNICAL CONSULTANT (PT2607) Academic Computing-E

Provide high-level stat. computing support svcs. through teaching, consulting, & evaluating software. Support related research computing appl. incl. stat., graphics & database systems.

Req.: MS or equiv. in stat. or related discipline. 3-5 yrs. rel. exp. Expert in mainframe & micro-computer stats. Letter & resume to Judi Baker by 7/29.

SYSTEMS PROGRAMMER/ANALYST III (PT2605) Dining Services-E

Plan, supv., & coord. development, implementation & maint. of mgmt. info. system(s). Prepare documentation & liaison w/univ. depts., & vendors, & train staff.

Req.: MS or equiv. Considerable exp. Knowl. of BASIC & a second lang. nec. Knowl. of interactive systs., Honeywell, DP6 mini computer & IBM PC Bkgnd. in food svc. industry helpful. Letter & resume to Judi Baker by 7/29.

APPLICATIONS PROGRAMMER II (PT-2613) Integrated Pest Management-S

Design, develop, modify, maintain, & document straight-forward appls. software for IPM Program utilizing micro & mini computer systs. Assist to develop & construct computer-based models, expert systems, & info. retrieval progs. Utilize data-base lang. & other software to develop data entry & report generating appls. for IPM Support Group staff.

Req.: BS in comp. sci. or a 2 yr. degree w/2-3 yrs. equiv. exp. in computer prog. & operations. Good comm., interper., & org. skills. Some knowl. of mainframe/micro/mini computer hardware software systs., peripherals, performance features & characteristics, various software graphics, stat. & database mgmt. programs & pkgs. Letter & resume to Judi Baker by 7/29.

APPLICATIONS PROGRAMMER/ANALYST I (PT1802) Theory Center-E

Develop, maintain & document admin. database systems. Train Theory Center in use of admin. databases. Create special reports as requested.

Req.: BA or equiv. w/related computer courses & exp. 1 yr. exp. w/database design & develop., incl. exp. with VM/CMS. Exp. w/SQL highly desir. Able to work independ. Letter & resume to Judi Baker by 8/5.

ADMIN. ASSOC. (PC2423) Finance & Business Svcs.-S

Resp. for supv. & providing leadership in acctg. & admin. of over 4,000 accts. & \$60M of activity for 4 partially State supported colleges.

Req.: BS pref. in acctg. & busn. admin. Min. 5 yrs. restricted fund acctg. exp.; If holding MBA or CPA, 3 yrs. exp. Able to use IBM-PC & generate spreadsheet analysis; understanding of mainframe computer application req. Letter & resume to Esther Smith.

Clerical

REGULAR EMPLOYEES

Submit employee transfer application, resume & cover letter. Career counseling interviews available by appt. EXTERNAL APPLICANTS Mail employment application & resume to 160 Day Hall. Interviews conducted at Staffing Services, East Hill Plaza by appt. only. Qualified applicants are contacted after materials are reviewed.

RECORDS ASST., GR16 (C2716) Catalog Mgmt. Olin Lib.-E

Input bibliographic & authority records into NOTIS database; search for records in asstd. card catalogs; search database for bibliographic & authority records base; other catalog projects as assigned.

Req.: H.S. dip. or equiv. exp. Detailed work w/skill & accuracy. Prior libr. exp. desir., but not nec. Med. typing; typing test req. Min. Biweekly: \$448.50

SECRETARY, GR18 (C2706) Agronomy-S

Provide sec./admin. support for 6 fac. Type; file; corresp.; travel arrangements; answer phone; backup sec. support for 5 other fac.

Req.: AAS in sec. sci. or equiv. Min. 1 yr. related off. exp. Familiar w/CU helpful. Med. typing. Min. Biweekly: \$487.50

EDITORIAL ASST., GR18 (C2713) CU Press-E

Act as assist. to acquisitions editors. Resp. for acquisition, development & maint. of several scholarly books lists; routine off. duties; type, file, follw up. Ext. phone contact w/authors, readers & other Press depts. 2 yr. appt.

Req.: AAS or equiv. Prior exp. w/book publishing helpful. Hvy. typing. Letter & resume to Esther Smith by 7/29. Min. Biweekly: \$487.50

SECRETARY, GR19 (C2707) Hotel Admin.-E

Provide sec. support for fac. teaching & researching food sci. High level of confidentiality req.

Req.: AAS in sec. sci. or equiv. Min. 1 yr. exp. Able to use WP. Familiar w/culinary, chemical & bio. terms, symbols & abbrev. Hvy. typing. Min. Biweekly: \$510.90

OFFICE ASST., GR19 (C2711) JGSM-E

Provide admin. support to Registrar & Financial Aid Assoc.

Req.: AAS or equiv. Min. 1 yr. exp. Knowl. of computer desir. Exc. org., interper., & comm. skills. Min. Biweekly: \$510.90

ADMIN. AIDE, GR19 (C2614) Academic Computing-E

Provide admin. support for Computing Resources Ctr. Work at Help Desk, Software Lending Libr.; assits patrons; serve as liaison to microcomputer user groups.

Req.: AAS or equiv. Min. 1 yr. exp. w/microcomputers & assoc. software. Exc. comm. skills. Light typing. Min. Biweekly: \$510.90

CIRC./RESERVE SUPV., GR20 (C2715) Public Svcs./Music Library-E

Facilitate access to circ. of books, scores & sound recordings. Supv. stud. assts. & night svcs.; provide reference svc.; assist patrons in using audio equip.; participate in maint. of bibliographic info. Reserve materials as req.; handle overdue, billings for lost materials; in charge libr. in absence of librarians.

Req.: BA in music or equiv. w/emphasis in music history. Libr. exp. desir. Service oriented, able to work effectively w/fac., staff & students. Supv. skills. Reading knowl. of 1 foreign lang., German pref. Light typing. Min. Biweekly: \$534.30

ADMIN. AIDE, GR20 (C2708) Hotel Admin.-E

Provide admin./clerical data support for Alumni Affairs dir. Maintain all off. functions, internal & external comm. during dir.'s absence.

Req.: AAS or equiv. Familiar w/data/WP system. Work well under pressure; possess exc. editing/composition/bookkeeping skills. Exc. org., interper., & comm. (written/oral) skills. Hvy. typing. Min. Biweekly: \$534.30

RESERVATIONS COORDINATOR, GR21 (C2701) Unions & Activities-CAC-E

Resp. for scheduling all extracurricular activities sponsored by depart. 1. & registered stud. org. at CU. (dances, films, lectures, workshops, craft fairs, dramatic performance, concerts, & others). Scheduling incl. advising & counseling clients regarding reservations.

Req.: AAS or equiv. Min. 2 yrs. exp. Knowl. of CU facil., policies & psnl. Able to deal w/diverse constituency. Exc. org., interper., & comm. skills. Familiar w/computers & willingness to learn new applications, esp. Special Reservations Program. Hvy. typing. Min. Biweekly: \$557.70

ADMIN. AIDE, GR21 (C2702) Bldgs. & Properties-Geneva-S

Resp. for efficient operation of the Bldgs. & Properties, Custodial, Fleet, Security depts.' off., incl. operating budgets, scheduling, psnl. processes, p/r, WP & typing.

Req.: AAS in sec. sci. or equiv. Min. 2 yrs. supv. off. exp. Knowl. & use of computer display terminal & printer; electronic memory typewriter; WP; calculator. Exc. org., interper., & comm. skills. Med. typing. Min. Biweekly: \$557.70

ADMIN. AIDE, GR22 (C2710) Career Center-E

Handle all aspects of off. acctg. Assist dir. in developing budget; assist recruitment coord. in preparing & scheduling 500 employers for on-campus recruitment; interact w/undergrad. college career off. on related issues; assist in maint. of newly implemented computer network; interact w/employers & computer svcs.

Req.: AAS or equiv. Exp. in bus. environ. Exc. org. skills & attention to detail; familiar w/PCs. Some knowl. of acct./bookkeeping, pref. w/CU. Med. typing. Min. Biweekly: \$581.10

ACCTS. COORD., GR24 (C2510) Controller's-Endowed Acctg.-E

Acctg. for & prep. of finan. data in accordance w/prescribed guidelines for sponsored grants & contracts; advise & assist CU depts. in finan. admin. of sponsored agreements; establish acctg., monitor expenditures & prep. monthly, quarterly & annual reports.

Req.: AAS in acctg. or equiv. BA desir. Min. 3-5 yrs exp., 2 yrs. CU exp. desir. Knowl. of Lotus 123. Exc. comm (written/oral) skills are essential. Min. Biweekly: \$639.60

General Service

REGULAR EMPLOYEES

Submit employee transfer application to Staffing Services, 160 Day Hall. Interviews conducted by appt. only. EXTERNAL APPLICANTS Mail employment application to Staffing Services, 160 Day Hall. Interviews conducted by appt. only. Qualified applicants are contacted after materials are reviewed.

CASHIER, GR15 (G2702) Dining-E

Transact cash & credit sales; tabulate daily figures & prepare deposits.

Req.: H.S. dip. or equiv. 1-2 yrs. related exp. Basic reading & computation skills. Good interper. & comm. skills req. Min. Biweekly: \$429.00

FOOD SERVICE WORKER, SO01 (G2703, G2704) Dining-E

Set-up, display & serve food &/or beverage. Check Co-op dining cards for validity & make sale transactions by cash or credit card. Shift subject to change.

Req.: H.S. dip. or equiv. Knowl. of food prep. & presentation pref. Good customer relation skills. Basic reading & computation skills req. Min. hourly: \$5.50

CUSTODIAN, SO02 (G2701) Residence Life-E

Provide genl. custodial care of bldgs. & grounds in immediate vicinity of assigned area. Mon.-Thur., 8 hrs./day; Fri., 7 hrs./day.

Req.: H.S. dip. or equiv. Able to operate a variety of heavy power equip., lift 50 lbs. & climb an 8 ft. ladder. Basic reading & writing skills. Daily contact w/students. Min. hourly: \$5.75

CUSTODIAN, SO02 (G2709) Bldg. Care-E

Provide genl. custodial care of bldgs. & grounds in immediate vicinity of assigned area. Mon.-Thur., 6:00 a.m.-2:30 p.m.; Fri. 6:00 a.m.-1:30 p.m.

Req.: H.S. dip. or equiv. Able to operate a variety of heavy power equip., lift 50 lbs. & climb an 8 ft. ladder. Basic reading & writing skills. Min. hourly: \$5.75

HEAD CUSTODIAN, SO04 (G2708) Bldg. Care-E

Participate in, direct, supv. & evaluate work of 7-10 custodians in assigned area (50% cleaning/50% supv.) Provide genl. cust. care of bldgs. & grounds in immediate vicinity of assigned area; ensure timely opening of assigned bldgs.; order & account for in-house supply inventories. Sun.-Wed. 11:00 p.m.-7:30 a.m.; Thur. 11:00 p.m.-6:30 a.m.

Req.: H.S. dip. or equiv. 2 yrs. cust. exp. req., supv. exp. pref. Able to lift 50 lbs. & climb 8 ft. ladder. Min. hourly: \$6.25

DELIVERY DRIVER, SO04 (G2707) Copy Centers-E

Pickup & deliver supplies & pkgs. between & among Copy Ctrs., Mailing Ctr., Announcements, the Post Office, other CU depts. & the Print Shop.

Req.: H.S. dip. or equiv. Familiar w/CU, Exc. interper. skills. Valid NYS driver's lic. Min. Hourly: \$6.25

Technical

REGULAR EMPLOYEES:

Submit employee transfer application, resume & letter. EXTERNAL APPLICANTS: Mail employment application, resume, & list of lab techniques/equip., or computer software/hardware with which you are familiar. Submit letter per position, specify title, dept. & job number. Interviews conducted by appt. only. Qualified applicants are contacted after materials are reviewed. Backgrounds highly desired: biochem., chem., microbiol., elect., physics, lic. animal health tech.

TECHNICAL ASST., GR16 (T2306) Neurobiology & Behavior-S

Routine lab duties: prep. samples for chem. analysis; wash glassware; make media; run errands. Routine maint. & care of lab. colonies of insects incl. moths, butterflies, bugs, cockroaches, ants & other animals such as birds, frogs, etc. Greenhouse duties incl. starting & transplanting plants, watering, etc.

Req.: H.S. dip. or equiv. Apply ASAP. Min. Biweekly: \$448.50

TECHNICIAN, GR18 (T4207) Food Sci.-S

Run analytical tests on dairy products. Test procedures incl. Kjeldahl nitrogen, moisture, salt, fat & other constituents of milk & dairy products. Enter data in computer; prepare analytical reagents & clean glassware.

Req.: BS food sci., chem., biochem., or related area. Exp. w/Kjeldahl analysis, IBM PC, & Lotus 123 desir. Apply by 8/5. Min. Biweekly: \$487.50

TECHNICIAN, GR20 (T2706) Animal Sci.-S

Conduct swine exper.; develop protocols, design set-up & conduct studies w/cannulation, blood sampling, minor surgery (assistance), prep. solutions, summarize & analyze data. Supv. others.

Req.: BS or equiv. in an. sci. w/trng. in swine production & reproductive physiol. Pre-employment physical req. 1 yr. exp. in animal research w/cannulation & blood sampling trng. Apply by 8/5. Min. Biweekly: \$534.30

TECHNICIAN, GR20 (T2415) Vet. Pathology-S

Perform lab techniques & assist in development of assays & experiments to carry out scientific research in field of immunopathology & cellular bio. of autoimmune dermatosis. Maintain lab supplies & equip.

Req.: BS in bio. sci. 2-3 yrs. related exp. Apply asap. Min. Biweekly: \$534.30

LIFE SAFETY SPECIALIST, GR21 (T2701) Life Safety Svcs.-E

Fire extinguisher repair & maint.; maintain & test fire reporting & suppression systems (sprinklers); respond to emergencies; trng. Univ. personnel in safety/fire prevention; duty hrs. may encompass 24 hr. shift coverage, incl. wkdays & wknds.

Req.: AAS or equiv. exp. w/emphasis on bldg. constr. & blueprint reading. 3-5 yrs. related exp. req. Knowl. of NFPA, NYS & fed. codes & standards. Exp. & trng. in fire svc., rescue, fire prevention, & safety. Must possess mechanical abilities. Valid NYS driver's lic. Exc. written/oral comm. skills. First Aid & EMT cert. desir. Apply by 8/5. Min. Biweekly: \$557.70

TECHNICIAN, GR22 (T1401) Vet. Pathology-S

Independ. design & assist in purification & characterization of organ-specific, matrix associated tumor cell adhesion molecules, resp. for organ preference of tumor metastasis. For duration of grant.

Req.: BS req.; MS pref. 1-3 yrs. exp. in lab. affinity & column chromatography, ELISA, gel electrophoresis, protein purification, Western blotting; bkgnd. in hybridoma-monoclonal antibody techniques, HPLC chromatography protein iodination & tissue culture desir. Apply ASAP. Min. Biweekly: \$581.10

Part-Time

PROGRAM COORD. I (PA2606) A&S Deans's Off.; Language House Program-E

Resp. for program development & planning; maintain faculty participation in programs; select students & resident native speakers. Coord. residential aspects of program w/Res. Life Dept. Prep. budget & develop funding strategies. 1/2 time; 10 month position.

Req.: AB. Good admin. & comm. skills nec. Interest in developing effective foreign lang./lecture programs. Fluency in a foreign lang. & familiar w/CU desir. Send letter & resume & 3 letters of recommendation to Cynthia Smithbower by 7/28.

READING LAB MONITOR (PA2703) Learning Skills Center-E

Org. instruction; order & maintain lab materials. Maintain student records, score tests, provide individual assistance to students. Some eve. work.

Req.: BS in reading or related field. 1-3 yrs. exp. working w/college students in learning ctr. related activities; exp. w/study skills development, learning disabled students. Letter & resume to Cynthia Smithbower by 8/5.

ASST. COORDINATOR (PA2701) Learning Skills Center-E

Teach regular & outreach workshops in study skills, develop materials, consult w/students, maintain student records.

Req.: BS in reading or related field, MS pref. Exp. working in a College Learning Ctr.; strong comm. skills; exp. w/learning disabled students. Letter & resume to Cynthia Smithbower by 8/5.

NIGHT SUPV., GR18 (C2714) Public Svcs./Music Library-E

Supv. & assist in circ. procedures. Provide info. & reference assistance to patrons of Music Libr.

Resp. for Lincoln Hall security during eve. & wknd. hrs.; assist w/processing operations. Regular, p-t position.

Req.: BA music w/emphasis in music history. Prior exp. supv. others. Good interper. & org. skills. Reading knowl. of 1 foreign lang. Lt. typing. Min. full-time equiv.: \$487.50

SR. NIGHT SUPV., GR20 (C2409) Uris Library-E

Oversee operation of circ./reserve desks & resp. for bldg. during eve. hrs. Supv. student assts. 5 p.m.-12 midnight. Wkdays & alternating wknds.

Req.: Some college bkgnd. Able to work well w/variety of people in public setting & in supv. capacity. Min. full-time equiv.: \$534.30

SEARCHER, GR18 (C2108) Olin Lib.-E

Search materials for bibliographic info. using both online database & card catalogues. Input records for online database. May req. eve. hrs.

Req.: H.S. dip. or equiv. Addit'l. ed. may be substituted for exp. Prior libr. exp., pref. in tech. svcs. Reading knowl. of 1 or more Slavic lang. Lt. typing. Min. full-time equiv.: \$487.50

EXTENSION SUPPORT AIDE (PA2502) HDFS-S

Coord. Linking Up program activities at Rochester site. Work w/local businesses & industries to recruit adult mentors; orient & train adults, contact w/youths & families, coord. group mtgs. & assist w/research activities. 30 hrs./wk.

Req.: BA, ed., human svcs., human relations or psych. 2 yrs. exp. working w/youth programs, some program admin. pref. Familiar w/Rochester community essential. Letter & resume to Cynthia Smithbower.

GREENHOUSE WORKER (T2419) Agronomy-S

Care for plants & plant materials in greenhouses & growth chambers at Guterma, Muenscher & Emerson Halls. Sat., Sun. 12-15 hrs./wk.

Graduate Bulletin

Fall registration for graduate students will be in Sage Hall Lounge, Aug. 22-26, 8:15 a.m. to 4:15 p.m. Bring student ID card and registration admission form sent by the registrar.

Course enrollment: Students may bring completed and signed course enrollment forms to registration and complete course enrollment during registration. Forms will be available during registration week in campus mailboxes, graduate field office, or Sage Graduate Center. Course enrollment will continue through Sept. 16.

Fellowships for 1989-90: Many fellowships have fall deadlines for completed applications. Consult the Fellowship Notebook and send for application forms now. The Notebook is available in each of the graduate field offices and is also listed on CUINFO. More detailed information is available at the Fellowship and Financial Aid Office, Sage Graduate Center.

Change seen in opinion of Vietnam War as 204 veterans here identify themselves

Two hundred and four Cornell employees have identified themselves as Vietnam Era military veterans in response to a survey conducted in March by Cornell's Office of Equal Opportunity.

"This is by no means the total number of Vietnam Era veterans working at Cornell, but we are encouraged that this many employees came forward to identify themselves," said Mary De Souza, OEO coordinator of minority staff and Vietnam Era veteran services.

The survey was initiated in response to a federal act requiring employers with federal contracts of \$10,000 or more to identify employees who served in the military during the Vietnam Era, defined as Aug. 5, 1964, through May 7, 1975.

De Souza is sending newly identified Vietnam Era veterans material describing services available from her office as responses continue to be received. The veterans' names will be kept confidential, she said.

Many veterans chose not to identify themselves as having served in Vietnam when they applied for employment at Cor-

nell, according to De Souza. She said they were reluctant to step forward either because of the trauma related to their combat experience or because public opinion had conditioned them not to talk about their experience.

"The tide may be slowly turning," said Carl Steckler, a Vietnam Era veteran and teaching support specialist in the Physics Department. Some veterans who resisted identifying themselves a few years ago may feel the public is more understanding now because of movies such as "Platoon" and recent books and television programs about Vietnam, he said.

Steckler and another Cornell employee are planning a "get-together" next fall on campus for Vietnam Era veterans at Cornell. "We'll get to meet each other," he said. "No hidden messages, no forms to fill out. Just a chance to get to know each other better."

Harry De Libero, veterans affairs counselor for Tompkins County, agreed that Vietnam Era veterans seem more willing to identify themselves now than in previous years. Only one Vietnam Era veteran

showed up at a symposium on the Vietnam war held at Ithaca College 10 years ago, he said. By contrast, "there were hundreds" attending a similar symposium at Tompkins-Cortland Community College this past April 29.

De Libero added that Cornell's employment policies, which in his opinion are more liberal than those of other major employers in this area, contributed to the success of the self-identification survey.

"We are very careful to review job applicants' skills and try to find a match with available openings," said Bettie Thompson, manager of staffing services in the Human Resources Department.

Vietnam Era veterans may not have the exact skills required for a job, she said, but their military experience may be "translatable" into skills that meet job specifications.

As part of Cornell's affirmative action effort, Thompson said, her staff tries to make sure supervisors take job applicants' military experiences into account in considering them for openings.

— Joe Leeming

Thermal stress said to cause microchip fractures

Cornell materials scientists have published the first complete theory explaining the process by which ultrathin metal lines connecting components on microchips can fracture.

Their equations predict that the problem, which already plagues manufacturers producing new high-capacity memory chips, will become far worse as designers shrink chip components to fit on new higher-capacity chips and the connecting lines become smaller.

The problem is little discussed in the microelectronics industry because of competition and because manufacturers are unwilling to admit that they have not solved it, the scientists said.

Materials science Professor Che-Yu Li and graduate students Ronald Black and William LaFontaine published their theory in the July 4 issue of *Applied Physics Letters*. It was based on laboratory studies of related phenomena at Cornell, as well as analysis of published data on failure of the metal lines.

According to the scientists, the failure in the narrow lines — which are typically alloys of aluminum and silicon or copper — stems from the large differences in thermal expansion properties between the lines and the silicon base, or substrate, of chips.

When a chip is fabricated at temperatures of about 400 degrees Centigrade and



Materials science Professor Che-Yu Li, center, and graduate students Ronald Black, left, and William LaFontaine.

Claude Levett

allowed to cool, these differences produce stress in the thin lines. Stress causes the nucleation and growth of tiny voids that can exist between the grains of metal. Eventually, these voids grow large enough to cause the line to sever.

In the thicker metal lines of earlier chips, the chief cause of failure was a process

called electromigration, in which long-term current flow through the lines caused metal deterioration. As the interconnection lines became narrower in new chips, however, failure due to electromigration was reduced because of the different grain structure of the finer lines.

"Because of the decrease in electromi-

gration problems with narrower lines, there are many people who are not really worried about this new fracture phenomenon," Li said. "However, our theory predicts that the thermal-stress problem will become far worse below one-micrometer lines. There will be no saving miracles."

The commercial chips most widely used today feature connection lines two to three micrometers wide. Newly introduced one-megabit memory chips use connection lines about 1.3 micrometers wide, while the 16-megabit chips expected to be available commercially by 1993 will use lines 0.3 micrometer wide. A micrometer is one-millionth of a meter.

"No doubt, everybody is working on the problem, but because the industry is so competitive, no one is talking about it," Li said.

The Cornell researchers plan to join with International Business Machines Corp. for advanced research on the problem, so that they can be confident their research will meet actual industry needs, said Li. Their efforts also will include using Cornell's National Nanofabrication Facility to create extremely narrow lines to test their theory further.

The research is sponsored by the Department of Energy, the Semiconductor Research Corp. and IBM.

—Dennis Meredith

4-day forum set on rural schools

Some 350 school board members, administrators and teachers in rural school districts throughout New York State will meet in Cooperstown July 24-27 to discuss "Working for Equity and Excellence in Rural Schools."

A recent report by the Rural Schools Program at Cornell, which is sponsoring the four-day session, found that the state's rural school districts often perform better than urban schools. David L. Call, dean of the College of Agriculture and Life Sciences, will participate.

Barton Blotter: Cash, goods stolen

A \$7,100 computer taken from the storage area of High Rise No. 1 on North Campus was among \$12,013 in cash and valuables stolen in 12 thefts on campus, according to the morning reports of the Department of Public Safety for July 6 through 17.

Five incidents involved \$2,163 in cash taken from wallets and rooms, including \$2,000 stolen from a room in Sperry Hall. Other items reported stolen included a \$800 computer printer taken from Malott Hall, a \$40 wooden level and \$300 in window sills stolen from the Statler Hall building site, and a \$350 camera.

X-rays continued from page 1

energy X-ray beams, scientists have learned about the structure of materials from viruses to metals.

The Cornell biochemists — Professor Keith Moffat, senior research associates Wilfried Schildkamp and Donald Bilderback and research associate Marian Szebenyi — reported their results on June 28 at the meeting of the American Crystallographic Association in Philadelphia.

They used CHESS, which yields extremely high-intensity X-ray beams, to obtain a diffraction picture of a small organic molecule and an enzyme. The two test molecules, an indole alkaloid and the enzyme lysozyme, were chosen for no particular medical significance; they were used only to prove that the high-speed analytical technique would work.

The success means X-ray beams can be used to see the structure of molecules involved in a variety of biological processes — including the change in shape, or conformation, of proteins as they carry out biological reactions; the alteration of molecules in the visual system as they biochemically react to light; and the binding and release of oxygen by hemoglobin, Moffat said.

While laser techniques have been used at other laboratories to produce X-ray flashes for such purposes, they have not proven technically reliable, according to the scientists.

The CHESS facility depends on X-rays

emitted by the Cornell Electron Storage Ring (CESR), a one-half-mile-long ring in which counter-rotating beams of electrons and positrons are collided at energies of from 4 to 6 billion electron volts.

Besides yielding subatomic particles studied by high-energy physicists, these collisions also yield so-called "synchrotron radiation," which is electromagnetic radiation, including X-rays, spewed out by the high-energy electrons as they are bent by the powerful magnets of CESR into a circular path. By installing windowed ports in the CESR beam chamber, CHESS researchers can tap these X-rays for their studies.

The achievement by Moffat and his colleagues depended on their ability to enhance the intensity of CESR's beam using the undulator — a dual linear array of magnets that oscillates the CESR electron beam back and forth as it passes between them.

The undulator, two meters long, consists of two sets of small, powerful magnets, with a field strength of about 5,000 gauss, made of a neodymium-iron-boron alloy. The 123 magnets of the undulator bend the electron beam of CESR back and forth 61 times as it passes through the narrow chamber between the sets of magnets.

The result is that the beam is intensified about 100 times, compared to the normal synchrotron X-ray beam, which is roughly one million times more powerful than a medical chest X-ray. The key to this intensification is that instead of producing a con-

tinuous range of X-ray wavelengths, the undulator-treated X-ray beam is transformed into a discrete set of wavelengths, whose intensity far exceeds the average of the normal beam. These wavelengths are particularly enhanced in the one Angstrom range, which is one hundred-millionth of a centimeter. Such short-wavelength "hard X-rays" are extremely useful to determine the structure of molecules.

The undulator, which was funded by a \$500,000 grant from Argonne National Laboratory, is a prototype of many such devices to be used in the APS, as a basic means of intensifying the synchrotron X-ray beam. CHESS was chosen as the test bed for the undulator because CESR, operating at 4 to 6 billion-electron-volts, is the only accelerator running in the same energy range as the planned APS.

The undulator was designed by James Viccaro, Gopal Shenoy and Suk Kim of the APS, and Eric Blum and Batterman of Cornell, in collaboration with Spectra Technology, Inc., of Bellevue, Wash., which built the device.

The APS, with its 7 billion-electron-volt beam and about 30 undulators and other such devices, will provide facilities for as many as 300 scientists to perform experiments simultaneously. It will be used for a wide variety of experiments in materials science, biology, medicine, biotechnology, chemistry, physics and the geosciences.

—Dennis Meredith

'Uncle Ezra' passes anonymity's veil to successor

For two years, students who took their personal problems anonymously to Cornell's computerized advice-giver, "Uncle Ezra," were rebuffed in their efforts to penetrate Ezra's anonymity. He was "the spirit of all Cornellians who care about you," Ezra might typically say when asked his identity.

Then, one day last spring, the umpteenth query to "tell us who you really are" was rewarded with a surprise revelation: "It's particularly appropriate that you should ask," the computer screen responded for the very first time. "My real name is Jerry Feist."

The explanation followed. "I'm unmasking myself because my days as 'Uncle Ezra' are now over. I have recently taken the job of director of psychological services within Gannett Health Center."

But another Ezra was waiting in the wings. "In fact, my replacement has been on the job for several weeks already," Feist wrote, "and I bet you can't tell our answers apart." Feist praised "the small, dedicated band I've worked with" — which included two student researchers, two computer experts, a librarian, a member of the faculty, and special contributors solicited by Ezra — and he promised to write an occasional answer from his new office.

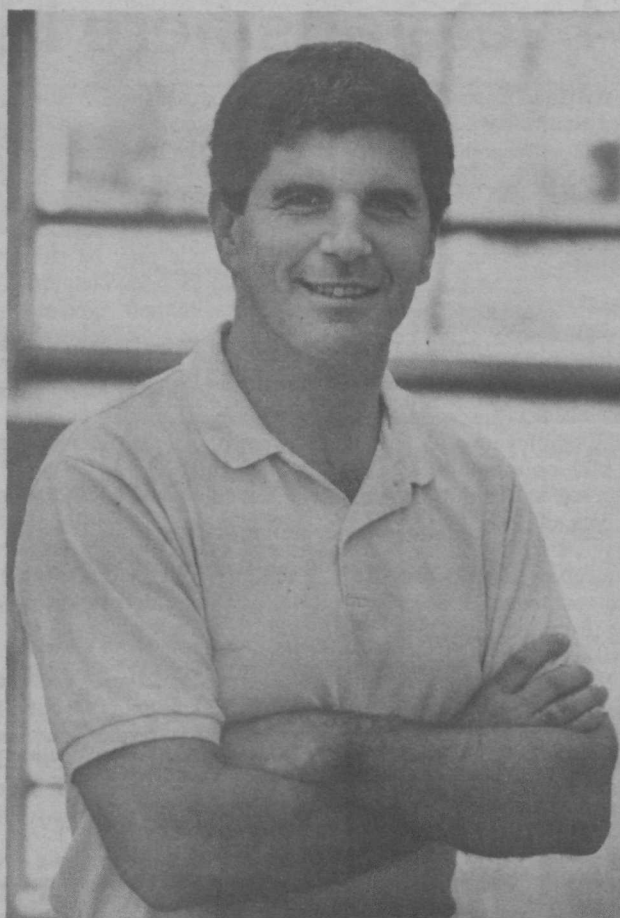
Feist left the post with "a lot of regrets," he said in an interview. "I felt as if I knew a lot of the writers, and they knew me. They wanted to know more about Ezra, to know that it was a real person, not just some weird computer program. But the electronic distance was important to them because it let them say exactly what was on their minds."

What the experience demonstrated to him "is the number of people reaching out to share feelings, with no one to share them — students who are leading these private lives and are all alone, and then read other people's experiences and recognize that we're in the same boat in a lot of ways."

Anyone can tap into CUInfo, a campus-wide computer network, and read other people's exchanges with Ezra.

"Many of those who come to Cornell have difficulty in making a personal, emotional connection with other people" — close friends, family, loved ones, advisers — Feist observed. "We are encouraged to intellectualize everything, and there are so many people here who are islands of intellectual interest." Junior faculty and staff members have joined in writing Uncle Ezra about their difficulties making friends.

How do young men and young women relate to each other these days? Uncle Ezra was asked. His reply: "Tentatively, with fear, with hidden agendas, afraid to be open, to say what is on their minds, afraid to believe what the other person is saying, afraid of being rejected." If that is not altogether new, "Each generation of students, each person has to rediscover the answers," he commented.



Jerry Feist

Claude Levett

Uncle Ezra was named in honor of the university's founder, Ezra Cornell. The invitation to students to query "Dear Uncle Ezra" was extended in 1986 to supplement counseling services already in place, including professional and student peer counseling and referral organized under the rubric, Empathy Assistance and Referral Service (EARS). Tanni Hall Salustri is the assistant dean for counseling who supervises EARS. Fifty counselors are selected from among the 500 students who enroll in her weekly classes in counseling skills.

"They come from all over the campus, from every school," she noted in an interview. "They attend the sessions mostly because they want to learn how to relate better

to other people. But they become counselors because they want to contribute to the community, to help, really to see Cornell be responsive to student needs."

For a student to request counseling at the health center or with the dean of students' staff at Barnes Hall requires face-to-face contact. In the computer age, it was felt that more students would seek help if it could be asked with the true impersonality of the video display terminal. "Ezra" is believed to be the first such service on an American campus, and since its inception Cornell has had queries from five other institutions considering a similar project.

In a typical month of the school year, some 175 students pose questions to Uncle Ezra. Ten times that number read the exchanges, and Ezra in turn has read such reactions as, "You people are better than Dear Abby."

As a result, "The Best of Uncle Ezra" is about to be published. Copies may be ordered by sending a check for \$4.95, payable to Cornell University to the Dean of Students office, 103 Barnes Hall.

The questions directed to Ezra over the last two years have indicated varied concerns. Examples:

- "I am failing everything. I need serious help."
- "How is it possible to be a law student, meet the 18,000 other Cornell students, get enough sleep, eat right, keep in touch with old friends and still make law review?"
- "I've gained a lot of weight recently, especially now that I'm back at school, I just feel like eating all the time. I'm so ashamed because I look so awful. . ."
- "My problem is that I am not a drinker and feel uncomfortable at parties where everyone else is drinking and I am not."
- "Guys here seem to be interested only in one-night stands. I am getting really tired of this. I would like to be involved with someone, but no one seems interested in commitments."
- "One of my best friends thinks she may be pregnant. What can I do to help?"
- "This week was my birthday and none of my friends remembered. I'm depressed."
- "Where is the bridge that everyone jumps off of. I am considering it myself."

In answer to the last inquiry, Ezra quoted the observation that "suicide doesn't solve problems, it only passes them on from you to the survivors — family, friends, loved ones and other people who care about you." He went on to give the Suicide Prevention telephone number and other sources of counseling.

Another reader later added, "To the students who discuss suicide — visit a little kid's playground when they're all around. It will renew your faith in life."

— Irv Chapman

University will not pursue Fall Creek hydropower plant

Citing changes in the economics of hydropower, the university has set aside plans to generate electricity at Ithaca Falls. And while Cornell probably would not try to prevent a private developer from building a hydropower plant on Fall Creek, the university has not ruled out a joint project with the City of Ithaca.

"Based on the most recent analysis conducted by our staff, Cornell University sees no clear economic advantage to constructing a hydropower plant on Fall Creek at Ithaca Falls at this time," Cornell's director of community relations, David I. Stewart, told the Ithaca Hydropower Commission and its chairman, Daniel L. Hoffman, July 14.

"If the city should choose not to proceed with its own hydropower plant, the university does not plan to proceed with its own plant solely to prevent a private developer from obtaining a hydropower license," Stewart said. "We would be willing to con-

sider a joint venture between the city and Cornell," he added.

The university, which already operates a small hydroelectric plant below Triphammer Falls, sought a license for a second Fall Creek site from the Federal Energy Regulatory Commission in 1982. At the time, a Maryland-based firm was applying for a license on the same site, and the City of Ithaca sought its own license for hydropower development — in part to block development by Cornell and other non-public projects.

The federal regulatory agency granted a limited hydropower development license to the city for Fall Creek. That license expires in 1989, and a public referendum on the issue is planned for this fall. Cornell owns substantial water rights and some of the land at Ithaca Falls, where university founder Ezra Cornell first harnessed flowing water for mills in 1830. The former

hydropower facility was last used for generating electricity in the 1950s.

Cornell still believes that, "given global environmental problems, hydropower presents a clean, safe, renewable source of energy," Stewart told the city.

"At the same time, any discussion about pursuing hydropower at Fall Creek would also depend on whether the construction of such a plant would be economically advantageous," he said.

When the university planned hydropower development at Ithaca Falls in 1982, the facility was estimated to cost \$3.8 million and was expected to produce \$500,000 worth of electricity per year.

"Given possible changes in the economics of hydropower, we feel strongly that it would not be prudent to eliminate all future options related to this clean, renewable source of energy," the university spokesman added. "Although the economics of a

hydropower plant do not appear to be viable in 1988, we intend to keep the possibility of generating electricity through a hydropower plant under consideration for the future."

Public opposition to hydropower at Ithaca Falls has centered around questions of aesthetics, including whether diverting water through tunnels and construction of facilities would detract from the natural beauty of the site.

Hydropower Commission Chairman Hoffman, a member of the Ithaca Common Council, said the commission is "pleased that the university would cooperate — should the city proceed with its own development at Ithaca Falls."

"I think city voters would have liked a more definitive statement from the university," Hoffman said. "There is no guarantee that Cornell will not re-enter the application process any time in the future."

— Roger Segelken

Budget continued from page 1

unions. But before increases can be implemented, enabling legislation must be passed in Albany and then be ratified by the trustees of the State University of New York, Fawcett said.

It is "most probable" that the legislation will be enacted in early August after the Legislature returns from its break and that the trustees will act in late September, he added.

For faculty and professional staff, half the first year's increase would begin as of June 30, 1988, and a retroactive lump-sum catch-up payment would be made as soon as the new plan is in effect. The second half would be paid as of Nov. 3.

For other employees, 80 percent of the first year's increase would take effect as of June 16 and an appropriate lump sum would be paid retroactively; the rest would take effect Oct. 1.

In the second and third years, increases would begin with the start of the pay year — July 1 for faculty and professional staff and April 1 for others. Fawcett said that, because the first-year increase is being

phased in in two parts, it will amount to 4 percent on paychecks, although base pay will increase by the full 5 percent.

He emphasized that this phased-payment arrangement had become a common feature of pacts negotiated between the state and its employees and was not related to this year's state budget problems.

"At most, the crush of budget business may have delayed the Legislature, necessitating some retroactive payments," Fawcett said. "However, there is no reason to consider the terms themselves to have been influenced by the state's budget problems."

Provost Robert Barker said that, while any delay necessitating retroactive payments is "inconvenient and regrettable," the agreement itself "is consistent with the salary pools for other Cornell employees."

"After a grueling long legislative session — lengthened still further by the discovery of a revenue shortfall — the unwelcome delay in implementation is understandable," Barker commented.

The Legislature's agreement on Liberty Scholarships, an idea President Frank H.T.

Rhodes had strongly supported, will augment existing state and federal aid programs to assure needy New York youngsters the price of attending college in the state. The first appropriation, \$9 million, will begin in the 1991-92 school year, and it is hoped the program will provide non-tuition support to some 94,000 students once it is in full operation.

TAP grant revisions raise the maximum grant — now \$2,850 a year — to \$3,650 in 1989-90 and \$4,125 in 1990-91. (There is no change for 1988-89.) They also raise the net taxable income with which families may receive minimal grants (of \$350 a year) from \$34,250 to \$42,500 in 1989-90 and to \$50,500 in 1990-91.

The spending authorization added to SUNY's budget may offset some of the \$15.7 million in mid-year cuts required by Cuomo. Cornell's mandated share of that was \$1.175 million, which, along with earlier budget strictures, required Cornell to leave open about 90 of 1,800 state-funded positions, according to Barker.

"And although the budget reductions

present substantial problems, Governor Cuomo and the Legislature have acted wisely to deal with a serious revenue shortfall now," the provost said. "Delaying action on that problem until later in the year, after a good part of the fiscal-year dollars had been spent, would have jeopardized a number of critical state programs, with devastating effects on services and budgets of the state agencies."

Fawcett said that SUNY presumes the new funds will provide "meaningful relief" from earlier cutbacks, but he added that he has "simply no idea" what the level of relief will be at Cornell's statutory colleges.

— Sam Segal

The next issue of the Cornell Chronicle — on Aug. 4 — will be the last one of this academic year. The first issue of the new year will be published on Aug. 25.

Networking

A Cornell Newsletter Published by Employees for Employees

Volume 9, Number 7

Thursday, July 21, 1988

Affable Al Reed Receives Dedicated Service Award for July

There are few Cornellians more widely known and genuinely respected than Al Reed. He originally hails from Candor, New York and has worked his way up through the ranks of the Grounds Department.

In addition to his 29 years of loyal service as one of our Grounds Department's most skilled heavy equipment operators, Al's leadership and warm enthusiasm for promoting overall university communication and goodwill have been strikingly evident throughout his long campus tenure. Whether toiling all night behind the wheel of a snow plow or covered by a thick cloud of smoke from one of his "infamous, chicken barbecue extravaganzas," Al is reliably cheerful and always heavily involved in the action!

In 1959 our former Personnel Director, Deed Willards, conceived of a concept for bettering Cornell community spirit by providing more opportunity for people-to-people social interaction. This concept was developed tenaciously by Al, who is now the keystone of what has become our very dynamic Cornell Recreation Club. Along with the dedicated support of other people-oriented campus leaders, Al has tirelessly nurtured CRC to an active membership of over 700 fellow employees.

Their activities have mushroomed from an annual chicken barbecue-picnic to frequent distant excursions to recreational get-a-ways in Canada, Florida, and Hawaii. Al has been the driving force in the success of CRC's annual Christmas dinner dance which has become so popular it has become challenging to find facilities in Tompkins County which are large enough to accommodate this lively activity.

When it comes to getting a job done, Al is invariably among the most energetic volunteers. He was one of our "premier chefs" at our last Employee Night at the Court, and hustled out over 1,500

barbecued chicken halves. Al has also been committed to a number of local charitable activities over the years to include Cornell employee support of the Gadabout (senior citizens transportation service) fund raisers, organization of the Newfield High School Athletic Boosters Club -- which built athletic field house facilities valued at nearly \$100,000 -- and coaching Kiwanas Youth League baseball.

After charcoal roasting an estimated 100,000 chicken halves during his life time in "rain, snow, and gale" he's still going strong!

When Al isn't working at one thing, you'll probably run into him industriously engaged in another. With the ever-present backing and talent of his gracious "better-half" -- and we don't mean chicken -- Fran, you might find the Reed family tapping sugar maples somewhere up in "them thar hills!"

As if they didn't get enough snow on campus, the Reeds, who have both a son, Donald, 34 years, and a daughter, Marjorie, 25 years, are also in the family maple syrup business. Like clockwork, late each winter, the Reeds make their way through the snow perfecting their family teamwork in the sugarbush, and, in another manner, adding a little more sweetness to our community.

Meanwhile... "back at the ranch" --you guessed it -- Al is working at still another activity close to his heart. Also known as one of Grounds Department's "Senior Winter Jock," this time it's bowling! Last year he became affiliated with the Bowl-A-Drome. If you like the camaraderie of good friendships and a fun evening, Al



Al Reed

says, "It's the place to go!"

According to Al's supervisor, Dennis Osika, "Al is the type of seasoned 'can-do' employee that both enhances our departmental teamwork and reliably gets the job done right! His unselfish example has proven just what one good person can really accomplish in a sometimes, seemingly, apathetic community."

Al has been reelected to the Grounds Department Employees Council by his

coworkers since its inception three years ago and is also widely respected for his leadership role as a zone representative with the United Auto Workers union. He has a well-earned reputation as a fair and highly ethical man.

We are all very proud of and indebted to our "Affable Al Reed." We salute him for his energetic commitment toward making Cornell a happier, more people-oriented community!

Cornell's 14th Annual Employee Day Saturday, September 17, 1988

Chicken Barbecue and Big Red Football



We Hope You're Planning on Coming!

Ticket information will be mailed in late August.

Save the Date! It's a Real Special Day!

Bowlers Wanted: Beginners or Experienced

The Cornell Girls' League is a fun league, at Ide's Lanes, Thursdays at 5:20pm. If interested, come to our pre-season meeting at Ide's Lanes on August 25, 1988, 5:30pm or call Hazel at 533-4704 or Jody at 5-2729.

Transfers and Promotions for July

EMPLOYEE

Paula Affeldt
Catherine Alvord
Betty Baldwin
Donna Beach
Michelle Bower
Cheri Chase
Shari Clement
Jenifer Coleson
Sylvia Corbin
Sharon Drake
Veronica Endler
D Fingerhood
Karen Gentile
Callean Hile
Graeme Jennings
Paula Long
Daniel Mansoor
Barbara Noble
Harriet Peters
D W Poole
Linda Schempp
Allen Snyder
Amy Sproveri
Eileen Sullivan
Monica Thomas
Amy Townsend
Marchetta Utter
Linda VanBerkom
A VanWinkle
David Wakoff

DEPARTMENT

Arts & Sciences
IPA
Vet College
International Students
Ornithology
Accounting
Computer Services
Genetics
JGSM
Chemistry
Computer Services
University Libraries
Financial Aid
Modern Languages
Athletics
Financial Aid
JGSM
Hotel Administration
JGSM
Computer Services
JGSM
Life Safety Services
Athletics
University Libraries
Hotel Administration
Computer Services
Computer Services
Hotel Administration
Ornithology
Computer Services

Personnel Changes Take Place Within the Office of Human Resources

Office of Human Resources, located in Day Hall, provides employment-related services to departments and individuals. Recent personnel changes within the office became effective on July 1 and include the assignment of Pete Tufford, formerly manager of employee relations, to associate director with responsibility for coordinating the employee relations and compensation functions.

Working with Pete in the management of these two areas are Marge Swiercz Clark and Anita Harris. Marge is newly appointed to the position of manager of employee relations and previously served as assistant to the director and senior employee relations specialist.

Employee Relations administers matters relating to employee complaint procedures, labor relations, supervisory consultation, unemployment insurance, employee orientation, layoffs, the supervisory identification program, and probationary review. For information on confidential employee-supervisory consultation or any of the above-listed topics, call Employee Relations at 5-7206.

Anita, past senior compensation associate, replaces Karen Canfield as manager of compensation, a unit which is responsible for administering the university's nonacademic wage and salary programs.

The Compensation staff is available to answer questions and give guidance to supervisors and employees on topics such as position evaluation procedures, exempt and nonexempt criteria, position descriptions, promotions, pay increases, overtime pay rates, pay ranges, temporary pay rates, temporary (dual, casual, and acting) appointments, hiring rates, grade levels, and position titles.

Call Compensation at 5-7400 for more information.

Marilyn Paluba, associate director, coordinates the functions of employee benefits and human resource information. Also, she now becomes

responsible for overseeing the staffing function.

For general information on employment-related questions, call the Office of Human Resources at 5-3621.

Photo by Morris Peck



Left to right: Employee Relations Manager Marge Swiercz Clark, Associate Director Pete Tufford, Compensation Manager Anita Harris, and Associate Director Marilyn Paluba.

The Executioner

By Linda Contento Schmidt

The moment of truth has arrived.
He seats me in the chair.
He asks me a few questions
little else is said.
The moment is tense.
There are no friends or family present
No one to deliver last rites.
I am alone.
I was never accused of being brave
and the evidence of fear is apparent:
Beads of sweat are forming on my
brown,
My stomach contorts into a square
knot.
The muscles straddling my spine
have tightened with anticipation,
My face has hardened into a mask of
fear
as my sweaty palms clasp the chair in
a
death grip.
I do not reflect upon the quality of my
life.
Scenes of my past do not flash before
me.
There is no time.
Total consciousness focuses anxiously
on the present.
The moment has come.
He is prepared.
My eyes squeeze shut. I hold my
breath.
I am prepared.
He flips the switch.
I hear only "Open wide"
as he lowers his drill.

Lead Level Notification

Lead is a naturally occurring metal found in low levels in the earth's crust and in most ground and surface waters. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.

Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

Lead levels in your drinking water are likely to be highest: if your home or water system has lead pipes; if your home has copper pipes with solder; if the home is less than five years old; if you have soft or acidic water; if water sits in the pipe for several hours.

Lead levels in naturally occurring New York State waters are in all cases lower than the New York State and Federal drinking water standards.

Elevated lead in drinking water is usually linked with the use of lead pipe or lead solder in copper pipe. Some drinking waters are very corrosive. A corrosive water has a tendency to dissolve the metal it is in contact with. This may accelerate the leaching of lead into drinking water. However, even waters with relatively low corrosivity can cause lead to be dissolved if the water is allowed to sit in the plumbing and undisturbed for at least six hours.

The drinking water supplied by Cornell University is minimally corrosive. However, tap water may still contain lead. Exposure to this water can be minimized by running the tap water until cold to the touch before drinking.

Cornell University is taking the following steps to minimize lead exposure:

1. No lead solder for copper pipe.
2. Drinking water is routinely tested for lead and corrosivity.

If you think your plumbing has lead pipes, or are concerned about possible lead in your drinking water, an inexpensive test can be done to find out. Contact your local health department for more information, or contact the Cornell University Water Filtration Plant at 5-3381.



Club Chairperson Andrea Hodges enjoys the annual steak dinner-dance.

Everybody's gone surfin' ...

The Year in Review: Hawaii, Montreal



Fleet Morse in Hawaii.

Cornell Recreation Club



David Stewart and CRC tour guide in Hawaii.

Who Decides the United Way Allocation Process?

Who decides how and to which organizations the United Way dollars are allocated? The distribution of United Way funds is determined by a citizen volunteer review process.

The volunteers who make up the allocations review teams represent the diversity of Tompkins County and include representatives of the business community, college professors, homemakers, retirees and others.

United Way funded organizations are divided into five groups according to their general purpose, for example, GIAC, Southside, Girl Scouts, Boy Scouts, Campfire and YMCA are grouped under the heading "Youth and Family Services." An allocations review team (with 7-9 volunteers) is assigned to each group.

In April, team members visit funded organizations giving them the opportunity to see each in operation. The organization presents an overview of current programs and objectives including the agency's role of providing services within the community, the make-up of the clientele served, staffing patterns and basic budget facts.

In May, allocations conferences are held. The purpose of the conferences is to review an organization's proposed budget and request for United Way funding and to develop precampaign allocation recommendations for submission to the United Way Board.

At these conferences representatives present budget highlights by each program or service area.

A question and answer period follows providing further clarification of the in-

terrelationship between program and budget.

Allocation recommendations are made on a program-by-program basis, giving consideration to current priorities in the community, allocations guidelines set by the United Way Board of Directors, and an organization's overall need and effectiveness.

The chairman and vice-chairman of each review team presents the precampaign allocation recommendations to the allocations council. The allocations council then develops and recommends a schedule of total allocations to be presented to the United Way Board of Directors for action.

In December the allocations council makes its final recommendations to the United Way Board based on campaign results. The Board then notifies the funded organizations of their allocation.

Joel Zumoff of Cornell University is the chairman of Team I. Joel volunteered with Family & Children's Services and other not-for-profit agencies before he began volunteering for the United Way. Through the United Way he was able to learn more about the variety of health and human services that are available in Tompkins County. Joel was impressed with all the efforts that the human service organizations offer to the community and how the residents of Tompkins County benefit.

Volunteer Opportunities

There are opportunities for you to volunteer for a United Way agency. Some possibilities are listed here:

Drivers are still needed for Gadabout

buses and vans. Transport elderly and handicapped individuals, help them board the vehicle and carry packages. Requirements: Drivers must attend BOCES eight-hour defensive driving course, behind the wheel training-screening and reflex-perception test. Drivers work minimum one-half day per week. Escorts also needed to assist passengers with wheelchairs on and off lift-equipped buses. Contact: Gadabout at 273-1878.

The Red Cross is establishing a permanent blood donor site located in the gymnasium at the Henry St. John building on Clinton St. Volunteers are needed for the success of this community donor program. The Red Cross is looking for volunteers who can commit to working one afternoon a month. Contact: Red Cross at 273-1900.

Suicide Prevention is seeking volunteers for its 24-hour hotline. Volunteers who successfully complete training are expected to give 15 hours a month to the telephones, plus participate in an other 5 hours of in-service training. The agency is especially in need of people who can work at night. Trained volunteers are expected to work for at least a year. Next training is scheduled for July 18 - July 22. For an application and a personal interview, call 272-1505.

MAKE A
DIFFERENCE
THE
UNITED WAY



FISH is seeking licensed drivers to provide essential transportation for people unable to drive themselves. Requirements: Car, valid insurance and the desire to fulfill other people's lives. Benefits: Meet interesting people. Contact: FISH at 272-7952. Telephone coordinators are also needed; only two requirements: a phone and the desire to help others. Telephone coordinators may be disabled or house-bound themselves.

Volunteers needed to do short-term research and planning for the Human Services Coalition. Typists and clerical support on either temporary or long term basis. Contact: Human Services Coalition at 273-8686.

Quality Management in Ithaca



By Jane-Margaret Pittman

Ithaca business leaders and International Management Council (IMC) members have once again proven their excellence and dedication to quality management. Through the IMC program members participate in and develop workshops, educational courses, and conferences while, at the same time, study and evaluate themselves and their performance as leaders, managers, supervisors and citizens.

Since IMC has the support and guidance of countless companies, it is possible for IMC to develop well-rounded programs with a variety of approaches to the training needs of its members. With this support and guidance, IMC can accomplish what a company is unable to do alone.

The Ithaca IMC chapter offered the Certified Professional Manager's (CPM) exam to a group for the first time in May 1988. A total of eight local businesspersons met the criteria and passed the exam to become certified managers or associate certified managers including Joan Miller, administrative manager in Plant Biology.

Another Cornell employee, Joe Lomax, senior training associate in the Office of Human Resources, was certified in November 1987 and says, "The program helped me review management theory and practices, extend my knowledge of management techniques, and gave those taking the training class an opportunity to share experiences and information regarding management."

The CPM program was initiated and taught in Ithaca for the past two years by Marge McKinney, administrative manager in Vet Pharmacology.

Classes for the next session will begin on August 3, 1988 for personal skills; testing will take place in November. Classes for administrative and/or interpersonal skills will begin in November and testing is scheduled for May 1989. Call Marge McKinney at 5-3653 for information about enrolling in the upcoming session.

Sign Up Now for New Cornell-Candor Area Bus Route

Cornell employees interested in bus transportation to Cornell from Waverly, Van Etten, Spencer and Candor, please fill out and mail to:

Chemung County Transit
1201 Clemens Center Parkway
Elmira, NY 14901
Name
Address
Phone
Time in AM
Time out PM
Thank You!



CRC's Beebe Lake celebration

Washington DC, and Much, Much More

been an exciting year at CRC. Members have visited Hawaii; DC; Hunter Mt.; Montreal; City; and Reading, PA. Our enjoyed Yankee baseball, Buffalo, Scotch Doubles bowling, and Vernon Downs racing. Members also enjoyed the annual

June picnic, the steak dinner dance, the annual holiday dinner dance, and the children's Christmas party. Cornell Recreation Club sponsored the Employee Night at the Court, sold food at the Beebe Lake celebration, and catered barbecues to raise funds for our park site.

A very special thank you to our won-

derful group leaders this year. The trips ran so smoothly thanks to your efforts.

Cornell Recreation Club will be sponsoring many exciting events and trips this year. Come join the fun. Join CRC. You'll be glad that you are part of this organization.



CRC park site pavilion.



Hawaii in bloom

Unclassified Ads

1. Please send all unclassified ads through Campus Mail ONLY to Networking Unclassifieds, Humphreys Service Building, (hand delivered ads will be omitted) - no phone calls please.

2. For our information your name and campus phone number MUST be submitted with ads, otherwise your ad will be omitted.

3. All unclassified ads are free of charge to Cornell faculty, staff and students and will be printed in the order received as space permits.

4. Please limit your ad to 30 words or less. Any ad longer than 30 words may be shortened by the Networking staff.

5. Unclassified ads are for nonbusiness purposes only.

6. The deadline for the August 18th issue is August 8th.

7. If an error appears in your ad, please resubmit the ad to be published in next available Networking.

8. Please submit an ad for each issue that the ad should appear in.

Unclassified Ads Address Change

Please send all unclassified ads to Networking Unclassifieds, Humphreys Service Building

For Sale

1983 Chevy Cavalier, exc cond, automatic, power windows and locks, AC, PS, PB, AM-FM stereo cassette. Kelly 5-8686 (w) or 659-4429 (h).

1979 Dodge 024, auto trans, 4 new radial tires, great shape, \$1,000. 5-2127 days or 589-6770 eves.

1979 Ford Fairmont, 4 cyl, std, many new parts, \$600. 5-3594 days or 387-6805 after 5:30.

1979 Buick Electra Estate wagon, exc cond, 60,500 miles, Limited Edition model, loaded with extras, AC, CB radio, trailer hitch, ideal for major trips or business, \$2,850. Peter A. Curtiss 5-5014 or 347-4282.

1976 Olds Omega, 4-dr, many new parts, must sell, make offer. 273-4222.

Suzuki GS 750T, exc cond, 2,200 miles, \$1,500; 4 yr dbl

reg QH Palomino gelding, grn broke, exc disp, \$900. 844-8463 after 5pm.

Boat, 1988 Thunderscraft with approx 30 hours, 19' with cuddy cabin, 165 Mercruiser I-O, 1987 Shorelander Tri with rollers, asking \$14,500. 539-7886 after 6pm.

Deluxe, self-cleaning elec range in exc cond, \$200 OBO; 2-man rubber raft, paddles, life jackets, \$50 OBO; assorted curtains and rods, BO. 273-2614.

GE washer & dryer, \$125 each or \$225 pair; 4-drawer chest, solid wood, \$60; kitchen table, Formica top, \$20; mahogany desk, \$75; Rectilinear III highboy speakers, 277-112.

Moving - oval kitchen table with leaf, \$50; Gem Spinnet organ (model 110) cost \$850, yours for \$550; Gibson continuous cleaning elec stove, green, \$175. All above cost are neg. Cheryl, 5-2336 or 5-5783.

Hide-a-bed couch, full size; queen size waterbed, \$100 each OBO; assorted storm windows, steel flat bed frame, 8' truck cap, rear axle set up for trailer, offers. Steve 5-2774 or 659-4925 eves and weekends.

Kimbel console piano, exc cond, 9 yrs old, pencon finish, asking \$1,500. Mary 5-2649 or 272-4994.

Sears Lifestyle exercise bike, exc cond, \$220 new, asking \$125, includes 2 yr maintenance agreement; brass bed, \$75; drafting table, \$20. Rick 5-3833 or 277-3041 after 6pm.

Exercise bike, \$30. 5-6890 (w) or 589-6454 (h).

Schwin bike (M), large frame, seat, and baskets, two spds, coaster brakes, no cables, very good cond, \$40. Bruce 5-4525 or 5-4789 or 257-3568.

12" B&W TV, used only a few months, \$35; 10-spd girl's bike, almost new, \$50; 10-spd men's bike, \$40; all neg. 257-1719.

Cheap room for rent: Emerson VCR, like new, Kenwood AM-FM tuner, great for apt; Concorde car stereo; Son of a Gun hairdryer, 1400 watts, used once; recliner; 1974 Duster (car). Mary 5-2079 or 257-1973.

House, beautiful home on S. Geneva St., downtown, 4 bdrms, 2 full baths, full attic and basement, 2 car garage with carport, covered front porch, rear deck, asking \$109,000. Bob 277-5215 or 5-4738.

3 bdrm, 2-story country home, 2.5 acres; barn, 2 box stalls, loft; 2-car garage, kitchen with sliding glass doors, handmade cabinets, hardwood floors in bdrms, laundry room, 3 miles from 96, 4 from SCI. Principals only, asking \$49,500. 607-659-4208 or 272-8901 eves.

Employee Assistance Program (EAP)

Anger: A Signal for Change

Anger: It is so uncomfortable for many of us. Our Victorian forebears offered us models of denial and repression -- lady-like or gentlemanly nonresponses. More recently we have been advised to vent, "Let it all hang out." While either method may work for us for a while, neither shows us a way to harness that energy that comes out of anger, to let that energy work for us. If anger surges to the surface in a volcano-like explosion or bubbles

away beneath a carefully composed exterior, we may miss the chance to read and heed its message, to try to understand what it is signaling to us.

Our anger may be telling us that we feel compromised, that somewhere at work, at home, or in our social life we are doing more, giving more, than is comfortable. We may feel unnoticed, unappreciated. Or the anger may signal that someone else is doing too much for us

and that we feel incompetent, frustrated, or stifled. We may feel that we are stagnating, our potential for growth or advancement unrealized.

In her book, "Dance of Anger," Harriet Goldhor Lerner addresses the special problems women have with anger in work or personal relationships. Her suggestions are helpful for men as well. Dr. Lerner advises us to pay attention to our anger, using its energy to work toward making changes in anger-producing situations and relationships. If we continue to limit our responses to venting, to emotional outbursts, blaming and fighting, or if we always resort to stony silence and distancing, we stay stuck and the anger-producing situation goes on in the same old way.

Elmira—Horseheads—Alpine Junction Bus Service to Cornell

By Alberta G. Callihan

Employment at Cornell University proved to be rewarding and enjoyable for a number of people who reside in the Elmira, Horseheads, Alpine area. Carpools became a way of life for some, and others preferred to make the trip by themselves. This meant putting many miles on personal automobiles and spending a great deal on gas as well.

Thoughts turned to wishful thinking of a means of transportation that would alleviate the cost as well as the wear and tear on the individual who had to drive day after day to Ithaca.

Sue Hamlin heard from Kim Archangel that there was a bus run just started that was running from Watkins Glen to Cornell. She talked to the manager of Chemung County Transit and asked him what to do in order to have a bus from the Elmira area that would travel to Cornell. He told her to get a commitment of 35 people. She put a couple of ads in Networking and eventually had the names of the required number of people.

In March the letter arrived in the mail from Sue containing information about the bus.

The details were that a monthly bus pass cost \$25. The tentative route is an Elmira pick-up (downtown Holiday Inn area, up Rt. 17 to Rt. 13, pick-up at the parking area north of Tate's Equipment and a pick-up at Alpine Junction and on to Cornell. The bus would leave Elmira between 6:45 and 7am to arrive at Cornell at 8am. On the return trip, the bus will pick-up between 4:30-4:45 and 5pm.

The run would commence approximately April 1.

On May 1, 1988, 34 passengers purchased bus passes.

A trial run started with free transportation from April 28 to April 30. May 1 the original bus pass was available.

There were some funny and some not-so funny experiences; such as, the bus breaking down every warm summer evening going up the Newfield Hill.

--Breakfast parties!

Someone said that one of the passengers is always an experience... he might be welcoming new people riding on the bus for the first time -- trying to learn how to use his relaxation tape recorder, or attracting attention when taking a nap.

Some of the passengers tried to play "Trivial Pursuit" (it was reported that it got ugly at times).

The brakes gave out one evening in April (luckily enough before starting on the return trip that caused an hour and a half wait for the arrival of a "school bus." Some people were lucky enough to find a ride home so they didn't have to wait for over an hour for the replacement.

How do the passengers on the bus cope with stress; especially in the winter-time after a half-hour or longer wait for the bus that had trouble making it up the hill? Curling up with a pillow for a nap, talking, laughing, relaxation tapes, or playing trivia.

The new bus is in use. Passengers enjoyed a pleasant ride home on Thursday night, June 23, 1988.

Oops!

We made a mistake last time in our article on the Employee Degree Program. Janet Gray received her degree through Agriculture and Life Sciences - not Human Ecology - as we reported; and Joe Scantlebury, through Africana Studies. Chris Pelkie is still studying with CALS. Sorry for the mixup.

Wanted

Elvis records, don't throw away. I will take them. Smit 5-2320.

Dehumidifier in working cond. Eleene 3-3337 or Dan 539-6636 eves.

For Rent

One bdrm lower-level furnished apt in private northeast home, separate entrance, parking, bus line, no pets, \$425 includes heat, hot water, AC, grad student or faculty preferred. 5-3986 or 257-5677 or 272-6443.

Family cottage on Indian Lake in the Adirondacks, 2 bdrm, max. 4 people, \$220 per week. Elizabeth Johnson 518-648-5394.

Garage Sale

3-family garage sale, good modern clothing, mostly adult and infants; household items to numerous to mention. August 12-13, 10-4pm. Anything left after 1pm on Sat. 50% off. 33 Sweazey Rd. Lansing.

Employee Calendar

Events of Particular Interest to Cornell Employees

Wednesday, August 3. Employee Assembly meeting, 12:15-1:45pm, 3rd floor Day Hall Board Room.

Campus Address Change

If your campus mail is incorrectly addressed or you have recently changed work locations, to correct the address, please send the following information to Human Resource Information, 147 Day Hall: your name, your social security number, new address. Allow three weeks for the change to become effective.

Networking Deadlines

August 29 for September 8
September 12 for September 22
September 26 for October 6
October 10 for October 20
November 7 for November 17
November 28 for December 8
December 12 for December 22
January 9 for January 19, 1989
January 23 for February 2, 1989

1988 Holiday Schedule

The following holiday schedule for nonacademic employees is listed below.

HOLIDAY
Labor Day
Thanksgiving

Winter Holiday Period (6 days)

CORNELL'S DAY OF OBSERVANCE
Monday, September 4
Thursday, November 24
Friday, November 25
Monday, December 26
Tuesday, December 27
Wednesday, December 28
Thursday, December 29
Friday, December 30
Monday, January 2, 1989

If you have any questions regarding the holiday schedule, please call Employee Relations at 5-7206.

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