

## Natural Noises Biologists Find Praying Mantis Not Deaf

By ROGER SEGELKEN

The praying mantis — cherished by gardeners for its consumption of insect pests and by generations of school children who hatch the intriguing bug from eggs — was always thought to be deaf.

Now, two Cornell neurobiologists have discovered that the lanky green insect has a single, sensitive ear in the center of its body.

The ear may be useful in two functions of great importance to the insect: avoiding enemies and courting a mate. Reporting their finding in the Feb. 14 issue of the journal *Science*, David D. Yager and Ronald R. Hoy say the "cyclopean ear" of the praying mantis picks up ultra-high frequency sound.

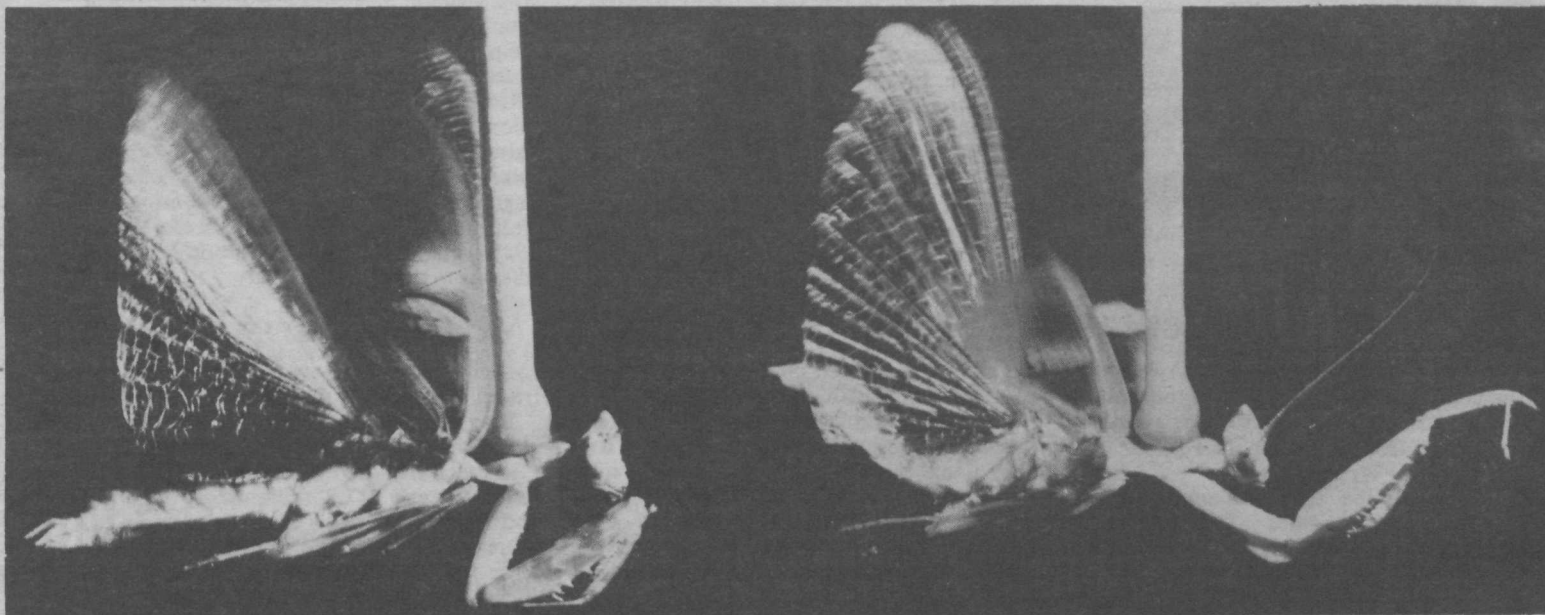
This discovery makes *Mantis religiosa* the first animal of any kind known to possess a single ear.

Hoy is an associate professor and Yager is a research support specialist in the Section of Neurobiology and Behavior in Cornell's Division of Biological Sciences. Hoy is currently conducting research at the University of Hawaii.

A series of tests helped the Cornell researchers locate the cyclopean ear in a groove on the ventral, or belly, side of its metathorax, the portion of the body where the back pair of legs is attached.

The ear is made up of two tympana (membranes similar to the eardrums of higher animals) that are separated by a slim air space. Nerve structures, attached to air sacs near the ear, lead to a nerve cord in the metathorax.

Having only one ear would seem to prevent the praying mantis from determining direction of sound, the Cornell biologists note. However, it may compensate by rotating its



A praying mantis attached to a tether (left) assumes the legs-folded position until the cyclopean ear hears the simulated sounds of echo-locating bat. Then, it extends the front legs, flexes the abdomen, and dives for cover. Photographs by David Yager.

body to scan for the source of sound.

The praying mantis hears best at ultrasonic frequencies, between 25 and 45 kHz (25,000 to 45,000 cycles per second); humans hear in the 20-20,000 Hz range. Its hearing ability, Yager and Hoy found, is comparable to that of crickets, lacewings, and moths, insects with the more conventional pair of ears.

"Our discovery ... suggests that (mantises) possess a more complex behavioral repertoire than previously appreciated," the researchers write in *Science*, the weekly journal of the American Association for the Advancement of Science.

"We do not yet know what role detection of ultrasonic signals plays in the natural his-

tory of mantises. Perhaps weak, ultrasonic signals are produced during courtship."

Courtship rituals might be enhanced, they speculate, if the mantises hear sounds that may be produced when the insect's abdomen rubs against its wings. Aware that mantis mating occurs at night and that males follow the scent of the female's pheromone trails through the dark, Yager and Hoy suggest another use for the insect's high-frequency hearing:

"Perhaps, by analogy with flying moths, lacewings, and crickets, flying mantises listen to the ultrasonic biosonar signals of insect-eating bats."

The Cornell researchers tested that idea by simulating the high-frequency sound pulses

used by echo-locating bats to home-in on airborne prey. Mantises flying through the laboratory reacted dramatically to the simulated bat sounds. By extending their forelegs and flexing the abdomen, they are able to make abrupt changes in their flight path.

The researchers also found a neurological feature that would seem to keep the praying mantis from becoming a nervous wreck while "praying." The insects do not react to simulated bat sonar while at rest — and out of reach, presumably, of their flying enemy — but only in flight.

"Apparently, the circuits that control the avoidance response aren't turned on when the mantis is stationary," Yager comments. Not bad for a one-eared green bug.

## Elephant Chatter Overheard by Scientists

By ROGER SEGELKEN

Elephants produce — and perhaps communicate with — low, rumbling sounds that are beyond the range of human hearing, biologists here have discovered.

In addition to the familiar trumpeting noise that humans hear, the huge beasts frequently make inaudible sounds, five to 10 seconds at a time for as long as 10 minutes.

This discovery may answer the riddle of how elephants separated by several miles can suddenly mobilize in times of danger, without any apparent signal. Infrasonic calls could be the elephants' "secret channel,"

according to Cornell biologists Katharine B. Payne, William R. Langbauer Jr., and Elizabeth M. Thomas.

Elephants are the first land-dwelling mammals known to produce infrasonic sound, Payne and her colleagues note in an article prepared for publication in the journal *Behavioral Ecology and Sociobiology*. The only other mammals known to produce infrasonic calls are whales.

The elephants' infrasonic calls are in the sound frequency range of 14 to 24 Hz (cycles, or hertz, per second). Generally, sounds below 20 Hz and those above 20,000 Hz are

inaudible to humans. Sounds below 30 Hz must be extremely intense to be heard. Sometimes, the low-frequency energy is felt by humans as a rumbling sensation.

That rumbling feeling and a fluttering movement in the elephants' foreheads were the only clues the Cornell biologists had of infrasonic calling.

They began their studies by recording audible sounds from captive Asian elephants in Portland's Washington Park Zoo and at Circus World in Haines City, FL. Subsequent recordings of African elephants in Kenya's Amboseli Park confirmed their findings.

By speeding up the recordings to raise the frequency and by viewing audio signals on spectrograms, the Cornell researchers detected elephant vocalizations that their ears had missed. Just as playing an LP record at 45 rpm changes deep voices to "chipmunk" talk, the faster-than-normal tape speed made the elephant rumblings higher pitched and thus audible.

The spectrograph provided acoustic imprints of all sound frequencies the elephants emitted.

Analysis of spectrograms showed that  
Continued on Page 2

## One-Minute Manager Enters Classroom

By MARTIN B. STILES

Kenneth A. Blanchard, author of "The One-Minute Manager," said in the cheerleading style he espouses that an "A" is the only grade he'll give in the two-credit course he is offering this spring at School of Hotel Administration.

Between the peals of laughter that punctuated Friday's four-and-a-half hour opening lecture of "Managing Organizational Change and Productivity," 150 undergraduate and graduate students learned that all they have to do is:

- Read seven books.
- Have 100 percent class attendance.
- Be able to explain orally the concepts of the course.
- Write five papers, four in teams of eight and one individually.

If the papers and oral presentations are not of "A" quality, the students will be able to redo them until they are.

"I'll be at my cottage on Skaneateles Lake near New Hope this summer for anyone who has to take longer to measure up to the standards of excellence that can only be expected of a Cornellian," he said.

After the lecture, Ellen Eskenazi, Hotel '88, said, "It is not going to be an easy 'A,' like a lot of us thought, and it's a lot of work for a two-credit course. But everybody I know thinks its going to be great and worth the effort."

"He's telling us the same things he tells Fortune 500 executives," said another student.

The adjectives heard most following the opening session were "dynamic," "exhilarating," and "inspiring."

"I'm thrilled with the emphasis on people, the humanistic side of management," said one student.

A certain skepticism was expressed about whether the high level of excitement and enthusiasm can be sustained through the whole course.

Florence Berger, associate professor of hotel administration, who is collaborating on the course with Blanchard, said she and nine teaching assistants are

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## Alexander Heads Federal Panel

By YONG H. KIM

A Cornell scientist is playing a key role in shaping national policy on ways to protect the public and the environment from potential dangers of genetically engineered microorganisms created by the biotechnology industry.

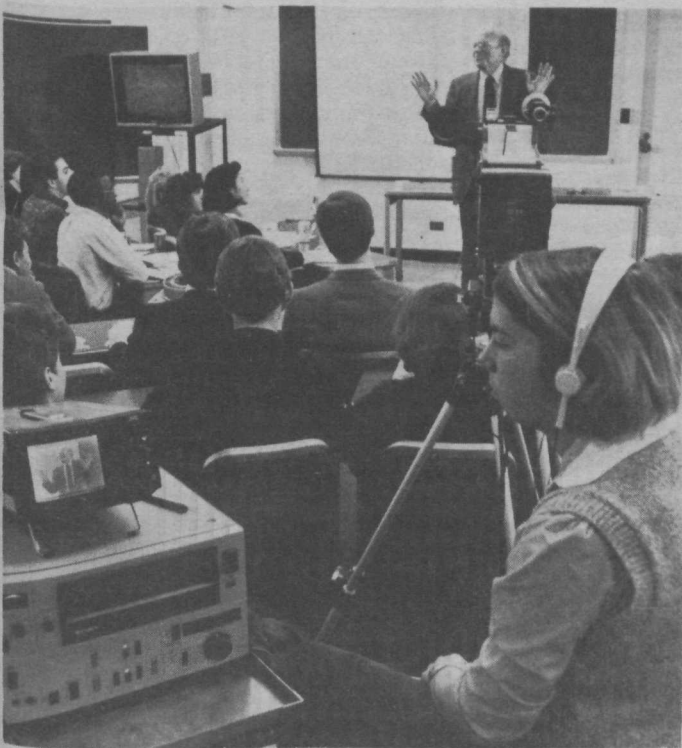
Martin Alexander, a soil microbiologist and microbial ecologist, headed the 10-member U.S. Environmental Protection Agency study group that recommends stepped-up research to develop safeguards against such organisms that could find their way into the environment on a large scale. The group's report was issued Jan. 30.

"I know of no major technology that has not had some deleterious effect," declares Alexander, who teaches in the College of Agriculture and Life Sciences.

Risks are small when a few genetically manipulated species find their way into the environment, but the likelihood of harm increases greatly when a large number of different kinds of these organisms are released, Alexander argues. The rapidly growing biotechnology industry is expected to come up with many different strains of organisms for agriculture and pollution control, for example.

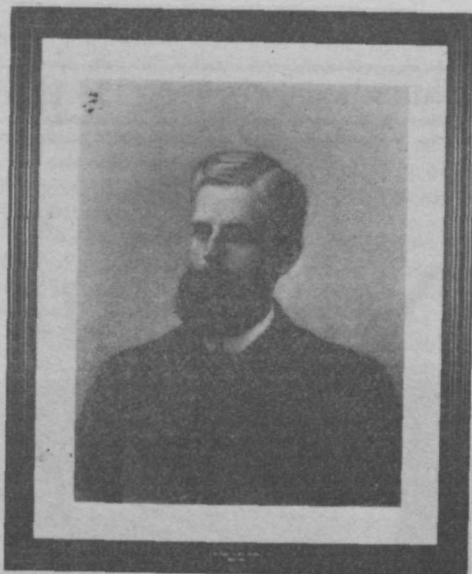
For Alexander, though, the question is

Continued on Page 8



The 'One-Minute Manager' in action.





Newly restored charcoal portrait of Dr. Daniel Elmer Salmon.

## New Award Honors Dr. Salmon

A portrait of one of veterinary medicine's founding fathers was found and restored at the College of Veterinary Medicine here and is now the focus for a new alumni award.

Early in 1985, a charcoal portrait was found in a storage area of the college and Dr. Ellis P. Leonard was consulted as college historian. He identified the subject as Dr. Daniel Elmer Salmon, the first recipient of a DVM degree from a university in the U.S.

After Dr. Salmon's death in 1914, his books were assigned to the College of Veterinary Medicine at George Washington University. That school closed in the fall of 1918 and its dean presented the books to the college here. Inventory lists of that time refer to the collection of notebooks covering the lectures given by Dr. James Law and a framed 1891 portrait of Dr. Salmon when he was chief of the Bureau of Animal Industry.

Unfortunately, the long time spent in the closet had damaged the portrait. When the college's head librarian, Suzanne Whitaker,

was asked to oversee the preservation of the artwork, she could accurately describe it as being in "tough shape." Two tears were visible in the area of the coat and to the left of his beard. Insects had eaten through the paper in several spots and the dust of nearly eight decades had accumulated on its surface. At one point the original art had been fastened to a cloth, and this was disintegrating where it was nailed to a wood frame.

Restoration of the art was necessary because it remains the best available likeness of Dr. Salmon. The college's Alumni Association agreed to fund the restoration and local help was available from Daniel Clement, an artist who specializes in conservation of works of art on paper. In less than three months, Clement repaired the tears, removed the dust and dirt and the fabric support, humidified the paper to make it pliable again, and re-matted the portrait using acid-free materials that will never discolor the art.

The charcoal likeness is now on permanent display in the Flower Library.

## First Three Presentations Honor Distinguished Vet College Alumni

The first Daniel Elmer Salmon Awards for Distinguished Alumni Service of the College of Veterinary Medicine have been awarded to Doctors Gordon Danks, E. P. Leonard and F. (Bud) Wright.

Initiated by the college's alumni association, the award is named in honor of Dr. Daniel Elmer Salmon, the first person at Cornell and in the U.S. to earn a DVM degree from a regular academic program. The first recipients were nominated by a body of

the alumni and voted on by the executive committee of the alumni association.

Arthur Gordon Danks '33, remains an enthusiastic ambassador for the college to its alumni and through his influence many substantial gifts have come to the college.

Ellis Pierson Leonard '34, is the author of a book chronicling the college's first 80 years. This two-volume set was the culmination of nearly 13 years of work, during which Dr. Leonard located sources and photographs, identified those individuals who had

contributed to the growth of the college and traced graduates in their career.

Frederick Oliver Wright '41, was the chairman of the college's first Capital Fund Campaign from 1976 to 1980 which raised a total of nearly \$17.2 million from alumni and friends. He was a member of the executive committee of the alumni association from 1977 to 1983 including two years as association president-elect and two years as association president.

## Richard Meier Architecture Event Keynoter

Award-winning architect Richard A. Meier will give a public lecture on "Museums and Other Buildings" Thursday, Feb. 20, on campus.



MEIER

His talk, scheduled for 6:15 p.m. in Alice Statler Auditorium, is the keynote address of the Fifth Annual Thomas W. Mackesey Seminar Series, sponsored this year by the West Coast alumni of Cornell's College of Architecture, Art, and Planning.

The two-day program includes career seminars, workshops, discussions, and portfolio critiques by West Coast alumni for the benefit of students in the college. All lectures and seminars are free to the public. Schedules are available in the dean's office on the first floor of Sibley Hall.

In addition to the lecture by Meier, architecture and design writer Joseph Giovannini, now with the New York Times and formerly with the Los Angeles Herald Examiner, will lecture at 10:30 a.m. Friday, Feb. 21, in Room 115 of Olive Tjaden Hall.

Meier, who won the 1984 Pritzker Architecture Prize, is a 1957 graduate of the architecture school.

The annual seminar series is named in memory of Thomas W. Mackesey, former dean of the college (1950-60), and former dean of the university faculty and vice provost for planning.

## Elephants

Continued from Page 1

some, but not all, infrasonic calls have audible components, as well. Besides their trumpeting sounds, an adult elephant's repertoire includes roaring, barking, and tapping of the trunk. Among captive elephants, infrasonic sounds occur between adults and between females and their calves.

The fluttering motion in the elephant's forehead, in the area where the nasal passages enter the skull, does not necessarily indicate the cause of the infrasonic calls, Langbauer explains. The sound may originate in the animal's vocal cords and then resonate from the forehead, much like a loudspeaker producing ripples in a nearby pan of water. The researchers are not sure of the infrasonic source, and plan further investigation.

Nor do their findings prove the elephants are actually communicating with infrasonic calls, the biologists emphasize. Communication, in the strict definition, requires that an animal change its behavior as a result of a signal from another.

To determine whether true communication is occurring when elephants make infrasonic calls, the Cornell biologists will take their experiments back to Africa. Watching from tall towers, they will note the reactions of elephants to the infrasonic vocalizations of others at a distance. They also will play back recordings of infrasonic calls to observe the reaction when the animals that produced the sounds are not present.

So far, the Cornell biologists have not found elephant sounds to be as complex as those of whales, according to Payne, who has studied the "singing" of humpback whales for 15 years. The estimate that infrasonic calls can travel 12 or more miles through the trees, shrubs, and tall grass in typical elephant habitat -- much farther than higher-frequency sound -- leads to speculation about the function of infrasonic sound.

"Family life in elephant society is an extraordinary affair," says Payne, "and there is little question that it is supported and facilitated by an equally extraordinary network of acoustic, visual, and olfactory communication."

"We also know that an elephant's hearing is better at the low frequencies," Payne continues. "There is circumstantial evidence -- from the Maasai warriors, who are the only threat to elephants in Amboseli Park -- that elephants may have a 'secret channel' for communication. A big, sprawled-out group of elephants, facing in all directions and engaged in various private occupations, such as feeding, bathing, or sleeping, can suddenly mobilize for a highly organized march when no signal is apparent to human observers."

Infrasonic communication could be the explanation. Payne, Langbauer, and Thomas are research associates in the Laboratory of Ornithology, which supports their work, along with the World Wildlife Fund and the National Geographic Society.



## If Love Is Real, It's Just Another Day

By SUSAN S. LANG

If your lover fails to shower you with romantic adornments and passionate embraces on Valentine's Day, don't worry! They're not good indicators of the quality of your relationship anyway.

"Romance isn't even a necessary component of a healthy, mature, and long-lasting relationship," according to Andrea Parrot, a specialist on human sexuality at Cornell University.

"It has very little to do with whether a relationship is good or bad," she said. "Romance actually can be harmful to a mature relationship if it's used to measure or evaluate the relationship."

Candlelit dinners, moonlight strolls, candy, and flowers are associated with romantic, thoughtful, and caring lovers in our society, but they actually are meaningless in and of themselves.

Too many people tend to confuse these romantic gestures and romantic love with mature love that characterizes long-lasting relationships much more often, said Parrot, who teaches in the College of Human Ecology.

Romantic love, sometimes called "immature love," is characterized by its sudden onset and decline, its stormy emotional swings, and its highly structured routines and expectations. When a romantic relationship ends, it usually dies hard and painfully.

These relationships are more often based on differences and often compel one of the partners to say that he or she "would do anything for the other," Parrot said.

A mature relationship, on the other hand, is based more on friendship and similarities. "The best relationships are those in which

you fall in love with a friend or make friends with a lover," Parrot said.

Partners willingly do things for the other in these relationships, yet they each maintain their respect and integrity for self. There's much less structure and emotional intensity, and a great deal more flexibility in such relationships.

What is important? How can you tell if your relationship has the makings of mature, long-lasting love?

- Do you each have a secure belief in your own value?
- Are you both improved by the relationship?
- Does the relationship make both of your lives better, more sensitive?

## Phone 'Cutover' Two Weeks Away

By PAT PAUL

With "cutover" only two weeks away, activities in the Department of Telecommunications are running at a feverish pitch.

Training sessions for department telecom coordinators will conclude Feb. 14, and new staff telephone directories are now being distributed. Once you have received your training materials and your new telephone directory, we encourage you to use your System 85 telephone to make campus calls.

There have been a lot of questions on how cutover will actually occur. First of all, this refers to the time when System 85 will be connected to the outside world, allowing you to receive and place calls to points off campus. On the evening of Friday, Feb. 28, this process will begin. By 7 a.m. Monday,



March 3, this transition will be essentially complete.

Once the Centrex service is disconnected, New York Telephone will provide recorded messages on all "256" numbers to inform callers that Cornell has undergone a number change. Callers will be instructed to replace the "256" with "253" and redial the call. Callers will not be charged for calls to the "256" number that reach this recording. A different recording will be provided for the dormitory telephone numbers and software programming will steer calls to the new telephone numbers at the College of Veterinary Medicine. The dorms and the Vet College will be on a "253" exchange.

Pat Paul is director of Telecommunications. This is another in a series of articles describing the telephone equipment switch-over.

## —Geneva S. Booker—

Geneva S. Booker, 86, who was retired assistant editor of the Cornell Alumni News, died Sunday, Feb. 9, 1986, at Tompkins Community Hospital.

Among her survivors are a son, John F. Booker, who is professor of mechanical and aerospace engineering.

Memorial donations may be made to the Book Fund of the Cornell University Libraries.

## Cornell Chronicle

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# 67% Federal Cut Proposed for Cooperative Extension

Five major programs and as many as 300 Cooperative Extension positions across New York State face elimination if President Reagan's budget cuts become effective Oct. 1, 1986.

The president's executive budget proposes 59 percent cut nationwide for the Cooperative Extension system. However, New York's funding would be reduced 67 percent because of cuts in specific programs, according to Lucinda A. Noble, director of Cornell Cooperative Extension.

The federal allocation to New York would be slashed from \$11.3 million to \$3.6 million.

"A reduction of this magnitude will require drastic personnel reductions at regional and state levels," Noble said. "We will have to adjust allocations to county Cooperative Extension associations, regional programs, and college departments and administration," she explained.

"All segments of Cooperative Extension in New York State will be affected," she said, "but hardest hit will be the Expanded Food and Nutrition Education Program (EFNEP), and sea grant, integrated pest management, renewable resources, and urban gardening programs."

Cornell Cooperative Extension programs

serve more than six million New Yorkers each year. There are more than 1,600 extension personnel across the state, including those at Cornell, in every county of the state, and in New York City.

Nationally, \$200 million in Cooperative Extension budget cuts could mean the loss of more than 10,000 positions in counties and land-grant institutions, Noble estimated.

"Reagan's cuts would drastically alter the complexion of Cooperative Extension as the nation knows it," she said.

Under the federal mandate that established Cooperative Extension, funding is shared by the federal, state, and county governments.

The \$11.3 million from the federal government for the current fiscal year is about 27 percent of the total Cornell Cooperative Extension budget. The state provides \$48.9 million, or about 21 percent, and county governments support the local offices with \$20.2 million, 48 percent of the total budget. Program fees provide \$1.6 million, about 4 percent.

"Elimination of 67 percent of the federal commitment undermines the confidence vested in the federal partner that has made it possible for Cooperative Extension to thrive in the state and nation, and to grow from a

predominantly rural organization to a system that now provides research-based knowledge to consumers, youth, agriculturists, and just about every segment of the population," Noble said.

Noble was one of 22 people on a national panel that developed a guide for the future mission, scope, priorities, and policies of the Cooperative Extension system through the end of the decade.

The Joint USDA-National Association of State Universities and Land Grant Colleges Committee on the Future of Cooperative Extension, in a 28-page report issued in 1983, recommended increased educational programs; improved farm and home technology; more translation of research results particularly for family farms, agribusinesses, families, and communities; a continuation of home economics programs; and emphasis on 4-H youth programs.

The first Congressional hearings on the president's cuts in extension funding are scheduled for March 20, according to Dale Stansbury, NASULGC's director of government relations for agriculture and natural resources programs.

"The Senate budget committee is already seeking information on the impact of these cuts," he said Tuesday. "I have a strong

feeling that Congress won't accept the cuts at this level."

One solution to the funding problem that has surfaced would see extension reverting to agricultural programs only.

"That's all right for Kansas, perhaps, but not in a state like New York with non-traditional programs dealing with food and nutrition, local governments, and urban gardening," Stansbury said. "They might wind up being sacrificed if there is no proof of public support for them."

Noble said timing of the cuts is especially ironic. The first extension agent in New York State was employed 75 years ago this spring, making this the diamond jubilee of Cooperative Extension in the state.

Three of the state-supported colleges at Cornell, New York's land grant and sea grant institution, provide the backbone of Cooperative Extension programming in the Empire State. They are the colleges of Agriculture and Life Sciences, Human Ecology, and Veterinary Medicine.

*This is the first in a series of Chronicle articles this semester on issues related to state and federal budget cuts and their impact on the university.*

## Garwin, as 'At-Large,' Has Lots of Freedom

By ROGER SEGELKEN

Imagine the freedom to pursue virtually any research interest, to travel and write, to speak out on any topic from gravity waves to the gravity of national policy decision-making. Suppose you had the freedom to accept or refuse a summons to testify before Congress, to advise presidents or publicly condemn them, to pack up and become a visiting professor at Harvard, Cornell, or Columbia?

For Richard Garwin, who is on the Cornell campus this week for another session as an Andrew D. White Professor-at-Large, that freedom that comes with being one of the few, select IBM Fellows. That distinction was won through more than 30 years of service as a physicist for the world's largest manufacturer of computers. Of course it doesn't hurt that "I've invented lots of things," says Garwin, who holds more than 30 patents.

Along the way, the physicist and nuclear weapons strategist and adviser and scholar invented his enviable job. He is one of the few who understands not only how weapons systems work but how they are used in the global arena.

Today, Garwin is scheduled to speak on "Technical Planning for National Security" in a free public lecture at 4:30 p.m. in Hollis E. Cornell Auditorium.

When he speaks it will be from expertise rooted in the early 1950s at Los Alamos National Laboratory, where he helped develop

the hydrogen bomb. The latest weapons development program -- the Strategic Defense Initiative -- is a disturbing example of policy makers' misunderstandings, he told the Cornell Chronicle.

Garwin's week on campus, with the Peace Studies Program as his host, is divided between lectures and informal meetings with students and faculty members. Tuesday, he heard a presentation on chaotic vibrations and non-linear dynamics by Francis C. Moon, professor and chairman of the Department of Theoretical and Applied Mechanics. A meeting with Thomas Gold, the John L. Wetherill Professor of Astronomy, and research associate Steven Soter was scheduled to discuss mining asteroids in space for minerals -- or for shielding material for SDI, an idea Garwin calls "really bizarre." His plans also include sessions with Hans A. Bethe, the John Wendell Anderson Professor of Physics Emeritus, and with Franklin A. Long, professor of chemistry emeritus.

Students seek him out, Garwin says, to discuss everything from defense policy to the physics of gravity. By the end of the week, he will have talked with at least six students in informal sessions.

The invitations to visit campuses are possible, Garwin notes, because of IBM's policy of allowing IBM Fellows "to work on anything we want." A physicist at IBM since 1952, Garwin has conducted research in areas such as liquid and solid helium-3, superconductivity, and gravity waves. Among the "lots of things" he has invented are superconducting power transmission lines and touch-input devices. A recent invention from his laboratory is a gaze-control computer. "One just looks at it in order to select items from the menu," he explains.

Garwin's full title is IBM Fellow and Science Adviser to the Director of Research, but at least a third of his time is spent in public service. He is a consultant to the Department of Defense, the Department of Energy, and intelligence agencies. In the current administration, he says, "my advocacy in policy approaches is not sought. I do that (advise on policy) in congressional testimony and in scholarly and popular articles."

Formerly a visiting professor of public policy at Harvard and currently an adjunct professor of physics at Columbia, Garwin knows why his employer encourages such interaction. "IBM has a great debt to the universities," he says. "They're happy to have people be visiting professors if they can make a contribution."

In a Peace Studies seminar at 12:15 p.m. Friday in 153 Uris Hall, Garwin will speak on another issue of concern, the importance of science advisers to U.S. presidents. A proper science adviser, he says, would make "the best possible evaluations on alternative courses of action, mobilizing the best and most effective people in the scientific and technical community to provide those assessments."

Would he take a job like that? "How could one refuse?" Then he adds, "I would also take the job of Secretary of Defense."



Demolition of Stone Hall was begun Monday morning

## Stone Hall's Fate to Be Argued In Ithaca, Albany Courts Friday

Attorneys are scheduled to argue the fate of Stone Hall in two courtrooms Friday. On Monday, preservationists obtained restraining orders halting demolition of the building.

Demolition workers were stopped less than three hours into their work by orders from Supreme Court justices in Ithaca and Albany.

The court orders prohibit demolition work on the building until Friday. Separate suits were filed by the City of Ithaca and Historic Ithaca, a preservation group, after they learned that demolition work had begun.

Barbara Ebert, executive director of Historic Ithaca, said she and others fighting to keep Stone Hall were led to believe that demolition would not begin for several weeks. Her group and the city hurriedly filed their lawsuits Monday, she said.

But Jay Handwerker, deputy general manager for the State University of New York Construction Fund, told a reporter that public notices have clearly indicated that demolition would begin within 10 days after the contract was awarded Feb. 3.

Stone Hall is being razed to make room for a new building, Academic I, that will

provide necessary, modern facilities for the College of Agriculture and Life Sciences, according to university officials.

"We are not dealing with just bricks and mortar. We are dealing with very important programs," David L. Call, dean of the agriculture college, has said. "The people are excellent. The facilities are second rate."

Ithaca officials will argue that structural changes to historic landmarks must be approved by the city. Historic Ithaca will claim that state environmental impact procedures have not been followed.

State officials will argue that local landmark regulations are not binding in this situation and that the objections are moot because part of Stone Hall has been torn down.

Construction of Academic I is slated to begin this spring, following demolition of Stone Hall, a turn-of-the-century building that housed the education department until last fall. The new four-story complex, which will run north and south along the west end of the ag quad, will be home to three academic programs and administrative units of the College of Agriculture and Life Sciences.



In a Thurston Hall laboratory, Andrew D. White Professor-at-Large Richard Garwin, center, hears a presentation on chaotic vibrations by theoretical and applied mechanics graduate students William Holmes and Guangxuan Li, left, and Department Chairman Francis Moon.



# Calendar

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

\*—Admission charged.

## Announcements

### E.A.R.S

Empathy, Assistance and Referral Service, known as E.A.R.S., has expanded its hours. Friday hours have been extended from 7-11 p.m. to 5-11 p.m. Regular hours Sunday through Thursday, 3-11 p.m. and Saturday, 7-11 p.m. continue unchanged. E.A.R.S. provides short-term peer counseling on a walk-in as well as telephone basis; it is located in Willard Straight Hall, room 211, and the phone number is 256-EARS. All services are free and completely confidential.

### Minority & Women Owned Business Enterprises Workshop

The Office of Equal Opportunity, in cooperation with the Division of Facilities & Business Operations and the departments of Purchasing, Dining and Campus Stores will present a workshop on "Doing Business With Cornell."

Cornell is committed to the maximum utilization of minority and women owned business enterprises. In keeping with that commitment, this workshop is specifically designed to provide these enterprises with information and technical assistance to facilitate the development of ongoing business linkages. Representatives from relevant Cornell business operations will be in attendance. The workshop will be held Feb. 25, at the James Law Auditorium from 10 a.m.-3 p.m. There is no admission charge.

For further information, contact Don Johnson, Director, Office of Equal Opportunity, 234 Day Hall, or call 256-3976.

### Summer Research in Europe

Funding is available for a small number of juniors from all colleges who are interested in pursuing field work in Western Europe this coming summer. Projects should generally relate to problems in agriculture, but need not be technical.

Application forms are available in the Western Societies Office, 117 Stimson Hall. For further information contact Kitty Mattes, 256-7592. Application deadline is March 3, 1986.

### Nutrition Career Day

Are you interested in the growing field of nutrition? Do you wonder what to do with your degree in nutrition? Are you aware of the many options available to you? Find the answers to all your questions at Nutrition Career Day—Feb. 15, 1986. Pre-register in Martha Van Rensselaer foyer before Feb. 7 (fee \$1.50) or at the door (fee \$2.00). Buy a boxed lunch for \$3.50 or bring your own!

### Alternatives Library

Learn how to weatherproof your home, and heat it more effectively this winter. Books and periodicals available at the Alternatives Library, Anabel Taylor Hall. Free, and open to the public.

### Writing Workshop

Writing Workshop Walk-in Service. Free tutorial instruction in writing. Mon.-Thurs., 3:30-6 & 7:30-10 p.m.; Sun. 3-8 p.m. 174 Rockefeller Hall and Sun.-Thurs. 10 p.m.-midnight in 340 Goldwin Smith Hall.

### Alternatives Library

Explore the world of herbal medicines, nature's way of healing. Books on loan at the Alternatives Library, Anabel Taylor Hall. Free and open to the public.

### Alcoholic Anonymous

Faced with a drinking problem? Perhaps Alcoholics Anonymous can help. Open AA meeting—Monday through Thursday 12 noon in Anabel Taylor Hall. Mon., Tues., Thurs.-Forum; Wed.-Room 314.

**Intramural Volleyball (Men, Women, Co-Ed)**  
Deadline for entries is Tuesday, February 18 by 4:00 p.m. in the Intramural Office in Helen Newman Hall. Minimum of 9 to enter, co-ed; 10 to enter, equal number of men and women.

Please specify your preferred day of play (1st, 2nd, and 3rd choice). You do not have a choice of times, only days, Monday thru Thursday evenings in Barton Hall starting (probably) Wednesday, March 19, 1986.

No individual may play on more than one team in more than one league in any one sport!! Forfeit fee of \$10 is due with your roster to enter. Checks only, made payable to "Dept. of P.E. & Ath. Intr. Div." Post date your check for May 9, 1986.

### Colloquia Thursday

Feb. 20, 4 p.m. Grout Room. "Stravinsky the Symphonist", Andy Waggoner.

### Emotions Anonymous

Every Tuesday, 109 Oak Avenue, (the Lutheran Church), college town. Emotions Anonymous is a self-help group for people with living or emotional problems. Everyone is welcome.

### Research Seminars

Olin Library Reference Department is continuing to offer its series of research seminars. General research seminars will be held on Saturday, Feb. 15, from noon - 2 p.m. and Thursday, Feb. 27, from 7 to 9 p.m. Government documents seminars are scheduled for Friday, Feb. 14, from 1 to 3 p.m. and Thursday, Feb. 30, from 7 to 9 p.m. All seminars will take place in Olin Library 701. For more information and to register, call the Olin Reference Department at 6-3319.

## Dance

### Cornell Jitterbug Club

The Cornell Jitterbug Club meets every Wednesday, 7:30-9:30 p.m. in Anabel Taylor Edwards Room. Instruction given.

### Israeli Folk Dancing

Dancing will be held on Thursday evenings at 8 p.m. in the One World Room of Anabel Taylor Hall. Beginners and experienced dancers welcome.

### Jazz Exercise

Adult Jazz Exercise Dance Class. Tuesdays and or Thursdays, 7-8 p.m. Call 256-4231 mornings, or 257-5677 for further information.

### International Folkdancers

The Cornell Folkdancers meet in the North Room of Willard Straight Hall on Sundays, throughout February. Instruction from 7:30-8:30 p.m., followed by request dancing till 10:30 p.m. Free; beginners welcomed, no partners needed. For more information call 256-7149 or 257-3156.

## Exhibits

### Herbert F. Johnson Museum

"Idea Mechanica" through Feb. 16; "New York State Artists V" through Mar. 16; "Hans Hinterreiter" through Mar. 23. The Museum is located on the corner of University and Central Avenue. Museum is open Tuesday through Sunday, 10 a.m.-5 p.m. Admission is free. Please call 256-6464 for further information.

## Films

Unless otherwise noted films are sponsored by Cornell Cinema. There is a staff position open on the Cinema Advisory Board. Applications are available in 525 Willard Straight Hall. The deadline is February 28, 1986.

### Thursday

Feb. 13, 4-6 p.m. (including 1-2 hr. discussion). Hoyt Fuller Room, 310 Triphammer Road. "Roots". Celebration of Black History Month. Presented by the Africana Studies and Research Center.

Feb. 13, 8 p.m. \*Uris Hall Auditorium. "The Grapes of Wrath" (1940), directed by John Ford. Cosponsored by the Center for Local Food and Agriculture.

### Friday

Feb. 14, 7:30 p.m. \*Statler Auditorium. "Return of the Jedi" (1983), directed by Richard Marquand with Mark Hamill, Billy Dee Williams and Anthony Daniels. Limited.

Feb. 14, 9:45 p.m. \*Uris Hall Auditorium. "Camila" (1985), directed by Maria-Louis Benberg, with Susu Pecoraro and Imanel Arias.

Feb. 14, 10:15 p.m. \*Statler Auditorium. "Pee-Wee's Big Adventure" (1985), directed by Tim Burton with Pee Wee Herman, and Elizabeth Daily.

### Saturday

Feb. 15, 7:30 p.m. \*Uris Hall Auditorium. "Camila."

Feb. 15, 8 p.m. \*Statler Auditorium. "Pee-Wee's Big Adventure."

Feb. 15, 9:45 p.m. \*Uris Hall Auditorium. "Women in Love" (1970), directed by Ken Russell, with Alan Bates, Oliver Reed, and Glenda Jackson. Co-sponsored by the English Department.

Feb. 15, 10:15 p.m. \*Statler Auditorium. "Return of the Jedi".

### Sunday

Feb. 16, 2 p.m. \*Uris Hall Auditorium. "Heidi." Cosponsored with the Ithaca Youth Bureau.

Feb. 16, 2 p.m. Johnson Museum. Guest filmmaker: Michelle Citron—"Revising Romance: The Double Bind." Films shown: "Beneath the Skin," "Possibly in Michigan" and "Mother." Free and open to the public.

Feb. 16, 8 p.m. \*Uris Hall Auditorium. "The Glenn Miller Story" (1954), directed by Anthony Mann, with Jimmy Stewart and June Allyson.

### Monday

Feb. 17, 9 p.m. \*Uris Hall Auditorium. "Macbeth" (1948), directed by Orson Welles, with Orson Welles and Jeanette Nolan. Admission with Film Club pass or ticket purchased at door.

### Tuesday

Feb. 18, 4-6 p.m. (including 1-2 hr. discussion). Hoyt Fuller Room, 310 Triphammer Road. "Roots". Celebration of Black History Month. Presented by the Africana Studies and Research Center.

Feb. 18, 4:30 p.m. Uris Hall Auditorium. "L'Auberge Rouge" (1951), directed by Claude Autant-Lara, with Fernandel, Francoise Rosay. Co-sponsored by Romance Studies.

Feb. 18, 4:30 p.m. Uris Library Media Center, room 310. "River Journeys: Mekong" (1985). William Shawcross travels up the Mekong, from its delta to near its source, and visits surrounding areas in Vietnam, Cambodia, and Laos.

Feb. 18, 8 p.m. \*Uris Hall Auditorium. Guest Ithaca Filmmaker: Marilyn Rivchin presents local premiere of English version of "Saint Soleil" and other films.

### Wednesday

Feb. 19, 4:30 p.m. Uris Hall Auditorium. "Sisters of the Gion" (Kenji Mizoguchi, 1936). Co-sponsored by Cornell Cinema and the Society for the Humanities.

Feb. 19, 8 p.m. \*Uris Hall Auditorium. "Hombre" (1967), directed by Martin Ritt, with

Paul Newman and Frederick March. Co-sponsored by Centerpeace.

### Thursday

Feb. 20, 4-6 p.m. (including 1-2 hr. discussion). Hoyt Fuller Room, 310 Triphammer Road. "Roots". Celebration of Black History Month. Presented by the Africana Studies and Research Center.

### Friday

Feb. 21, 8 p.m. \*Anabel Taylor. "Birdy" (1984), directed by Alan Parker with Matthew Modine, Nicholas Cage, and John Harkins.

Feb. 21, 9:45 p.m. \*Uris Hall Auditorium. "Without Witness" (1983), directed by Nikita Mikhalkov with Irina Kupchenko and Mikhail Ulyanov.

Feb. 21, midnight. \*Uris Hall Auditorium. "Bring On The Night" (1985), directed by Michael Apted with Sting and Branford Marsalis.

### Saturday

Feb. 22, 7:15 p.m. \*Uris Hall Auditorium. "Hi-matsuri (Fire Festival)" (1984), directed by Mitsuo Yanagimachi with Kinya Kitaoji and Kiwako Taicho.

Feb. 22, 8 p.m. \*Anabel Taylor. "Birdy".

Feb. 22, 9:45 p.m. and midnight. \*Uris Hall Auditorium. "Bring on the Night".

### Sunday

Feb. 23, 2 p.m. \*Uris Hall Auditorium. "20,000 Leagues Under the Sea" (1954), directed by Richard Fleischer with Kirk Douglas, James Mason, and Peter Lorre. Co-sponsored by the Ithaca Youth Bureau.

Feb. 23, 2 p.m. Johnson Museum. Revising Romance: Video Picaresque featuring Eleanor Antin's "The Adventures of a Nurse".

Feb. 23, 8 p.m. \*Uris Hall Auditorium. "The Man Who Shot Liberty Valance" (1962), directed by John Ford, with Jimmy Stewart and John Wayne.

## Lectures

### Thursday

Feb. 13, 12:20 p.m. 102 West Ave. Ext. "Ethnic Inter-marriage in Singapore", Sharon Lee, Department of Sociology, National University of Singapore, SEAP Visiting Fellow.

Feb. 13, 4:30 p.m. Goldwin Smith Hollis Cornell Auditorium.

"Technical Planning for National Security," Richard L. Garwin, IBM Fellow, Thomas J. Watson Research Center, and A.D. White Professor-at-Large.

Feb. 13, 7:30 p.m. Faculty Commons. Martha Van Rensselaer. "Infertility: An Ironic Twist to Women's Liberation," Constance Hoenk Shapiro, Associate Professor, Human Service Studies. Sponsored by the Women's Studies Program.

### Friday

Feb. 14, 12:15 p.m. 360 Uris Hall. Brown Bag Lunch. "The Prison Memoirs of Political Detainees Under Colonialism", Barbara Harlow, Society for the Humanities.

### Tuesday

Feb. 18, 4:30 p.m. Goldwin Smith Kaufmann Auditorium. "Socratic Irony", Professor Gregory Vlastos, University of California, Berkeley, Department of Classics Townsend Lecturer, Spring 1986.

Feb. 18, 8 p.m. Goldwin Smith Hollis Cornell Auditorium. "The School of Aphrodisias. A New Chapter in the Contributions of Anatolia to Graeco-Roman Sculpture". Professor Kenan T. Erim, New York University (Charles Eliot Norton Lecturer of the Archaeological Institute of America).

### (Wednesday)

Feb. 19, 4:30 p.m. Goldwin Smith Hollis Cornell Auditorium. "Defining Music", Don M. Randel, Department of Music, Cornell University, Society for the Humanities Annual Invitational Lecture.

### Thursday

Feb. 20, 12:20 p.m. 102 West Ave. Ext. Bahtiar Effendy, Editor of MIZAN and of Panji Masyarakat, two Indonesian Islamic journals, will speak on Islamic and Indonesian studies.

### Friday

Feb. 21, 12 p.m. 250 Caldwell Hall. "Historical Overview of the Iroquois Confederacy in New York State", Ron LaFrance, Extension Associate. Sponsored by the Outreach Component and "Indian Studies", the publication of the American Indian Program.

Feb. 21, 12:15 p.m. 360 Uris Hall. Brown Bag Lunch. "The Mental Health of Ethnic Minorities and Women in London", John Ford, HDFS—Biology and Society.

## Music

Contemporary clarinet music will be featured in a recital by clarinetist and composer Mark Simon at 8:15 p.m. Friday, Feb. 21, in Barnes Hall. The concert is free and open to the public and is sponsored by the Music Department and the Cornell Council of the Creative and Performing Arts.

The recital will feature six recently composed works of Berio, Carter, Simon, Martino, Skrowaczewski and Milhaud, and are for solo clarinet as well with accompaniment. Simon will be assisted by Wendy Maraniss, piano; Ron Bukoff, bassoon, and Laura Campbell, flute.

Simon holds an M.M. degree in composition from Ithaca College and a D.M.A. degree in composition from Cornell, where he studied with Karel Husa.

Simon has selected his program with an eye towards variety, ranging from the rhythmic complexities of Elliot Carter to the catchy pop-tunes of his own "City Suite." As a composer, Simon said he believes that "popular music need not be solely the domain of screaming guitar-pickers, but may be molded to express a deep range of emotional subtleties and formal sophistication."

February 1986						
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### Every Sunday

Anabel Taylor Edwards Room, 9 p.m. Sing with the "Makhela: Hebrew Choir."

### Friday

Feb. 14, 8:15 p.m. Barnes Hall. Marina Gilman, songs by Bellini, Rossini, Wagner, Argento.

### Sunday

Feb. 16, 8:30 p.m. Anabel Taylor Commons Coffeehouse. Broadcast live on FM93. Sadie Green Sales-Ragtime Jug Band.

### Friday

Feb. 21, 8:15 p.m. Barnes Hall. Mark Simon, clarinet. Music of Berio, Carter, Simon, Martino, Skrowaczewski, Milhaud.

### Saturday

Feb. 22, 8:30 p.m. Goldwin Smith Kaufmann Auditorium. Michael Cooney, "The One-Man Folk Festival". Sponsored by the Cornell Folk Song Club. Tickets available at the Commons Coffeehouse, Ithaca Guitar Works, and Rebop Records.

### Sunday

Feb. 23, 8:30 p.m. Anabel Taylor Commons Coffeehouse. Broadcast live on FM93. Bill Steele, Ithacan humorous topical songwriter, author of "Garbage" and "Chocolate Chip Cookies".

## Religious Events

### Friday

Feb. 14 Anabel Taylor Hall. Ithaca Friends of Israel and Progressive Zionist Caucus Regional Zionist Conference "Arab-Jewish Coexistence in Israel: Prospects for the Future." For more information, call (days) 256-4227, (eves) 273-4839.

### Saturday

Feb. 15 Anabel Taylor Hall. Ithaca Friends of Israel and Progressive Zionist Caucus Regional Zionist Conference.

### Monday

Feb. 17, 7:30 p.m. Anabel Taylor G-34. Zionism 101.

### Tuesday

Feb. 18, 11-4 p.m. Anabel Taylor G-34. Shalich Gadi Aronson. Sign up to talk about "Israel Options".

Feb. 18, 8 p.m. Anabel Taylor room 314. Basic Judaism.

### Wednesday

Feb. 19, 12 noon. Anabel Taylor Founders Room. "Jewish Women's Discussion Group". Bring a lunch.

### Thursday

Feb. 20, 7:30 p.m. Anabel Taylor Edwards Room. "Jewish Practices and Thought: Kashrut".

## Religious Services

### Catholic

Every Saturday, 5:00 p.m. Anabel Taylor Auditorium. Mass.

Every Sunday, 9:30, 11 a.m., 5 p.m. Anabel Taylor Auditorium. Mass.

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

### Christian Science

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

Mon.-Fri., 7:30 a.m.; Sun., 8:30 a.m. Young Israel House, 106 West Ave.

### Episcopal (Anglican)

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

### Jewish

All services will resume Friday, Jan. 24.

Every Friday, 5:30 p.m. Anabel Taylor Founders Room. Shabbat Services (Conservative—Egalitarian).

Every Friday, 5:30 p.m. Anabel Taylor Chapel. Shabbat Services (Reform).

Every Friday, 5:30 p.m. Young Israel House, 106 West Ave. Shabbat Services (Orthodox).

Every Saturday, 9:15 a.m. Anabel Taylor Edwards Room. Shabbat Services (Orthodox). Kiddush to follow.

Every Saturday, 10 a.m. Anabel Taylor Founders Room. Shabbat Services (Conservative—Egalitarian). Kiddush to follow.

### Korean Church

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

### Muslim

Monday-Thursday, 1 p.m. Anabel Taylor 218.

Friday, 1 p.m. Anabel Taylor Edwards Room.

### Protestant

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

### Protestant Cooperative Ministry

### Sunday

Feb. 16, 11 a.m. Sage Chapel. Speaker: Robert L. Johnson, Director, Cornell United Religious Works.

### Sunday

Feb. 23, 11 a.m. Sage Chapel. Speaker: Sharon Dittman, University Chaplain, Protestant Cooperative Ministry.

# SNOW!

Is the University open,  
or is it closed?

Telephone **256-3377**



## Seminars

Seminar notices, unlike other calendar notices, do NOT go to Central Reservations in Willard Straight, but should be delivered to the Chronicle office, 110 Day Hall, in writing by noon Friday before publication. Each notice can be run only once, so on Thursday events please note whether you wish it published the day of the event or the week before. Please include the name and telephone number of someone who can be reached if there are questions.

**Applied Mathematics:** "Variational Principles for Hill Spherical Vortex and Nearly Spherical Vortices," W. H. Wan, SUNY Buffalo, 4 p.m. Friday, Feb. 14, 165 Olin.

**Astronomy:** "Instabilities of Accretion Tori," J. Goodman, Institute for Advance Study, Princeton, 4:30 p.m. Thursday, Feb. 13, 105 Space Sciences.

**Atomic and Solid State Physics:** Theory Seminar, Title TBA, David Bensimon, University of Chicago, 1:15 p.m. Thursday, Feb. 13, Clark 701.

**Atomic and Solid State Physics:** Solid State Seminar, "Fractal and Chaos Experiments in Mechanical Systems," Prof. Francis Moon, Cornell, 4:30 p.m. Tuesday, Feb. 18, Clark 700.

**Biochemistry, Molecular and Cell Biology:** "Role of Alpha and Delta Polymerase in Mammalian DNA Replication," Robert Bambara, University of Rochester, 4:30 p.m. Friday, Feb. 14, 204 Stocking.

**Chemistry:** "Tempering and Tampering with Metallated Amides," Victor Snieckus, University of Waterloo, 4:40 p.m. Monday, Feb. 17, 119 Baker Laboratory.

**Chemistry:** Baker Lecture series, "Intramolecular Dynamics" by Stuart A. Rice, University of Chicago, continues at 11:15 a.m. both Thursday, Feb. 13 and Tuesday, Feb. 18 in Baker 200.

**Computer Science:** "Generative Communication in the Distributed Programming Language Linda," David Galernter, Yale University, 4:30 p.m. Thursday, Feb. 13, Upson B-17.

**Floriculture and Ornamental Horticulture:** "Highlights of Horticultural Travel in Zimbabwe and South Africa," John Seeley, professor emeritus F&OH, 12:15 p.m. Thursday, Feb. 20, 37 Plant Science.

**Food Science:** "Effects of Milk Coagulants on Membrane Fouling and Permeate Flux During the Ultrafiltration of Cheddar Cheese Whey," Phil Tong, Department of Food Science, Cornell, 4:30 p.m. Tuesday, Feb. 18, 204 Stocking Hall.

**Geological Sciences:** "A Geologist's Perspective on Crustal Transect Construction in the Southern Canadian Cordillera," James Monger, Geological Survey of Canada, Vancouver, 4:30 p.m. Monday, Feb. 17, 1120 Snee.

**Hotel:** "Single-Service Rethermalization Equipment and Hospital Menu Quality," Bonnie Richmond, and "Perceptual Mapping—Price Quality Perceptions of Major Hotel Chains," Thomas Cullen, 4:30 p.m. Thursday, Feb. 13, Taylor Room, Statler Hall.

**International Nutrition:** "A.I.D.'s Program to Integrate Nutrition and Agriculture," Maura Mack, Nutrition Officer, Bureau for Science and Technology, Agency for International Development, 12:15 p.m. Thursday, Feb. 13, 130 Sav-age.

**International Studies in Planning:** "Biotechnology; National Research Programs and International Competition," Martin Kenney, Agricultural Economics and Rural Sociology, Ohio State University, 12:15 p.m. Friday, Feb. 14, 157 East Sibley.

**Jugatae:** "Parametric vs. Nonparametric Statistics," Charles McCulloch, Plant Breeding and Biometry, Cornell, 4 p.m. Monday, Feb. 17, Morrison Room, Corson—Mudd Halls.

**Materials Science and Engineering:** "Stability of Thin Film Amorphous Alloys," Frans Saris, FOM-Inst. for Atomic & Molecular Physics, 4:30 p.m. Thursday, Feb. 20, 140 Bard.

**Mechanical and Aerospace Engineering:** "Transport and Mechanical Properties of Composite Materials," Sal Torquato, North Carolina State University, 4:30 p.m. Tuesday, Feb. 18, 282 Grumman.

**Microbiology:** "Regulation of the Enzymes and Genes of the Bacterial Luminescence Operations," E. Meighan, Biochemistry, McGill, 4:30 p.m. Thursday, Feb. 13, 124 Stocking.

**Ornithology:** "Iceland Spring," Stephen Kress and Evelyn Weinstein, Laboratory of Ornithology and National Audubon Society, 7:45 p.m. Monday, Feb. 17, Lab of Ornithology, 159 Sapsucker Woods Road.

**Peace Studies:** (Brown Bag Seminar) Title TBA, Richard Garwin, A. D. White Professor-At-Large, 12:15 p.m. Friday, Feb. 14, 153 Uris Hall.

**Pharmacology:** "Neuronal Proteases and Their Inhibition During Development," Randy Pittman, Pharmacology, University of Pennsylvania, 4:30 p.m. Monday, Feb. 17, D101L Schurman.

**Plant Biology:** "Physiological Aspects of the Dehydrated State in Seeds," A. Carl Leopold, Boyce Thompson Institute, 11:15 a.m. Friday, Feb. 14, 404 Plant Science.

**Plant Breeding:** "Stalk Borer Resistance in Maize," Dirk L. Benson, graduate research assistant, Cornell, 12:20 p.m. Tuesday, Feb. 18, 135 Emerson.

**Plant Pathology:** "A Relationship Between Melanin Biosynthesis and Appressorial Pore Size in *Pyricularia Oryzae*," Richard Howard, Dupont, Wilmington, 4:30 p.m. Tuesday, Feb. 18, 404 Plant Science.

**Pomology:** "Research Funding Challenges and Opportunities," N. R. Scott, Office for Research,

4 p.m. Friday, Feb. 14, 114 Plant Science.

**Psychology:** "Is Speech Special? The Significance of Simian Sounds," Charles T. Snowdon, University of Wisconsin, 3:30 p.m. Friday, Feb. 14, 202 Uris Hall.

**Remote Sensing:** "Remote Sensing of Amazon Basin Deforestation," Thomas Stone, Marine Biological Lab., Woods Hole, Mass., 4:30 p.m. Wednesday, Feb. 19, 110 Hollister.

**Rural Sociology:** "The San Julian Cooperative: Issues of Participation and Organizational Survival on the Bolivian Frontier," Peter Taylor, graduate student, 3 p.m. Friday, Feb. 14, 32 Warren Hall.

**Textiles and Apparel:** "Conservation of Library and Archive Materials; Problems and Solutions," John Dean, conservation librarian, Cornell, 4:30 p.m. Tuesday, Feb. 18, 317 Martha Van Rensselaer Hall.

**Vegetable Crops:** "Irrigation-Induced Water Pollution in the San Joaquin Valley, W. H. Allaway, Agronomy, 4:30 p.m. Thursday, Feb. 20, 404 Plant Science.

## Theatre

Thurs. through Sat.

Feb. 13-15, 8 p.m. \*Willard Straight Theatre. Theatre Cornell opens its Spring Season with John Ford's "Tis Pity She's a Whore" Edward Payson Call, director of this play, describes it as "a decadent drama. 'Tis Pity...combines the appeal of a lurid episode of television's Dynasty with some superb poetry." Tickets available at the Theatre Cornell Box Office in 101 Willard Straight Hall from 1-6 p.m. Mondays through Fridays and one hour before all performances. For reservations and information call 256-5165.



Maggie Fleming as Annabella and Mark Torchia as Giovanni are featured in "Tis Pity She's a Whore" which opens Theatre Cornell's spring season at Willard Straight Theatre at 8 p.m. today. The play, written in poetic form, parodies Romantic love with perverted lust and also deals with corruption in the Church of England.

## Barton Blotter

There were eight thefts of cash totaling \$665 reported on campus for the period Feb. 3 to 9, according to the morning reports of the Department of Public Safety.

In addition, there were five other incidents of offices being broken into and cabinets pried open, but nothing was found missing. Thefts included \$130 taken from an office in Barnes Hall and \$80 taken from a room in Caldwell Hall. There were two thefts from rooms in Baker Laboratory for \$120 and \$5. Also, three rooms were broken into in Baker with nothing found missing.

There was a total of 15 thefts reported with losses in cash and valuables set at \$1,527. These included \$193 in various items taken from the Campus Store, a \$200 microwave stolen from Snee Hall, and wooden crutches worth \$45 taken from the library in Willard Straight Hall.

## Graduate Bulletin

GRADUATE FACULTY REPRESENTATIVES are reminded that noon on Thursday, February 20, is the deadline for receipt of nominations for the Special Fellowship Competition (nominees for ethnic diversity and Three-Year Teaching Fellowships).

For more information on the fellowships listed below contact the Graduate Fellowship office or your graduate faculty representative.

Feb. 21—UNITED NATIONS GRADUATE STUDENT INTERN PROGRAM: The United Nations Department of Public Information will conduct intern programs (NY, 6/12-7/18; Geneva, 7/14-7/31) to provide a deeper understanding of principles, purposes and activities of the United Nations. Each candidate must apply to the Cornell Graduate School, Fellowship Office, 116 Sage Graduate Center.

March 1—AMBASSADE DE FRANCE, Bourses Chateaubriand: The French government will award several research grants to American candidates either seeking a doctorate in the exact sciences or medicine, or to young Ph.D.s who obtained their degree no more than three years prior. The students must be willing to spend the 1986-87 academic year in a French university, engineering school or research laboratory. The grant will amount to 6,500 francs per month, payable in France for a period of ten months. The French government will pay for the return trip.

March 1—AMERICAN NUMISMATIC SOCIETY, Grants for Summer Study in Numismatics: The Society offers ten grants-in-aid for study at the 34th Seminar in Numismatics to be held at its museum from June 10 to August 9. The pur-

pose of the grants is to provide students with a deeper understanding of the contributions made by numismatics to other fields of study.

March 1—AMERICAN NUMISMATIC SOCIETY, Graduate Fellowships: A fellowship of \$3500 will be awarded to a university graduate student in the fields of humanities or social sciences who: 1) will have completed the general examinations for the doctorate; 2) will be writing a dissertation during 1986-87 on a topic in which the use of numismatic evidence plays a significant role; and 3) has attended one of the Society's Graduate Seminars prior to the time of application. The Council reserves the right to waive any of the listed requirements.

March 1—ARGONNE NATIONAL LABORATORY, Division of Educational Programs: Argonne National Laboratory offers opportunities for qualified graduate students to carry on their master's or doctoral thesis research at the Laboratory as a Laboratory-Graduate Participant or for Thesis Parts appointments. Areas of research include physical and life sciences, mathematics, computer science, engineering, conservation, environmental impact and technology, fission, fossil fuels, fusion, and solar energy. Appointments are made for periods of up to one year.

March 1—ATLANTIC SALMON FEDERATION/ATLANTIC SALMON TRUST: A \$6000 Bensing-Liddell Salmon Fellowship is awarded in alternate years for overseas travel, study and research benefitting Atlantic salmon conservation or management.

## 'One-Minute Manager'

Continued from Page 1

even more excited now about the course than they were before.

Teaching assistant Andrea Baltzan said, "He acts like what he says; he struck me as being the one-minute manager."

Blanchard, who holds two degrees from Cornell (A.B. '61, Ph.D. '67) said there should be only one grade on a Cornell graduate's record and that is an "A."

"Cornell students are winners or they wouldn't have gotten in. They should be graduated as winners."

He said he doesn't believe in flunking anyone, one of several radical ideas that he said led to his leaving college teaching. "If students fail to measure up, they can either drop the course or continue to redo the work no matter how long it takes until they come up to standards."

He said the time and money wasted on the course is punishment enough.

If the situation persists, such students will have to come to terms with parents and themselves to determine whether they should drop out altogether. Characterizing himself as a translator and communicator, Blanchard dropped capsules of current behavioral insights -- both negative and positive -- during his introductory lecture Friday. The lecture itself was the first of the three-part performance review he urges managers to use in business to get top performance out their employees.

He outlined the goals and objectives of the course and handed out the questions to the final examination, a practice for which he was criticized by his colleagues in the late 1960s and 1970s.

The second phase, he said, is the "day-to-

day coaching" to teach the class the answers. This is the most neglected area in both teaching and business. "This is where we teach people how to win," he said.

The final examination -- the performance evaluation -- is the third phase and is where most people in business organizations begin, he said.

Among the capsule ideas he dropped were:

-- "Try to catch people doing something right."

-- "Managers and teachers are cheerleaders, facilitators, a service organization for other people."

-- "The truth makes all the difference in achieving success."

-- "The leave you alone and zap method of management."

-- "In life, what you resist persists. If you face what is bothering you, it will go away in the process."

-- "Cornellians are successful because winners interacting with winners make winners."

-- "You've got to take care of your employees and customers; if you do you'll kill the competition anywhere you go."

-- "People who feel good about themselves produce good results."

-- "If you don't have stress in your life, you're dead. So stress isn't the problem. It is how you deal with it."

Blanchard said he has been a life-long advocate of positive thinking and is currently collaborating in the writing of a book with the legendary Norman Vincent Peale, the 88-year-old author of "The Power of Positive Thinking."

Expected to be out in the fall, the new book is titled "The Power of Ethical Management: You Don't Have to Cheat to Win."

## Financial Aid Program Revisions Considered, Faculty Council Told

Tuition increases and cuts in federal student aid are leading Cornell to consider revising its financial aid programs, the Faculty Council of Representatives was told Tuesday.

Financial aid changes proposed last November by a 26-member commission are being reviewed by the Board of Trustees' Committee on Academic Affairs, said Benjamin Nichols, professor of electrical engineering and a member of the commission studying undergraduate financial aid.

"We won't have to take any drastic steps" for next year, Nichols told an audience of about 40 people. But some changes will be needed for Cornell to continue attracting good students of differing social and ethnic backgrounds, he added.

At present, Cornell admits students regardless of their ability to pay and then develops a financial aid package that includes contributions from parents, students, government programs, and university funds. For the past four years, Cornell has used an admissions rating system that allows schools and colleges to target financial aid to students the university desires to enroll, based on academic performance and other characteristics.

Among its recommendations, Nichols said, the commission has proposed that Cornell continue admitting students regardless of their ability to pay, factor inflation into all elements of financial aid packages, increase student wages, and lengthen the summer vacation to help students earn more money.

The admissions rating system should be abolished as "a misguided effort," because students' ratings are not affected by their performance at Cornell, Nichols said. Most Cornell units are revising or dropping the ratings system, he added.

In addition, Cornell should continue to pay special attention to the financial needs of low-income and under-represented students, Nichols said.

"A lot needs to be done to find out how students do support themselves," he said. "We don't know how many students have left because of financial problems."

In other action at the FCR meeting, it was announced that:

-- As of Feb. 5, freshman applications for next year had reached 20,994, a 7 percent increase from last year's record high.

-- Candidates are being sought for the faculty seat on the Board of Trustees.



Number 6

## Cornell University

**University Personnel Services**  
**Day Hall**  
**Ithaca, New York 14853**  
**607/255-5226**

## Please Note:

Job Opportunities is a publication of Staffing Services and is distributed each Thursday through the Cornell Chronicle.

Job Opportunities lists current vacancies with the University, consistent with the University's commitment to promotion from within, affirmative action and equal opportunity employment.

Employee Transfer Applications: Em-

ployees who wish to transfer to other jobs within the University should complete a separate Employee Transfer Application form for each position and submit the form(s) to Staffing Services. Individuals with official University layoff status are given preference in referrals.

Applicants: Applications for employment are available at Cornell University's

employment office at East Hill Plaza at the intersection of Ellis Hollow Road and Judd Falls Road in Ithaca, from 9:00 a.m. to 12:00 noon, Monday through Friday. Completed applications can be submitted through the mail to University Personnel Services, Staffing Services, 160 Day Hall, Ithaca, NY 14853.

This listing is also available on CUINFO, Cornell University's computerized information service. For further details on CUINFO, contact the Information

and Referral Center at 256-6200 or Computer Services.

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

February 13, 1986

tivation analysis and in reactor uses desirable. Apply by February 21, 1986 to Cynthia Smithbower.

Job Number: PT024

Position: Administrative Manager I (Repost)

Department: CHESS

Description: Under general administrative direction, perform, supervise, direct and/or advise on work related to the personnel, business and facilities aspects of a medium size department. Related activities may involve program/project management, funds management, contract and grant administration, staff supervision, management analysis, property and space management and information/data systems management.

Requirements: Bachelor's degree or equivalent. Knowledge of management principles/methods preferred. Three years relevant administrative or supervisory experience. Knowledge of finance, accounting and budgeting. Familiarity with computer systems helpful. Good communication and human relations skills. Please send cover letter and resume to Ralph D. Jones.

Job Number: PA466

Position: Staff Engineer

Department: Laboratory of Nuclear Studies

Description: Work on hardware improvements for the Cornell Electron Storage Ring, a high energy physics research facility. The job involves the design and fabrication of equipment and offers the opportunity to participate in the operations and experiments with a state-of-the-art accelerator system.

Requirements: Minimum Bachelor's degree in electrical engineering, applied physics, or physics. Experience in power equipment, computer control systems, pulse circuitry or radiofrequency devices and techniques is desirable. Please send cover letter and resume to Ralph D. Jones.

Job Number: PA0114

\*Asterisks identify jobs that were not listed last week.

## Job Opportunities

Cornell University is an equal opportunity, affirmative action employer.

## Administrative/Professional

The minimum salaries listed are for recruitment purposes only.

\*Position: Development Assistant, Cornell Fund Department: University Development

Description: Development Assistant works with the Director of the Cornell Fund in the planning and implementation of the University's annual campaigns for alumni support. Assist the director in implementing a personal solicitation program.

Requirements: Bachelor's degree or equivalent experience. Excellent written communication and organizational skills with direct experience in direct mail and/or a familiarity with the production of written and visual materials. Good with numbers and business skills. Please send cover letter and resume to Ralph D. Jones by February 28, 1986.

Job Number: PA063

\*Position: Data Analyst/Administrative Supervisor II Department: Clinical Sciences

Description: Assist in personnel and administrative matters in the Section of Medicine, maintain financial accounting system, provide appropriate and timely reports, and prepare financial analyses and projections for long range planning. Develop and maintain computer-based data management system.

Requirements: Bachelor's degree required in business administration with concentration in accounting; Master's preferred. Experience in accounting and with micro-computer systems for data analysis essential. Experience with federal grants/contracts administration. Please send cover letter and resume to Ralph D. Jones by February 28, 1986.

Job Number: PA061

\*Position: Research Support Specialist II Department: Horticultural Sciences, Geneva

Description: Implement research relating to problems relevant to the Long Island grape industry. Research will be multifaceted and may include experiments in vine physiology, variety evaluation, vineyard management, grape insects and vineyard disease control.

Requirements: Master's degree in plant science or related field with viticultural experience. Knowledge of laboratory equipment and familiarity with basic farm equipment. Some experience with computers, statistical analysis and general chemistry is desirable. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT062

\*Position: Research Support Specialist II Department: Physiology

Description: Design and conduct, in collaboration with the principal investigator experiments directed towards the cloning and characterization of intestinal DNAs and genes; study of control of gene expression during development and differentiation of the intestinal epithelium; will assist in preparation and coauthoring publications.

Requirements: Master's degree in biology with emphasis in biochemistry and molecular biology, or genetics. Some experience in recombinant DNA techniques such as RNA purification, DNA cloning and sequencing required. Please send cover letter and resume to Cynthia Smithbower by February 28, 1986.

Job Number: PT065

\*Position: Semiconductor Research Engineer (Repost) Department: National Submicron Facility

Description: Responsible for installation, operation, maintenance and development of semiconductor processing equipment including high temperature furnaces, plasma deposition, electron beam evaporation and ion milling systems.

Requirements: Bachelor's degree in electrical engineering, materials science, applied physics, chemical engineering or related field. Familiarity with high vacuum systems, electronics troubleshooting and semiconductor processing equipment desirable. Must be able to work effectively with graduate students, scientists and faculty from a wide variety of disciplines. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT257

Position: Computer Staff Specialist

Department: Media Services

Description: As technical advisor for entire Media Services department, is responsible for network operations, accounting and record-keeping systems, and electronic office integration. Will make recommendations on hardware and software acquisitions, implement office systems, advise clients on interfacing with Media Services network. Provide consultation services to staff.

Requirements: Bachelor's degree or equivalent with coursework in computing or related field. 3 to 5 years of computer systems and/or programming. In-depth knowledge of micro-minicomputer hardware and software systems, peripherals, their performance features and characteristics, various software graphics, statistical and database management programs and packages. Strong communication, interpersonal skills. Please send cover letter and resume to Cynthia Smithbower by February 21, 1986.

Job Number: PT051

Position: Administrative Manager II

Department: Human Development Family Studies

Description: Responsible, under direction of the chairman, for overseeing the personnel and business operations of a large department. Develop, prepare and monitor department and grants budgets. Oversee information/data systems management. Assist faculty with preparation of large volume of proposals; oversee management of support staff; analyze and make recommendations for internal business and personnel operation.

Requirements: Bachelor's degree required. Excellent communication and human relation skills. Knowledge of

Please Post

management principles/methods. Five years relevant administrative/supervisory experience. Knowledge of finance, financial systems, accounting and budgeting. Familiarity with computer systems preferred. Please send cover letter and resume to Ralph D. Jones by February 20, 1986.

Job Number: PA055

Position: Administrative Supervisor II

Department: Agricultural Economics

Description: Coordinate and supervise the personnel, communication and reporting aspects of the special '800' number information and referral system for New York State Farm families. Plan, schedule, and review assignment of several part-time information and referral system telephone operators. Secure and maintain up-to-date system referral information. Implement and monitor system logging and data information including a computerized data base. Term appointment through 2/28/87; contingent upon funding.

Requirements: Associate's degree or equivalent combination of education and experience. Minimum 3 to 5 years administrative and supervisory experience essential. Ability to deal with sensitive issues. Strong oral and written skills. Microcomputer experience desirable. Familiarity with farming and farm families. Knowledge of Cornell Cooperative Extension a plus. Please send cover letter and resume to Esther L. Smith by February 17, 1986.

Job Number: PC057

Position: Administrative Manager II (Repost)

Department: New York City Cooperative Extension Description: Responsible for personnel, fiscal, and administrative management of New York City programs of Cornell University Cooperative Extension. Supervise the other maintenance and processing of personnel and other confidential records. General administrative supervising of 8 to 10 office staff. Assist with the development of maintenance of department budget; monitor expenditures and supervise maintenance of financial accounts and records.

Requirements: Bachelor's degree in accounting or business with concentration in accounting. Three years accounting experience in business, public agency or an educational institution. Familiarity with computerized accounting systems. Evidence of continuing education in accounting-related subjects (courses, seminars, professional affiliations, etc). Please send cover letter and resume to Ralph D. Jones.

Job Number: PA446

Position: Assistant to the Vice President of Public Affairs (Repost)

Department: Public Affairs

Description: Assist the Vice President of Public Affairs with overall coordination and management of the division of Public Affairs, especially financial management, budgeting and long-range planning; preparation of divisional budget requests and financial reports, monitoring financial performance of departments. Directing personnel activities for the division. Researching, writing, editing major reports, and coordinating alumni leadership development.

Requirements: Bachelor's degree or equivalent. Cornell experience desirable; Public Affairs or related experience desirable; good oral and written communication skills, especially writing, required; quantitative analysis skills desirable. Please send cover letter and resume to Ralph D. Jones by February 20, 1986.

Job Number: PA4612

Position: Custodial Supervisor

Department: Buildings Care - Statutory

Description: Responsible for custodial maintenance of a large complex of buildings on campus. Supervise a staff of 30, actively maintain excellent working relationships with building users and manage large equipment and support inventory. Monday - Thursday, 6:00am - 2:30pm; Friday, 6:00am - 1:30pm.

Requirements: High school diploma or equivalent; some college coursework preferred. Candidate must possess substantial supervisory experience, preferably in the area of labor relations, strong written and verbal communications skills and experience in inventory management. Please send cover letter and resume by February 20, 1986 to J. Courtney Fletcher.

Minimum Starting Salary: \$13,625

Job Number: PS056

Position: Architect/Project Manager

Department: Architectural Services

Description: The primary responsibility is to manage major architectural projects for the University. Assist the Director and Project Managers in establishing and maintaining technical, budgetary, and scheduling requirements of all capital projects.

Requirements: Bachelor's degree in architecture required. Architectural registration desirable. 10 years minimum experience. Excellent organizational skills. Good communication skills. Experience with personal computer desirable. Please send cover letter and resume to Patricia Hutton.

Job Number: PA046

Position: Payroll Manager

Department: Controller (Endowed Accounting)

Description: Manage the Endowed Payroll Office. Responsible for payroll schedules while adhering to University policies and procedures. Work with university administrators and computer personnel to maintain and update the payroll system. Review tax legislation and specify program changes to meet governmental withholding and reporting regulations. Counsel employees on payroll-related matters. Supervise a staff of seven.

Requirements: Bachelor's degree in business or accounting or equivalent. 3 to 5 years experience in large payroll or accounting office. Familiarity with computerized financial systems is desirable. Must possess demonstrated supervisory ability and excellent verbal and written communication skills. Please send cover letter and resume to Ralph D. Jones.

Job Number: PA033

Position: Applications Programmer/Analyst III

Department: Computer Services (APS)

Description: As a member of a team that implements and maintains administrative systems will interface new systems and programs with existing systems and programs. Investigate and evaluate outside software systems to integrate or replace current production systems. Prepare estimates of programming time and computer production costs for given proposals.

Requirements: Bachelor's degree or equivalent. 3 to 5 years computer experience necessary. Knowledge of interactive administrative systems, database management, IBM operating systems and two major programming languages required. Prior supervisory experience helpful. Please send cover letter and resume to Cynthia Smithbower by February 21, 1986.

Minimum Starting Salary: \$20,000

Job Number: PT041

Position: Network Communications Specialist (Repost)

Department: Computer Services - Network Communications

Description: Assist in the development and implementation of data communications facilities in a multi-vendor, decentralized academic environment which includes: 3084, 3081, 4341 and multiple VAX processors; 3705 and 4705 communications controllers; VM, CMS, CP, UNIX, EP and COMM-PRO software; Sytek; Ethernet, Pronet, PCnet and Omninet Local Area Networks; Async, RJE and BSC 3270 Protocols. Will be a resource to the University community including the recently inaugurated NSF Supercomputer Facility concerning state-of-the-art technologies and implementations.

Requirements: Bachelor's degree in electrical engineering, computer science or related background and several years of relevant experience. Excellent interpersonal and communications skills are essential. Must have knowledge and experience in data communications. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT472

Position: Senior Applications Programmer/Analyst (Repost)

Department: Computer Services - APS

Description: As a member of the technical support group, will maintain and modify the data base and fourth generation programming environment in which administrative systems are developed.

Requirements: Bachelor's degree with computer courses and 3-5 years computing experience. Must be able to program in at least two languages including IBM 370 assembler. Must have knowledge of operating systems, especially VM/CMS. Familiarity with MVS, data base concepts and mini-micro computers preferred. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT469

Position: Area Supervisor

Department: Computer Services, Network Communications

Description: Responsible for daily supervision, technical guidance and scheduling of NetComm technicians who perform installations, problem diagnosis and field repairs on microcomputers and data communications equipment. Will participate in installations and higher level problem diagnosis. Will rotate on-call responsibilities.

Requirements: Bachelor's degree or equivalent with coursework in electronics, computer science and data communications/telecommunications. 3 to 5 years extensive data communications hardware/software experience. Supervisory training desirable. Superior technical problem diagnosis, organizational and interpersonal communications skills required. Please send cover letter and resume to Cynthia Smithbower by February 21, 1986.

Job Number: PT037

Position: Applications Programmer II

Department: Physical Education & Athletics

Description: Install, modify, service, maintain, develop and document applications systems software for moderately complex functions in a Convergent Technologies minicomputer system. Contribute to ongoing planning and development of hardware and software needs for a broad based minicomputer system. Provide general and specific training for all users.

Requirements: Bachelor's degree in computer science or related field. Knowledge of Convergent Technologies hardware/software helpful. Pascal and basic programming knowledge required. Excellent interpersonal and communications skills necessary. Apply by February 21, 1986 to Cynthia Smithbower.

Job Number: PT035

Position: Director

Department: University Press

Description: Oversee financial affairs of the Press's operations; establish managerial policies for the professional and nonprofessional staff, and develop, in conjunction with a faculty Board of Editors, editorial policy for the Press, which has a staff of 50, publishes approximately 100 titles yearly, and has annual sales of approximately \$4 million.

Requirements: Bachelor's degree. Demonstrated successful experience in the editorial, managerial, and financial aspects of university publishing, or equivalent experience. Please send cover letter and resume to Ralph D. Jones.

Job Number: PA026

Position: Research Support Specialist, III

Department: Nuclear Science and Engineering

Description: Design, construct, and maintain digital and analog electronic laboratory equipment including radiation detectors, nuclear reactor control systems, and minicomputers and microprocessors; assist in software development, activation analysis and other reactor uses.

Requirements: Bachelor's degree or equivalent in electrical engineering or related field. Some experience in digital circuit design and trouble-shooting; experience in ac-

## Clerical

CURRENT EMPLOYEES should submit an employee transfer application, resume and cover letter. Also, if you are interested in a career development interview, please contact Esther Smith at 6-5226 to schedule an appointment.

OUTSIDE APPLICANTS should submit an employment application and resume. Applications and resumes typically remain active for three months; typing test scores remain on file for one year. The clerical section uses an automatic referral system whereby outside applicants are referred to positions for which they are considered qualified and competitive. Unless otherwise advertised, requests to be referred to a specific position will not be accepted. Applicants who are referred to a department for review will be contacted by the department if an interview is necessary.

NOTE: OPEN INTERVIEWING FOR OUTSIDE APPLICANTS interested in clerical positions will be conducted every Wednesday afternoon from 1:00 - 6:00pm. in our East Hill Plaza Employment Office. No appointment is necessary, however a short wait may be required. Call Esther Smith or Lauren Worsell if you have any questions.

\*Position: Accounts Coordinator, GR22

Department: Utilities

Description: Provide administrative and accounting support for the Department of Utilities and Administrative Services. Budget preparation; reporting; accounts reconciliation; maintain and analyze Utility and Job Cost Systems; forecast rates, internal procedures auditing; handle projects as assigned.

Requirements: Associate's degree or equivalent. Medium typing. Knowledge of calculator, typewriter, personal computers (IBM and Macintosh) essential. Accurate typing a must. Excellent interpersonal and communications (written and oral) skills. Cornell accounting system experience desirable.

Minimum Starting Salary: \$13,667

Job Number: CO616

\*Position: Administrative Aide, GR20

Department: University Development

Description: Provide wide range administrative assistance to the Director in Corporate Development. Transcription; make travel arrangements and appointments; coordinate events off and on campus; review all incoming correspondence and route to appropriate staff; initiate responses as appropriate; prepare management and gift reports performing and coordinating research.

Requirements: Associate's degree or equivalent. Medium typing. Excellent and accurate typing required. Experience in word processing desirable. Ability to work independently. Excellent organizational, interpersonal and communication skills.

Minimum Starting Salary: \$12,209

Job Number: CO65

\*Position: Accounts Assistant, GR19

Department: Ecology and Systematics

Description: Provide clerical support for all aspects of endowed accounting. Process orders and payments; reconcile monthly statements; prepare internal statements and financial reports on microcomputer; problem solving; payroll; provide back-up for statutory accountant. Other duties as assigned.

Requirements: Associate's degree or equivalent in accounting preferred. Medium typing. Substantial accounting experience, preferably at Cornell. Familiarity with grants and contracts. Knowledge of, or strong interest in, modern data processing highly desirable.

Minimum Starting Salary: \$11,570

Job Number: CO66

\*Position: Audio-Visual Aide, GR19

Department: History of Art

Description: Responsible for projection and circulation of slides; train and supervise student projectionists; maintain audio-visual equipment; assist borrowers, mounting and accessing slides and training students to do the same.

Requirements: Associate's degree or equivalent; Bachelor's degree or equivalent desirable. Medium typing. Facility in handling audio-visual equipment essential. Ability to handle emergency situations in class room projection. Library experience. Good organizational, communication and interpersonal skills. Please send cover letter and resume to Esther L. Smith by February 20, 1986.

Minimum Starting Salary: \$11,570

Job Number: CO67

\*Position: Administrative Aide, GR19

Department: Law School

Description: Provide secretarial and administrative support to the Associate Dean and to the Assistant Director of Alumni Affairs. Coordinate production of mailings for Law School alumni functions; responsible for the Alumni Office computer system; maintain alumni dues files and deposits; word processing; file; receptionist and telephone. Other duties as assigned.

Requirements: High school diploma or equivalent; associate's degree desirable. Medium typing. Minimum 1 to 3 years related secretarial experience. Familiarity with IBM-PC or willingness to learn. Strong organizational, interpersonal and communication skills. Ability to take dictation essential.

Minimum Starting Salary: \$11,570

Job Number: CO614

\*Position: Secretary, GR18

Department: Human Development Family Studies

Description: Provide secretarial support for graduate and undergraduate program administrators and 1 to 2 faculty. Serve as receptionist for HDFS Department main office. Answer telephone; type; file. Other duties as assigned.

Requirements: High school diploma or equivalent. Sec-



retarial school desirable. Medium typing. Excellent interpersonal skills. Strong typing skills. Ability to work under pressure.

Minimum Starting Salary: \$10,920  
Job Number: CO62

\*Position: Data Entry Operator, GR18  
Department: Computer Services  
Description: Key enter or key verify data via Cade keystations. Some shift work and weekends.  
Requirements: High school diploma or equivalent. Medium typing. Data entry and/or keypunch experience, preferably Cyde system experience at least 1 to 2 years.  
Minimum Starting Salary: \$10,920  
Job Number: CO63

\*Position: Night Supervisor, GR18 (Repost)  
Department: University Libraries - Hotel Library  
Description: In charge of the library at night. Responsible for circulation and reserve operations; all photocopying services and newsletter distribution; compile and input Annual Bibliographies and Accessions lists; interlibrary loan. Other duties as assigned. Academic Year: Monday -Thursday, 3:30pm - midnight; Sundays, 2:00pm - midnight; Summers: Monday - Friday, noon to 9:00pm; Intersessions: Monday - Friday, 8:00am - 5:00pm.

Requirements: Associate's degree or equivalent; bachelor's degree preferred. Light typing. Library experience desirable. Good clerical skills with ability to use word processors and small computers. Excellent communication, organizational and interpersonal skills.  
Minimum Starting Salary: \$10,920  
Job Number: CO116

\*Position: Editorial Assistant, GR18 (Repost)  
Department: Media Services  
Description: Provide production and editorial support for Publications and Visual Communications unit. Check, proof, keyboard manuscripts, maintain a range of department files, process reprints.

Requirements: High school diploma or equivalent. Medium typing. Two to three years of office experience. Excellent proofreading skills. Familiarity with word processing desirable. Please send cover letter and resume to Esther L. Smith by February 24, 1986.  
Minimum Starting Salary: \$10,920  
Job Number: C487

\*Position: Secretary, GR16  
Department: University Development  
Description: Provide secretarial support to the Business Manager and the Administrative Aide to the Director of Development Operations. Act as primary switchboard operator for Office of University Development.  
Requirements: High school diploma or equivalent. Medium typing. Knowledge of electronic typewriter. Some office experience. Excellent telephone techniques. Good interpersonal skills.  
Minimum Starting Salary: \$9,874  
Job Number: CO64

\*Position: Interlibrary Services Assistant, GR16  
Department: University Libraries - Interlibrary Services/Olin Library  
Description: Prepare interlibrary materials for mailing; page materials from Olin stacks; route interlibrary loan requests to campus library units; search; compile statistics; discharge returned interlibrary loans; answer phone; maintain interlibrary loan files.  
Requirements: High school diploma or equivalent; some college coursework desirable. Light typing. Organizational skills. Ability to work under pressure while maintaining accuracy. Ability to work with foreign languages. Work experience in a library or office desirable.  
Minimum Starting Salary: \$9,874  
Job Number: CO68

\*Position: Records Assistant, GR16  
Department: Catalog - Olin Library  
Description: The position is in the Records Management section of the Catalog Department. File and type cards; input bibliographic records in RLIN computer system. Other duties as assigned including working on other catalog and catalog maintenance projects. Full-time, regular; Monday - Friday, 8:00am - 5:00pm; some flexibility.  
Requirements: High school diploma or equivalent. Medium typing. Ability to do detailed work with skill and accuracy. Previous library experience desirable.  
Minimum Starting Salary: \$9,874  
Job Number: CO610

Position: Administrative Aide, GR20  
Department: Agricultural Engineering  
Description: Assist with the development and execution of numerous research proposals. Type classwork, correspondence, manuscripts, etc.; proofread and edit proposals and progress reports; assist with financial reporting of grant expenditure; handle projects as assigned.  
Requirements: Associate's degree or equivalent in secretarial science. Heavy typing. Minimum 3 to 5 years experience. High-speed-accurate typing. Good grammar, punctuation, and communication skills. Machine transcription experience. Excellent editing skills. Biological/chemical background helpful in understanding terminology desirable.  
Minimum Starting Salary: \$12,209  
Job Number: CO514

Position: Secretary, GR19  
Department: NYSSILR - Office of Student Services  
Description: Assist Associate Director for Minority Affairs and the Registrar in undergraduate advising office. Type correspondence and catalog copy; manage appointment calendars; monitor records of small financial aid budget; word processing and data-entry. Interact with undergraduate students, counselors, and faculty. Other duties as assigned.  
Requirements: Associate's degree or equivalent. Medium typing. Minimum 3 to 5 years experience in a similar position. Some word processing and data entry experience required. Ability to work with diverse public.  
Minimum Starting Salary: \$11,570  
Job Number: CO57

Position: Office Assistant, GR19  
Department: NYSSILR - Office of Student Services  
Description: Assist School Registrar in academic record-keeping (courses, grades, demographic data) and data gathering for reports and student performance research; word processing and data entry; interact with undergraduate students, counselors, and faculty. Other duties as assigned.  
Requirements: Associate's degree or equivalent. Light typing. Minimum 3 to 5 years experience in a similar position. Some word processing and data entry experience required. Ability to work with diverse public.  
Minimum Starting Salary: \$11,570  
Job Number: CO56

Position: Word Processor Operator, GR18  
Department: School of Hotel Administration  
Description: Provide word processing support for 18 faculty in the Hotel School and clerical support to the administrative aide. Type and proofread moderately complex class materials (charts, exams, correspondence, proposals, research, reports, manuscripts); write and type drafts of letters and memos. 9-month appointments.  
Requirements: High school diploma or equivalent; secretarial school desirable. Medium typing. Excellent typing. WANG word processing skills preferred. Strong written communication including knowledge of editing and proofreading symbols. Excellent spelling and grammar.  
Minimum Starting Salary: \$10,920  
Job Number: CO53

Position: Office Assistant, GR18  
Department: Human Service Studies  
Description: Provide secretarial support for Department Social Services project. Type training materials and reports for staff trainers and administrators; file; answer

phones. Other duties as assigned.

Requirements: High school diploma or equivalent; business or secretarial school desirable. Heavy typing. Previous secretarial experience. Good interpersonal, telephone, and transcription skills. Ability to work under pressure. Familiarity with computers and word processors or a willingness to learn.  
Minimum Starting Salary: \$10,920  
Job Number: CO510

Position: Secretary, GR18  
Department: Division of Nutritional Sciences  
Description: Provide secretarial support for 2 faculty. Operate word processor; prepare vouchers and purchase orders; verify accounts and keep records; arrange travel; type correspondence, manuscripts, grant proposals, reports and class material; answer telephone; file.  
Requirements: High school diploma or equivalent; business or secretarial school desirable. Heavy typing. Minimum 1 to 3 years office experience. Word processor experience (IBM). Familiarity with Cornell procedures.  
Minimum Starting Salary: \$10,920  
Job Number: CO515

Position: Secretary, GR18  
Department: Pharmacology  
Description: Provide support to the administrative manager. Type complex technical manuscripts, abstracts, correspondence, etc. operate word processors, microcomputers; answer and screen calls; arrange meetings and travel; handle mail; maintain files; perform library reference tasks. Other duties as assigned.  
Requirements: High school diploma or equivalent; business or secretarial school preferred. Heavy typing. Minimum 1 to 2 years experience. Excellent interpersonal and communication skills. Knowledge of medical terminology helpful. Knowledge of word processors, microcomputers desirable.  
Minimum Starting Salary: \$10,920  
Job Number: CO55

Position: Administrative Secretary, GR18  
Department: Alumni Affairs  
Description: Provide secretarial support for two assistant directors of class affairs. Answer phone; type; file; arrange travel; assist in all aspects of program planning, e.g. reunion, homecoming. Interact with Cornell alumni.  
Requirements: High school diploma or equivalent; some business school or college coursework desirable. Medium typing. Experience and skill in general office procedures. Good organizational and communication skills. Ability to work under pressure. Knowledge of memory typewriter and IBM PC preferred.  
Minimum Starting Salary: \$10,920  
Job Number: CO512

Position: Special Collections Assistant, GR18  
Department: University Libraries - Manuscripts & Archives Olin Library  
Description: Arrange, describe, and index archival collections; write descriptive abstracts; compile and enter computer-generated guides; arrange with offices and private donors for transfer of material; stack maintenance. Full-time, regular until January 31, 1988.

Requirements: Associate's degree or equivalent; Bachelor's degree or equivalent desirable. Light typing. Strong organizational skills. Excellent writing skills. Word processing desirable. Ability to lift up to 50 lbs and to stand for long periods of time. Occasionally works with dusty or dirty material.  
Minimum Starting Salary: \$10,920  
Job Number: CO52

Position: Office Assistant, GR17  
Department: Summer Session, Extramural Study & Related Programs  
Description: Serve as receptionist; process mail; order supplies; general typing for office; process requests for information; assist Division Registrar in registration process; operate 3270 computer system in key punching and data verification.

Requirements: High school diploma. Medium typing. Minimum 1 to 2 years office experience. Ability to work with diverse public. Excellent interpersonal and communication skills essential. Ability to work independently and under great pressure. Background with IBM 3270 computer and familiarity with University Registrar's system desirable. Experience with WordPerfect preferable. Some familiarity with Cornell desirable.  
Minimum Starting Salary: \$10,366  
Job Number: CO511

Position: Receptionist, GR16  
Department: Center for International Studies  
Description: Act as receptionist for C.I.S. Answer inquiries on phone and in person; maintain calendar and schedules. Other duties as assigned.

Requirements: H.S. diploma or equivalent. Medium typing. Minimum 1-2 years of experience. Knowledge of personal computers. Excellent interpersonal and communication skills.  
Minimum Starting Salary: \$9,874  
Job Number: CO516

## General Service

\*Position: Senior Research Service Technician, GR23  
Department: LASSP  
Description: Perform trade functions necessary for the installation and support of research related laboratory equipment including soldering, use of electrically operated hand tools, rigging, understanding of basic compressed gas system, hydraulics and air handling.

Requirements: High school diploma or equivalent; shop courses preferred. Four years experience in shop environment. Knowledgeable in the use of wood and metal working tools and machinery; ability to work from drawings. Ability to work with minimum supervision.  
Job Number: SO66

\*Position: Maintenance Mechanic, GR17  
Department: Plant Pathology - Lake Placid, NY  
Description: Assist in all phases in the production of foundation seed potatoes at the Uihlein Farm in Lake Placid, NY. Includes planting, roguing seed stocks for diseased plants and varietal mixtures, harvesting and grading. Also perform minor repairs on farm machinery, calibrate equipment for application of lime, fertilizer, and pesticides.

Requirements: High school diploma or equivalent. Experience as a mechanic; must have ability to operate and make minor repairs of automotive and farm machinery. Physically capable of lifting 100 lb. potato sacks and 80 lb. fertilizer bags.  
Minimum Starting Salary: \$10,366  
Job Number: SO611

\*Position: Custodian, SO16 (Two positions)  
Department: Statler Inn - Endowed  
Description: Provide general maintenance and custodial care of buildings and grounds in immediate vicinity of assigned area. Monday - Friday, 3:00pm - 11:00pm; rotate weekends.

Requirements: Ability to use a variety of heavy power operated equipment, climb an 8' ladder and lift 50 lbs.  
Job Number: SO68, SO69

## Technical

Outside applicants for technical positions should submit an employment application, resume, transcripts and a list of laboratory techniques and equipment, or computer languages and hardware with which you are familiar. This information will be kept active for six months. For each position that you are qualified and wish to be a candidate for, submit a cover letter, including position title,

department and job number, to Cynthia Smithbower. Current Cornell employees should submit an employee transfer application, resume and cover letter. Outside applicants with training and/or experience in the following areas are encouraged to apply: biochemistry, chemistry, microbiology, electronics, physics and liensed animal health technicians.

\*Position: Computer Operator I, GR21  
Department: Computer Services  
Description: Operate large scale computer systems and associated peripheral equipment and monitor data communications network. Consult with vendor customer engineering and departmental support staff. Shift work and weekends.

Description: Associate's degree or equivalent in data processing education and experience. Computer operating experience required, data communications experience helpful. Knowledge of computer hardware, software, operating systems, and programming languages. Apply by February 28, 1986.  
Minimum Starting Salary: \$12,968  
Job Number: TO65

\*Position: Computer Operator, GR21  
Department: Computer Services - Production Super-computer Facility  
Description: Operate large scale computer systems and associated peripheral equipment and monitor data communications network. Consult with vendor customer engineering and departmental support staff. Shift work and weekends.

Description: Associate's degree or equivalent in data processing education and experience. Computer operating experience required, data communications experience helpful. Knowledge of computer hardware, software, operating systems, and programming languages. Apply by February 28, 1986.  
Minimum Starting Salary: \$12,968  
Job Number: TO66

\*Position: Laboratory Equipment Technician, GR21  
Department: Electrical Engineering  
Description: Assist in the efficient operation of the Electrical Engineering School's teaching laboratories and to support the daily operation of the building facilities. Responsible for bench set-ups, construction and maintenance of equipment and maintenance of a sufficient supply of parts.

Requirements: Associate's degree in mechanical technology or related area or equivalent. 3 to 5 years experience in mechanical design, construction and/or repairs. Ability to use wide variety of tools. Good organizational and interpersonal skills. Apply by February 28, 1986.  
Minimum Starting Salary: \$12,968  
Job Number: TO64

\*Position: Technician, GR21  
Department: Diagnostic Laboratory  
Description: Provide technical support to three projects currently funded and any others funded in the future within the Bacteriology section. Will prepare requests, document data and assist in data analysis.

Requirements: Bachelor's degree with emphasis on microbiology and biochemistry. 1 to 2 years experience desirable. Familiarity with column chromatography and using an ultracentrifuge preferred. Apply by February 28, 1986.  
Minimum Starting Salary: \$12,968  
Job Number: TO61

\*Position: Technician, GR18  
Department: Plant Pathology  
Description: Assist in laboratory and field research in potato golden nematode research program. Plant and harvest potatoes, inoculate plants, collect tubers, lay out field plots, collect samples, harvest plots, collect data for analysis. Appointment ends September 30, 1986; extension based on continuation of funding.

Requirements: Associate's degree or equivalent in plant science or related field. Knowledge of plant propagation in greenhouse and field. Familiarity with basic lab equipment. Such as microscopes, ph metus, centrifuges and autoclaves. Apply by February 28, 1986.  
Minimum Starting Salary: \$10,920  
Job Number: TO63

Position: Technician, GR19  
Department: Veterinary Microbiology - James A. Baker Institute for Animal Health  
Description: Perform technical duties including antibody assay, cell culture techniques, virus cultivation and purification, animal handling, in a research laboratory concerned with the immune response to influenza viruses. Full-time, regular until September 30, 1986; continuation based on extended funding.

Requirements: Bachelor's degree in biological sciences. Some microbiology courses preferred. Some experience in cell culture desirable but not required. Animal handling experience helpful. Apply by February 21, 1986.  
Minimum Starting Salary: \$11,570  
Job Number: TO52

Position: Technician, GR18  
Department: Chemistry  
Description: Assist in day-to-day operation of the section of Laboratory Services and Safety as directed by the manager. Prepare and provide reagents and supplies required by Laboratory Services.

Requirements: Associate's degree in chemistry; Bachelor's preferred. Knowledge of chemistry lab techniques and procedures required. Must be able to calculate and prepare chemical solutions of specific concentrations and be familiar with basic acid and base titration. Should have solid knowledge of safety practices. Apply by February 21, 1986.

Minimum Starting Salary: \$10,920  
Job Number: TO51

## Part-time

\*Position: Secretary, GR18  
Department: Real Estate  
Description: Provide administrative support to the Real Estate Department. Type correspondence; serve as receptionist; answer telephone; arrange appointments and travel; make deposits; prepare vouchers; provide other clerical and accounting support as needed. Part-time, regular, 9:00 a.m. - 2:00 p.m.

Requirements: High school diploma or equivalent. Secretarial or business school desirable. Medium typing. Minimum 1 to 3 years office experience. Real estate experience helpful. Machine dictation. Accounting. Good interpersonal skills. Attention to detail. Ability to operate memory typewriter. A valid drivers license required.  
Minimum Starting Salary: \$10,920/annual equivalent  
Job Number: CO615

\*Position: Secretary, GR16  
Department: Johnson Museum of Art  
Description: Operate reception desk in museum lobby. Provide information to visitors, sell cards, catalogues and posters; answer telephone switchboard and receive appointments for museum staff. Part-time, regular; Monday - Thursday, 8:30am -1:30pm; may involve additional hours during special events.

Requirements: High school diploma or equivalent. Excellent interpersonal skills. Ability to work under pressure and with a minimum of supervision. Previous experience as receptionist is desirable.  
Minimum Starting Salary: \$9,874/annual equivalent  
Job Number: CO612

\*Position: Custodian, SO16  
Department: Unions & Activities - Noyes Center - Endowed  
Description: General mopping, dusting, polishing and vacuuming of assigned areas. Cleaning of restrooms and picking up of noticable debris are essential. Set-ups and clean-ups of furniture and equipment for activities sched-

uled in the building. Day and hours vary; hours between 5:30am - 2:30am.

Requirements: High school diploma or equivalent. Able to lift 50 lbs and climb an 8 foot ladder. Able to freely handle commercial cleaning equipment. Preference will be shown for candidates with at least 6 months of experience in custodial position.  
Minimum Starting Salary: \$4.84/hour  
Job Number: SO67

\*Position: Stacks Assistant, GR16  
Department: University Libraries-Access/Circulation/Olin Library  
Description: Assist the Annex Library Supervisor in managing the book periodical and archival collections, and provide public service; oversee operations of Annex Library in Supervisor's absence; page book requests from stacks; charge out books for visitors and for delivery to campus libraries; discharge circulating materials; process additions to the stacks; conduct book inventories; furbish book stacks. Part-time, regular; Monday - Friday, 8:30am - 12:30pm.

Requirements: High school diploma or equivalent. Concentration and accuracy in shelving. Ability to lift and move books and boxes. Ability to work with a variety of people including patrons and staff.  
Minimum Starting Salary: \$9,874/annual equivalent  
Job Number: CO69

Position: Research Aide, GR20  
Department: Chemistry  
Description: Provide support to a professor of organic chemistry. Collect, compile and synthesize data from literature research; organize professor's research data files; prepare manuscripts and grant applications; manage correspondence; make travel arrangements; maintain filing; hendle appointment calendar. Part-time, regular; Monday - Friday, 9:00am - 1:00 or 2:00pm.

Requirements: Associate's degree or equivalent. College coursework in chemistry or biology. Medium typing. Library research, scientific writing/editing, technical drawing experience preferred. Secretarial experience essential. Knowledge of microcomputers and software for word processing useful. Reading knowledge of French and/or German useful. Please send cover letter and resume to Esther L. Smith by February 17, 1986.  
Minimum Starting Salary: \$12,209/annual equivalent  
Job Number: CO58

## Temporary

TEMPORARY OPPORTUNITIES: Individuals qualified for temporary work in the following areas are encouraged to apply: clerical, secretarial, word processing. If you have experience or skills in these or related areas and are interested in learning more about these opportunities, please call Laurie Worsell at 256-5226.

\*Position: Temporary Museum Education Assistant, GR19

Department: Johnson Museum  
Description: Assist in planning, teaching and documenting museum—school workshops for elementary and secondary grades; conduct tours of museum collections and exhibitions; and assist with conducting special museum related events. Full-time, temporary until June 30, 1986.

Requirements: Bachelor's degree in art history, fine arts, art education, museum studies or related field. Previous teaching experience with children is required. Please send cover letter and resume to Laurie Worsell by March 3, 1986.  
Minimum Starting Salary: \$6.35/hour  
Job Number: CO613

\*Position: Information and Referral Operator (4 position)

Department: Agricultural Economics  
Description: Answer '800' number calls from within New York State, discern callers needs and concerns, matching these with appropriate listings of county and state referral and information sources. Keep accurate logging data on all calls. Casual, approximately 15 hours a week, Monday - Saturday, 12:00 -9:00.

Requirements: High school diploma or equivalent. Some counseling and/or training experience desirable. Ability to deal with sensitive issues. Strong listening and interpersonal skills. Familiarity with farming, farm families, and Cornell Cooperative Extension a plus. Please send cover letter and resume or call in confidence to Esther L. Smith by February 24, 1986.  
Job Number: CO72

Position: Temporary Office Assistant (Repost)  
Department: Veterinary Medical Teaching Hospital  
Description: Work as a floater in the Teaching Hospital with Small, Large and Ambulatory Clinics, and the Hospital Administration Office. Will be expected to perform as telephone operator, admissions cashier, appointment secretary, mail clerk, radio dispatcher, and administrative secretary. Full-time, temporary; Monday - Friday, occasional Saturdays.

Requirements: High school diploma or equivalent. Medium typing. Medical office assistant, secretarial school and/or education in animal health technology helpful. At least 2 years office experience. Strong interpersonal and communication skills and ability to work under pressure required. Working knowledge of medical terminology or medical background desirable. Please send cover letter and resume to Laurie Worsell.  
Job Number: CO42

Position: Temporary Office Assistant (Repost)  
Department: Center for Environmental Research  
Description: Processing of invoices, requisitions, vouchers, journals, etc. Answer phones, type manuscripts and correspondence. Other duties as assigned. Part-time, temporary, Monday - Friday, 10:00am - 2:00pm.  
Requirements: High school diploma or equivalent. Medium typing. Accounting and secretarial skills helpful. Willingness to learn Xerox 860 word processor and Macintosh computer programs. Please send cover letter and resume to Laurie Worsell by February 24, 1986.  
Job Number: C146

## Academic

Please contact department directly.

\*Position: Assistant Professor of Anatomy  
Department: Veterinary Anatomy  
Contact: Professor Howard E. Evans, Chairman, Department of Anatomy, College of Veterinary Medicine  
Job Number: AO61

\*Position: Postdoctoral Research Associate  
Department: Department of Horticultural Sciences, Geneva  
Contact: Dr. Alan Taylor, New York State Agricultural Experiment Station, Department of Horticultural Sciences, P.O. Box 462, Geneva, New York 14456  
Job Number: AO62

Position: Extension Associate, CAO5 (Bronx EFNEP Site Leader)  
Department: Cooperative Extension, Expanded Food and Nutrition Education Program (EFNEP), Bronx, NY  
Contact: Barbara Eshelman, Cooperative Extension, 31 Roberts Hall  
Job Number: AO51

Position: Extension Associate, CAO5 (Queens EFNEP Site Leader)  
Department: Cooperative Extension, Expanded Food and Nutrition Program (EFNEP), Jamaica, NY  
Contact: Barbara Eshelman, Cooperative Extension, 31 Roberts Hall  
Job Number: AO52





Junior distance runner Sarah Day leads the pack in one of her victories this season. Men's and women's track squads will compete in a combined dual meet with Maryland this weekend at Barton.

## The Week in Sports

# Women's Hoop, Hockey Teams End Home Seasons

As the winter sports wind down, two Cornell teams will be making their final home appearances of the season this weekend.

The women's basketball squad, very successful at Barton Hall this season, will face Brown at 7:30 p.m. Friday and Yale at 6 p.m. Sunday. The women's hockey team will skate against Harvard at 2 p.m. Saturday and Dartmouth the same time Sunday in its last two games of the year at Lynah.

In other action on East Hill this week, the men's and women's track teams will entertain Maryland at noon Saturday in a combined dual meet at Barton Hall. The women's gymnastics team will compete against Temple at 1 p.m. Saturday in Teagle Hall, while the men's squad will face Cortland Wednesday at 7:30 p.m. in Teagle.

Last Sunday's 58-57 upset victory over Ivy League-leading Dartmouth at Barton Hall was the biggest win of the season for the Big Red women's basketball team. The squad — which is 8-12 on the season and 2-6 in the Ivy League — will try to improve on its 7-2 home court record with the two games this weekend.

Junior guards Mary Browne and Kathleen Geils each scored 12 points in the Dartmouth win and senior forward Heidi Johnson snared 10 rebounds. For Geils, it was a career high, while Browne shared the team high in points for the second straight game after pouring in 20 points against Harvard.

When the Big Red women's hockey team traveled to New England earlier this season, it tied both Harvard and Dartmouth. Cornell will be looking to achieve better results this time around, in order to remain in contention with Brown for the Ivy League title. The Big Red is currently 9-6-3 overall and 3-0-3 in the Ivy League with nine points, while league-leading Brown is 7-0-1 in Ivy competition.

Senior Amy Stanzin, who is having her best season ever, is the Big Red's leading scorer (24-24-48). Junior forward Patricia Baumann (16-16-32) is second, while junior Debbie Harackiewicz (11-17-28), in her first year on the squad, is the third-leading scorer overall. Junior forward Chris Neimeth (11-

10-21) remains the fourth-leading scorer after scoring the lone goal in the Big Red's 4-1 loss to defending ECAC champion Providence this past Sunday, dropping the team's record to 9-6-3 overall.

This weekend the men's and women's track teams will have their final preparation before the indoor Heptagonal championships on Feb. 22-23. The meet will be a continuation of last year's historic event, when the Big Red and Maryland competed in a combined men's-women's dual meet, believed to be the first NCAA meet of its kind on the East Coast. The two teams will follow that format again this spring.

After a fine cross country season, junior Sarah Day has won both the 3,000- and 5,000-meter runs at the Toronto Classic, while Joe Goldstein won the 1500-meter run for the men's team. Senior Curt Hampstead remained unbeaten in the 60-meter hurdles.

The women's gymnastics team lost last weekend to the University of North Carolina, but in the process scored an outstanding team total and individual bests. In scoring 172.25 points, the Red recorded its highest team total of the year and the second-highest score in the team's history. Cornell established a school record in last year's Ivy League championships, scoring 173.40 points.

Last week's individual standouts included a first-place tie by junior Carolyn Boos, who narrowly missed her school-record mark on uneven bars (9.3) as she registered a 9.25. On floor exercise, sophomore Jeanne Pitts scored a career-high of 9.05, freshman Suzanne Black had a personal best of 9.1, while senior Julie Hamon and sophomore Connie Leavitt both had a 9.05. Sophomore Pam Andrellos was the Big Red's leader on balance beam for the second straight meet; she had a mark of 8.8.

Cornell also set a school record on uneven bars with a score of 44.0, snapping the old mark of 43.55 set at the New York state championships in 1983-84. Senior Lisa Stroud had another strong performance on the event, recording a personal best of 8.85

to support Boos. Another outstanding effort on bars was turned in by Hamon, who also scored 8.85 — topping her seasonal best by six-tenths of a point.

The men's gymnastics team, which faces Cortland, is led by senior Dave Feeney and juniors Bruce Sonnenfeld, Peter Engelhard and Todd Raessler.

**Friday**  
Feb. 14, 7:30 p.m. Barton. Women's Basketball-Brown.

Feb. 14, 7:30 p.m. Oxley Polo Arena. Men's Polo-Skidmore.

**Saturday**  
Feb. 15, 12 noon. Barton. Men & Women's Track-Maryland.

Feb. 15, 12 noon. Teagle Pool. Women's Swimming-Harvard.

Feb. 15, 1 p.m. Helen Newman. Women's Gymnastics-Temple.

Feb. 15, 2 p.m. Lynah. Women's Hockey-Harvard.

Feb. 15, 3 p.m. Teagle Pool. Men's Swimming-Harvard.

Feb. 15, 8:15 p.m. Oxley Polo Arena. Women's Polo-Skidmore.

**Sunday**  
Feb. 16, 2 p.m. Lynah. Women's Hockey-Dartmouth.

Feb. 16, 6 p.m. Barton. Women's Basketball-Yale.

**Wednesday**  
Feb. 19, 7:30 p.m. Teagle Hall. Men's Gymnastics-Cortland.

Feb. 19 thru 23. Men and Women's Polo Eastern Regional Championships. Game times will be posted.

**Friday**  
Feb. 21, 6:30 p.m. Barton Hall. Men's Basketball-Dartmouth.

Feb. 21, 8:30 p.m. Lynah Rink. Men's Hockey-Yale.

**Saturday**  
Feb. 22, 12 noon. Teagle Hall. Men's Fencing-Harvard.

Feb. 22, 12 noon. Teagle Hall. Women's Fencing-Harvard.

Feb. 22, 12:30 p.m. Lynah Rink. Men's J. V. Hockey-Alumni.

Feb. 22, 4 p.m. Barton Hall. Men's J. V. Basketball-Mohawk Valley CC.

Feb. 22, 6:30 p.m. Barton Hall. Men's Basketball-Harvard.

Feb. 22, 8:30 p.m. Lynah Rink. Men's Hockey-Brown.

## Brief Reports

### Women's Studies Seeks Nominations

The Women's Studies Program is seeking nominations of members of the university faculty to serve on the program's board.

Faculty who wish to nominate themselves or others should contact the Women's Studies Program at 332 Uris Hall or at 256-6480. Nominations close Feb. 24.

Women's Studies is a permanent program in the College of Arts and Sciences committed to encouraging the development of teaching and scholarship about women and sex roles for both women and men. It also cooperates in public service activities with the university's extension services.

The program's policies are set by the board composed of faculty, staff and students at Cornell and by other members of the Ithaca area community who have an interest in women's studies.

p.m. today in 100 Caldwell Hall.

His talk and demonstration, sponsored by the Cornell Computer Services division of Academic Computing, are open to the Cornell community.

Paperno first used the computer in teaching Russian in the summer of 1985, and student evaluations were enthusiastic about its usefulness. During his talk, Paperno will discuss his classroom experience in using the computer and will describe the development of a foreign language lexical data bank for the IBM computer. Computers used in the program were obtained through Cornell's Project Ezra.

Speakers at a seminar Feb. 20 will be Kathy Chang and Howard Curtis of Mann Library. They will discuss on-line data bases and bibliographic systems. This also is an open seminar and will begin at 12:20 p.m. in 100 Caldwell Hall.

### Kammen Next Speaker In Johnson Series

Michael Kammen, the Newton C. Farr Professor of American History and Culture, will speak on "Business Leadership and the American Heritage: Exploitation or Education?" at 7:30 p.m. Monday, Feb. 17, in Alice Statler Auditorium.

Kammen's lecture is part of the Johnson Distinguished Lecture Series, sponsored by the Johnson Graduate School of Management.

The lecture series is designed to provide a forum for some of Cornell's most distinguished faculty members to discuss the implications of recent developments in their fields of speciality for American business and society during the next quarter century.

## For The Record

### Statements Were Excerpts

The statements that appeared on page 4 of last week's Chronicle were excerpts of presentations made to the Board of Trustees during its Jan. 31 meeting in New York City.

## SAGE CHAPEL

### CURW Director To Talk Sunday

The Rev. Robert L. Johnson, director of Cornell United Religious Work (CURW), will preach at Sage Chapel at 11 a.m. Sunday, Feb. 16. His sermon topic will be "A Conflict of Faiths: Idealists and Realists."

Johnson is an ordained minister in the United Methodist Church and a graduate of the University of North Carolina at Chapel Hill, Union Theological Seminary in New York City, and Harvard Divinity School. For 18 years, he served as director of the Wesley Foundation at Chapel Hill, N.C. and served in recent years as president of the National Institute for Campus Ministries.

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

### Cornell-Heidelberg 'Connection' Renewed

Philosopher Jacob Gould Schurman, Cornell's third president (1892-1920), was honored at Heidelberg University in Germany last week as part of that institution's 600th anniversary.

In ceremonies Feb. 8, Cornell President Frank Rhodes discussed "The Cornell-Heidelberg Connection."

Schurman studied at Heidelberg in the late 1870s, where "he began to blend the German university tradition with his own intuitions and instincts in a way that would profoundly influence the character of universities in America," Rhodes told an audience of 600 people, including two of Schurman's grandchildren — G. Michael McHugh and Lydia Schurman Godfrey, both 1950 Cornell graduates.

McHugh, who lives in Ithaca, said of the celebration, "It was absolutely fantastic. I think he (my grandfather) would have been flattered ... and a little embarrassed by the attention."

Other speakers included Detlef Junker, the Jacob Gould Schurman Professor of American Studies at Heidelberg; Richard Burt, American ambassador and a Cornell graduate; Hans-Dietrich Genscher, West German Foreign Minister; and John R. Silber, president of Boston University.

## Alexander

Continued from Page 1

whether such exotic creatures not only will be beneficial, as promised, but also do some harm.

In its report — "Assessing EPA's Biotechnology Research and Information Needs" — the national panel strongly recommends that EPA develop scientific tests for evaluating the survival, multiplication, dispersal, and possible harmful effects of genetically engineered organisms.

EPA says it will spend \$5.5 million in 1986 to determine the risks from products created through gene-splicing techniques. The agency's science advisory board, in the report prepared by the panel on biotechnology, says a "broader" effort is needed.

Such research is essential for the agency to gain the scientific knowledge to determine, or even predict, the potential risks of those organisms before such microorganisms find their way into the environment on a large scale, Alexander emphasizes.

"There is always a possibility of a problem," Alexander says. "Until you have the extensive experience with a particular technology, you don't know the probability of danger. It's like writing an insurance policy before an accident occurs."

In the case of microorganisms created through recombinant DNA techniques, a system to assess the potential risks involved before new strains of such organisms cause any problem is a must, he stresses.

In using EPA to develop a reliable risk assessment system, the study group recommends that the agency focus its efforts on several key scientific questions.

These include the ability of a genetically altered organism to survive, to grow, to multiply, to transfer its genetic material to other naturally occurring organisms, and to spread from the site of the initial release.

In addition, the research effort should be directed toward developing means of determining the effects of such an organism on the environment as well as the organism's capacity to cause disease.

The panel also recommends that EPA coordinate its efforts with other federal regulatory agencies, such as the Food and Drug Administration, the National Institutes of Health, and the U.S. Department of Agriculture, in establishing a comprehensive risk assessment system to prevent communicable diseases caused by genetically altered organisms.