

Cornell CHRONICLE

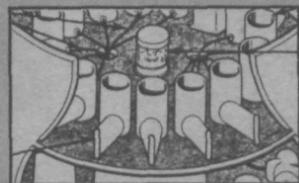
Volume 18 Number 1 August 28, 1986

3 Literary walking tour



Shuttle contest winner

3



8 Parking regulations



Sunspots and drought 8



Orientation counselors helped students last weekend moving into townhouses on North Campus.

Athletics plans drug education

About 1,200 students who plan to compete on Cornell intercollegiate athletic teams this year will be told about the physical dangers and legal ramifications of using drugs, according to university officials.

There are currently no plans to test students on a regular basis for drug use.

"Do we have a drug problem here? Not that I know of," said Laing E. Kennedy, director of athletics. "But there is a growing drug problem throughout our society and we can't ignore it."

All student-athletes will be required to attend one 90-minute drug education program, said Betsy East, associate athletic director. One session is scheduled for Aug. 28; the second will be held Sept. 17.

Presenters will include Kennedy, who will review NCAA and Ivy League regulations regarding alcohol and drugs; Cort Bassett, a physician's assistant in sports medicine, who will discuss the physical effects of drug use; Karl Ponchalek of psychological services, who will talk about Cornell programs to help people deal with alcohol and drug problems; and local FBI agent Bob Holt, who will discuss the legal ramifications of drug use and the availability of off-campus counseling and other services.

Cornell coaches will receive training on how to detect drug problems and provide help to drug users, East said.

The NCAA plans to test athletes for drug use once they become eligible for championship competition, Kennedy said. Ivy League schools have agreed to provide drug education for all athletes.

"Today, there is a drug — crack — that is lethal, not expensive, and almost instantly addictive," Kennedy added. "Drug use, especially in athletics, is receiving a great deal of attention. We want to educate people about the dangers of drugs to prevent drug use and abuse."

— Mark Eyerly

Lowi addresses freshmen: Inaction: Key to Reagan's popularity

It seems a strange message to share with more than 200 aspiring freshmen: "The less you try to do ... the better off you seem to be."

But government professor Theodore Lowi was not telling Cornell's newest students how to ace their exams. He was explaining how President Reagan excels in elections and public opinion polls, where he maintains approval ratings that approach 70 percent.

"It's a weird system we live in," Lowi asserted Monday, describing how monthly popularity polls are tantamount to a constant plebiscite on the presidency.

"What is Reagan doing right?" Lowi asked an orientation audience that crowded into a lecture room to hear him discuss, "Is There Life after Reagan?" "Immediately we think personality," he said. Not so. Reagan's popularity is a result of his go-it-alone foreign policy combined with the American tendency to rally together in response to international events, claimed Lowi, the John L. Senior Professor of American Institutions.

Foreign affairs influence the popularity of all presidents. Reagan's strength in public opinion polls derives from avoiding international diplomacy. That avoidance lets him criticize the Soviets, bomb Libya, or opposed actions by allies without worrying about how his words or actions might affect delicate negotiations elsewhere.

"President Reagan is the only president since World War II who has not committed himself to a single negotiation leading to a treaty that established a more stable relationship with another country, especially adversaries. He's the only one," Lowi said.

"He has made fewer commitments to the outside world than any president in modern times." Jimmy Carter, one of the most unpopular presidents since polling became an institutional part of American democracy, reached five

major agreements during his four years in office: on the exchange of ambassadors with China, on control of the Panama Canal, on arms control, on peace between Israel and Egypt, and the Law of the Sea Treaty, Lowi pointed out.

Domestically, Reagan has done little since his first year as president, when a tax cut, military spending hikes, and new federalist policies were pushed through Congress — and his poll ratings began to drop. Reagan's only sustained commitment is to a defense buildup that contributes to a sense of insecurity among the American public, which in turn leads citizens to rally around their president, Lowi said.

As to the question, "Is there life after Reagan?": "It is highly probable that Reagan's agenda will be far from complete when he leaves office," and it is unlikely that the next administration will carry out his agenda, Lowi said.

Unless Reagan's successor is committed to Reagan's ideology, blessed with equally strong popular support, and capable of holding together a fragile coalition, the Reagan agenda will fade.

"Charisma is something you can't pass along to somebody else," Lowi said.

Low-income students decline

Although Cornell continues to increase the amount of money budgeted for scholarship aid, admissions officers here as elsewhere are noting a hard-to-explain decline in the number of new students coming from the lowest income groups.

The number of freshman aid recipients reporting family income under \$20,000 this fall is 240. In 1984, the number of freshmen from families with an income under \$20,000 was 339, the high for the decade. Cornell has made no change in student-aid policies in recent years, and continues to admit freshmen on an aid-blind basis, according to the dean of admissions and financial aid, Susan Murphy.

"Cornell has a long-standing tradition and commitment to diversity in its student body," she said. "We are concerned that despite consistent and genuine efforts to attract the nation's brightest students, regardless of economic status,

the number of low-income students this year has decreased."

While the cost of tuition has gone up year by year, the University's expenditure for scholarships has gone up even more. The percentage increase over the last three years was 30 percent for tuition, 45 percent for scholarship funds.

"The situation appears to be reflected in entering classes of other selective private institutions," according to Katharine Hanson, executive director of the Consortium on Financing Higher Education.

The percentage of Cornell students applying for financial aid has remained constant in recent years at about 70 percent. So has the percentage qualifying. What has changed is that fewer are coming from the lowest income segment of the population.

Since students applying for aid are expected to have worked during the summer preceding

their arrival at the university, Cornell has been aggressive in creating opportunities, including subsidizing summer jobs in communities from which entering freshmen come. A typical aid package includes federal and state money, a Cornell scholarship, a student loan, and a work component.

Cornell's diversity has also extended geographically. More students are coming from localities outside the northeastern states. But those from farther away also tend to be richer. The number of all freshman aid recipients reporting family incomes higher than \$60,000 has tripled. The typical Cornell family has more than one child in college, thus qualifying for aid.

The current entering class has a 21 percent minority component, four points higher than a year ago. The increase is largest in the Hispanic

Continued to page 2

Notable

James W. Gillett, a professor of ecotoxicology in the Department of Natural Resources, has been appointed director of the Institute for Comparative and Environmental Toxicology, succeeding Christopher F. Wilkinson who is on a sabbatical leave at the Georgetown University Medical Center's Institute for Health Policy Analysis.

Robert J. Kane, dean emeritus of physical education and athletics, received the Cornell/Ben Mintz Media Award for 1986. The award, honoring Cornell's sports information director for 28 years until his retirement in 1977, is given for "exceptional support of Cornell in particular and to college athletics in general."

Kane, who directed Cornell's athletic program for 36 years until his retirement in June 1976, was inducted into the U.S. Olympic Hall of Fame on Aug. 1, and is a charter member of the Cornell Athletic Hall of Fame. He served as president of the U.S. Olympic Committee from 1976 to 1980 after a 25-year tenure that began when he became a member of the USOC Board of Directors in 1951.

Isaac Kramnick, a specialist in British social thought in the 18th century, has been named associate dean of the College of Arts and Sciences for a five-year term ending June 30, 1991. He will assist Geoffrey V. Chester, who assumed deanship of the college July 1.

A member of the Cornell faculty since 1972, Kramnick is the Richard J. Schwartz Professor of Government and an internationally recognized authority on the history of political thought. He will continue to teach and pursue his scholarly research.

Kramnick taught at Harvard, Brandeis, and Yale universities before coming to Cornell. He holds B.A. (1959) and Ph.D. (1965) degrees from Harvard.

Peg Lacey, director of Cornell Dining Services, was recently selected president-elect of the National Association of College and University Food Services.

Lacey oversees the marketing, operational, and financial functions of Cornell's dining operation, which serves more than 26,000 meals daily. In addition to more than a decade of involvement with NACUFS, Lacey is an advisor to the Hotel Division at the SUNY Delhi Ag and Tech College, to the Food Service Division of the Board of Cooperative Education Services, and is a guest lecturer at the Cornell Hotel School.

Gene H. Oberly, professor of pomology in the College of Agriculture and Life Sciences, has been reappointed chairman of the Department of Pomology for a four-year term, effective July 1.

Oberly, a member of the Cornell faculty since 1962, is recognized for his expertise in tree fruit management and mineral nutrition. He provides a regular leaf and petiole (leaf stem) diagnostic service to fruit growers, participates in training programs and fruit schools, and works closely with the New York State Horticultural Society, in addition to teaching.

Michael L. Shuler, professor of chemical engineering, won the American Chemistry Society's 1986 Marvin J. Johnson Award in Microbial and Biochemical Technology.

A specialist in biochemical engineering and acting director of the School of Chemical Engineering, Shuler will be cited at the society's fall meeting for his original research in mathematical models of microbial systems. His research involves bioreactors, unconventional foods, plant cells, waste treatment processes, and mathematical models of cell growth and immobilized cells.

Notable items include awards, honors, promotions and other outstanding achievements of faculty and staff. The column will appear weekly in the Cornell Chronicle.



New editors join News Service

Albert E. Kaff has joined Cornell's News Service as managing editor after 38 years as a reporter, foreign correspondent and wire service executive.

Kaff worked five years for newspapers in Kansas and Oklahoma and spent the next 33 years with United Press International, including 29 years in Asia.

With UPI, he was based in Korea, Japan, Vietnam, Taiwan, the Philippines and Hong Kong and traveled on assignments to most other countries in the region including China, Mongolia, the Southeast Asian nations, India, Pakistan, Sri Lanka, Bangladesh and Australia.

His reporting included the Korean War, the 1950 conflicts leading to the last Vietnam War, Taiwan Strait hostilities, Japan's economic growth from the 1950s to 1970s, two Olympic Games and interviews with President Syngman Rhee of South Korea, President Ngo Dinh Diem of South Vietnam, President Chiang Kai-shek of Nationalist China, President Diosdado Macapagal of the Philippines, Prime Minister Eisaku Sato of Japan and President Zia-ul-Haq of Pakistan.

Kaff was vice president and general manager of UPI's Asia-Pacific Division when he returned to the United States in 1981.

"Staff writers and editors in Cornell's News Service are working to produce a professional news report on the university's research and academic programs for publication and broadcast in the national and international media. I am delighted and honored to join in this effort," Kaff says.

New business editor

Barry M. Gross, a longtime Washington and Pittsburgh journalist, will come aboard the news service next week as business editor.

Gross will draw on almost 15 years of experience as an editor for the business news section of The Washington Post when he reports on business-related topics for the university's target news media.

Gross wrote a column on inventions and inventions, worked as a copy editor, and served periodically as chief of the business news section's copy desk. Before joining The Post, he was a copy editor and then features and religion editor of the Pittsburgh Post-Gazette.

Cornell's news service, under its new director, Irwin M. Chapman, will assign its staff to beats within the university community — science, agriculture, business, social sciences, humanities, and so on — with the goal of continual contact with faculty and staff members whose work is potentially of national interest.

Shew resigns

After 17 years as editor of the Cornell Chronicle and the university's director of community relations, Randall Shew has retired from those positions.

Shew has been named executive vice chairman of the Ithaca Centennial Committee and will also teach this fall in the university's Department of Communication.

Carole Stone, who has been a reporter and an editor for newspapers in New York and New Jersey, succeeds Shew as editor of the Chronicle.

Student *Continued from page 1*

category. The number of black freshmen is unchanged from the preceding class. Nationwide, minority matriculation is going down, except for Asian Americans.

One conjecture is that the decline in those whose attendance would require financial aid is due to an exaggerated fear that aid is no longer available. In fact, according to the admissions office's figures, federal aid has stopped increasing but the number of dollars has not significantly declined, and some state and university aid has increased.

Last year, for example, fearing a reduction in federal Pell grants, the university set aside an additional half million dollars in scholarships. As it turned out, increases in the State of New

York's Tuition Assistance Program made up the difference.

"I surmise parents are increasingly confused and put off by the hassle factor," said Hanson of the financing consortium, of which Cornell is a member university.

"The level of conflicting information and the sense of uncertainty are genuine," she asserted. "A parent used to be able to count on two sources of help: the institution and Uncle Sam. Now Uncle Sam seems to many to have become an unreliable partner."

Hanson noted that those who have not been adequately informed about the availability of financial aid certainly do know the published price of tuition, which is a significant information gap.

Briefs

■ **Alumni directories underway:** Two new directories of living undergraduate and graduate alumni will be published in June or July 1987 by Harris Publishing Company.

Alumni will receive a questionnaire in September with a follow-up request to be sent one month later. Alumni who do not respond to the questionnaires and who cannot be reached by phone will appear in the directory with the information provided by alumni records.

■ **Donald Barton honored:** The entomology-plant pathology building at the Agricultural Experiment Station in Geneva has been named in honor of Donald W. Barton, station director from 1960 until his retirement.

Barton Laboratory, constructed in 1968-1969, is the newest research facility at the Geneva station. The Board of Trustees of Cornell voted in 1982 to name the building after Barton.

■ **Billing for lab work and X-rays:** University Health Services has begun charging students for most laboratory tests and X-ray procedures performed at Gannett Health Center. Some tests, such as pregnancy tests and those subsidized by the Department of Health, will continue to be provided without charge. Fee schedules and information are available at the cashier, billing, and student insurance offices at the Health Center.

■ **Breakfast with the president:** A limited number of openings are available for students interested in having breakfast with President Frank Rhodes. Those interested are invited to call his office at 255-5201 to make a reservation.

The breakfasts are held from 7:30 to 8:30 a.m. in the Elmhurst Room of Willard Straight Hall at various times throughout the semester. Reservations are made on a first-come, first-serve basis.

■ **Olin Library offers tours:** The Olin reference staff will conduct 45-minute orientation tours of the central graduate research library for graduate students and faculty during the first three weeks of the semester. The tours will provide an introduction to resources and services of Olin Library, including the Union Card Catalogs, which list the holdings of all 15 campus libraries.

The first tours will be given Thursday, August 28, at 10:15 a.m. and 11:15 a.m. Subsequent tours will be announced. Tours begin in the lobby of Olin Library. For more information, call 255-3319 or stop by the Reference Department.

■ **Classes without exams:** The Experimental College offers non-credit leisure courses in: artistry, body awareness, culinary arts, music, performance, self reliance, and special interest. Registration will be held Sept. 8 and 9 at Willard Straight Hall Memorial Room, 6 to 8 p.m. Classes run Sept. 29 to Dec. 4. For more information, call 255-7131.

■ **Hotel School journal praised:** The Cornell Hotel and Restaurant Administration Quarterly is best in its field, according to a nationwide survey of hospitality industry educators.

In the study by professors William Kent of Georgia State University and Denney Rutherford of Washington State University, the quarterly was rated first in manuscript acceptance by educators, use in preparing lectures and for student reading. The quarterly also was ranked best known among eight hotel magazines by 131 professors who responded to the survey. The Cornell journal has an international paid circulation of more than 7,500. Articles cover marketing, food and beverage, employee relations and training, administration and finance, law and properties management.

■ **Record keeping session to be held:** Departmental payroll and personnel representatives may wish to attend a training session on university policies that affect vacation and sick leave accrual recordkeeping.

Topics to be covered include procedures for maintaining, updating, and correcting accrual amounts for nonexempt staff, how accrual rates are affected by credited service calculation, how periods of extended leave should be reported to personnel/payroll, and what effects periods of extended sick leave have on the vacation/sick leave accruals. The training sessions will be offered from 8 to 9:30 a.m. Aug. 29 and Sept. 3, 4, 8, 10, 12, 15, 17, and 19 in Conference Room 1 at Robert Purcell Union. For more information contact University Personnel Services, 255-7170.

■ **Bloodmobile coming:** Tompkins County Red Cross will hold a bloodmobile Tuesday, Sept. 2, from 10 a.m. to 3:45 p.m. outside Willard Straight Hall. To sign up, call Red Cross, 273-1900. Walk-ins are welcome.

■ **Cornell Stakes set:** Cornell alumni will gather for the running of the Cornell College of Veterinary Medicine Stakes at Belmont Race Track Oct. 4 as part of a long weekend of activities for faculty and friends of the college, Cornell alumni, horse owners, and trainers celebrating Cornell's ties to the equine industry of New York State. Cornell also will host an equine seminar Oct. 6 at Belmont.

■ **Guide to expenses published:** A newly published 34-page manual covering guidelines for university travel and related expenses reimbursed from endowed funds, "Endowed Travel and Entertainment Guidelines," is now available.

The manual reflects a number of changes made since the last version was printed in 1980, particularly the use of the Diner's Club corporate credit card as the preferred method of paying for travel and entertainment by faculty and staff in the university's endowed units.

Copies may be obtained by calling Cheri Chase at the Office of the Controller, East Hill Plaza, at 255-6240.

Obituaries

■ **Memorial for Edward Rosenberg:** A memorial service will be held Aug. 28 at 9:30 a.m., for Edward B. Rosenberg, project coordinator in the university's maintenance and service operation, who died of an apparent heart attack July 28. He was 36.

Rev. David Evans will officiate at the service near the ponds in the F.R. Newman Arboretum of Cornell Plantations. In case of inclement weather, the service will be held at the same time in Sage Chapel. Rosenberg, who had been a program consultant to the University Unions from 1975 to 1977 and a self-employed building contractor from 1977 to 1984, had been with Cornell's maintenance and service operation two years.

Cornell CHRONICLE

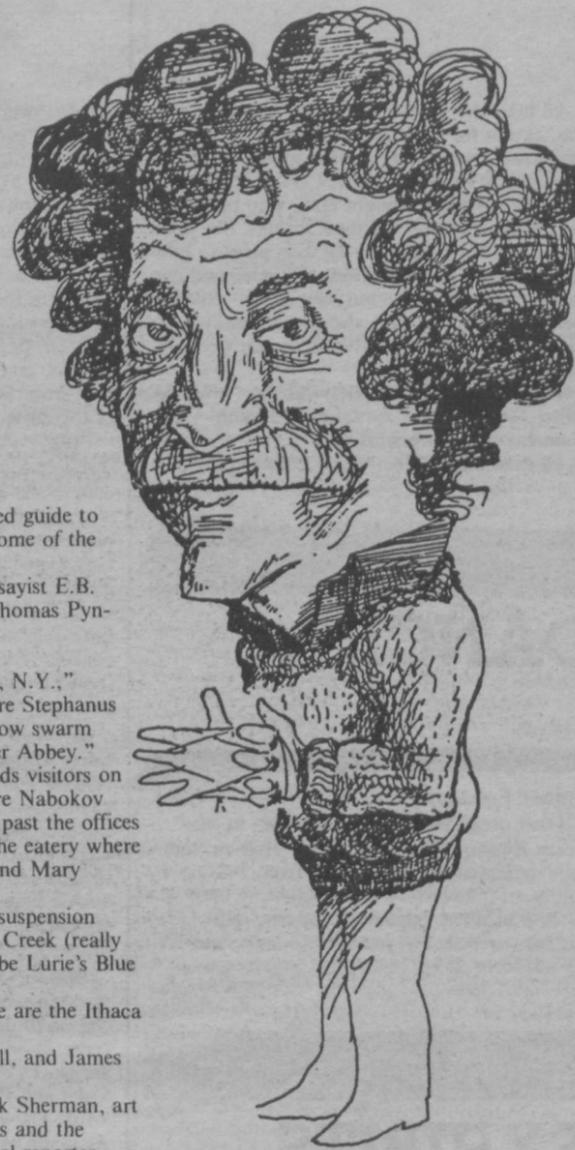
EDITOR: Carole Stone
CIRCULATION MANAGER: Joanne Hanavan

Published 40 times a year, Cornell Chronicle is distributed free of charge to Cornell University faculty, students and staff by the University News Service. Mail subscriptions, \$25 per year; two-year subscriptions are \$45. Make checks payable to Cornell Chronicle and send to 110 Day Hall, Ithaca, N.Y. 14853-2801. Telephone (607) 255-4206. Second-Class Postage Rates paid at Ithaca, N.Y.

POSTMASTER: Send address changes to the Cornell Chronicle (ISSN 0747-4628), Cornell University, 110 Day Hall, Ithaca, N.Y. 14853-2801.

It is the policy of Cornell University to support actively equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The university is committed to the maintenance of affirmative action programs that will assure the continuation of such equality of opportunity.

Literary giants walk these Ithaca streets. . .



Illustrations by Jack Sherman
Courtesy of Isidore Stephanus Sons

Armed with nothing more than a pair of comfortable shoes and a new pocket-sized guide to point the way, literature lovers can, in just one day, visit a world that has inspired some of the country's most noted writers.

They include Pulitzer Prize winners Pearl Buck, Alison Lurie, and Carl Sagan; essayist E.B. White; poet A.R. Ammons; and novelists Kurt Vonnegut Jr., Vladimir Nabokov, Thomas Pynchon, Richard Farina, and Robert Lieberman.

It is the world of Ithaca and of Cornell.

"For students of 20th century literature, a treasure trove of trivia awaits in Ithaca, N.Y.," Deborah Schoch writes in "A Literary Walking Tour of Ithaca," published by Isidore Stephanus Sons. "Yet Ithaca remains undiscovered and unspoiled by the culture-seekers who now swarm through Cambridge and Greenwich Village and wear down the floors of Westminster Abbey."

In a 36-page book narrow enough to slip into a shirt pocket or purse, Schoch leads visitors on an eight-mile hike across Ithaca and the Cornell campus — past the classroom where Nabokov taught comparative literature, past the dormitory where Farina lived as a freshman, past the offices of the student newspaper that counts White and Vonnegut among its alumni, past the eatery where singer Harry Chapin worked as a busboy and where Peter Yarrow of Peter, Paul, and Mary sang.

There are the sites that have been depicted in prose and poetry — the pedestrian suspension bridge from which two Farina characters toss Christmas manger statues into Harpy Creek (really Fall Creek) and the Green Dragon coffee shop in Cornell's Sibley Hall, believed to be Lurie's Blue Cow coffee shop in "The War Between the Tates."

And for those not thrilled about walking the hills surrounding Cayuga Lake, there are the Ithaca buses, which Nabokov rode to pick up dialogue for "Lolita."

Six of the 25 writers featured — Lurie, Ammons, Sagan, Lieberman, Dan McCall, and James McConkey — currently teach at Cornell. Another 13 studied or taught here.

"A Literary Walking Tour" of Ithaca contains illustrations of eight writers by Jack Sherman, art director at Newsday and formerly an illustrator and designer for Cornell publications and the Ithaca Journal. Schoch is a journalist in Burlington, Vt., and a former Ithaca Journal reporter.

The book is the first in a series of literary walking tours to be published by the Ithaca-based Isidore Stephanus Sons; books about Santa Fe, N.M., and Cambridge, Mass., will be published in 1987 and 1988. The firm also has published a tour book of Finger Lakes wineries.

— Mark Eyerly

Experiment to test pulse of plants on shuttle

The reactions of living plants to the physical stresses of space flight will be tested in an experiment devised by scientists at the Boyce Thompson Institute for Plant Research.

When space shuttle flights resume, the experiment may answer the question: Are the conditions of weightlessness, lift-off, and re-entry as troublesome to plants as earthly stresses like air pollution, drought, and salty water?

The idea for the experiment was picked from 400 entries to win a "launch your own experiment" space shuttle contest sponsored by Popular Mechanics magazine.

Designed by John J. Chiment and Scott H. Wettlaufer, the experiment can measure levels of a stress-indicator chemical called glutathione during various stages of space flight. Chiment and Wettlaufer are research specialists in environmental biology at the Boyce Thompson Institute.

Measuring glutathione

"Glutathione is a compound that plants produce to overcome stress such as air pollution, too much salt, or too little water," explains Chiment. "Measuring glutathione levels is like taking the pulse of a plant; it is a marker that shows when a plant is stressed."

Animals, including insects and humans, also produce glutathione, although its function is not

fully understood. Biologist Chiment was part of a Boyce Thompson Institute team that discovered in 1984 a surprising "catch-22" relationship between insects and plants that were suffering from air pollution.

"Insects feeding on stressed, high-glutathione plants grow faster and reproduce more quickly, perhaps by using the plant's own glutathione to detoxify natural, plant-generated insecticides," he observed. If plants do not produce glutathione, stresses may kill them. When they do make the chemical, insects that otherwise would pass them by have a feast.

"The establishment and success of tightly engineered ecosystems in space — systems capable of providing water, food, oxygen, and power on extended space flights — may well depend on the distribution of this single chemical," Chiment said in proposing the experiment.

Preliminary designs for the experiment call for as many as 20 separate soil-filled pots with soybean seeds, arranged in a canister the size of a small garbage can. Once set in motion probably when an astronaut pushes a button before lift-off, water will flow to the first pot and lights will switch on.

A computer-controlled timer will take over from there, starting seeds at intervals throughout the flight and landing. Periodically, the

sprouting plants will be "smothered" and preserved by silica gel, a drying agent. Back on Earth, laboratory analysis by spectrophotometry will measure levels of glutathione in each plant at the time of its brief life in space. The experiment will be duplicated, as a control, at the Boyce Thompson laboratories.

Starting with seeds

The duration of the space shuttle flight, as few as three days or longer than a week, will

determine how long the plants may live before being preserved. Because experiments are loaded on the space shuttle two months in advance and may not come off until a month after landing, the experiment must be self-contained, automatic, and able to start from seeds and dry soil.

Delays in the space shuttle program and a probable launch date two years in the future will allow plenty of time to fine-tune the prize-winning experiment.

— Roger Segelken

Council funds creative arts

The Council of the Creative and Performing Arts has awarded 30 students and staff members grants totaling more than \$10,000 for creative and performing arts projects to be completed and publicly presented in the 1986-87 academic year.

The projects, which are not connected with course work, are funded by the faculty council on the basis of artistic ability, potential for completion and the merit of the project itself, says Anna Geske, CCPA program director.

Grants for the visual arts were given to staff members David Sebesta, \$500 for a sculpture project, Robert Young, \$250 to do paintings and woodcuts, and Susan MacKay for a painting project.

Grants to seniors in the Department of Art went to Rachel Durfee, \$300 for prints and drawings, Frank C. Liu, \$100, and Andrew Ehrenworth, \$500 for an installation; to MFA students in the Department of Art, Kristen Peterson, \$500 for a gallery installation, and Patricia S. Walker, \$250 for a series of drawings; and to Gerar Edizel, graduate student in history of art, \$500 for drawings and paintings.

Four photography project awards were made to students in the College of Art, Architecture and Planning: Mahir Agha, \$445, and Jill A. Peltzman, \$320, Elizabeth Schub, \$380; and graduate student Richard Bernstein, \$200.

Two seniors in the College of Arts and Sciences Andrea Blander, \$300, and David L. Golob, \$400 also received awards.

Awards for filmmaking went to four seniors in the College of Arts and Sciences: Greg Bowman, \$300; Rachel Leventhal, \$500; Kevin McCarthy, \$500; and Erin Obodiac, \$150. Michael Cho, a junior studying at the Center for Film and Critical Studies in Paris, was granted \$300 for a film project.

For an apparel design presentation, awards of \$300 were given to Tomoko Maruyama, Andrea Madriaga, Cynthia Steiner, and Carol VanHarnick — all in the Department of Textiles and Apparel in the College of Human Ecology.

Other awards made were: \$500 to Apinan Poshyananda, graduate student in art history, for a multimedia exhibition; \$350 to Babak A. Ebrahimi, undergraduate in the College of Arts and Sciences, to translate and adapt a Persian story for the stage; \$500 to James Stuart Grant, graduate student in music, to compose a score for "A Father's Tale" in collaboration with librettist Robert Gross, theatre arts; \$370 to Eddie B. Smith, West Campus staff coordinator, to make a cassette of lullabies; and \$500 to Elizabeth Alexander and William Bradbury, graduate students in music, for compositions for a concert of Eastern music and dance.

Garden highlights state fair exhibit

An indoor vegetable garden produced from seeds that came from genetic strains preserved since the early settler days is the highlight of a Cornell exhibit at the New York State Fair.

Next to the garden is an exhibit about biotechnology, the science of genetic manipulation. This is the third consecutive year that the university has had a major exhibit at the state fair. The theme this year is the history and the future outlook for agriculture, the state's number one industry.

The 10,000 square foot exhibit, in the fair's Agriculture and Health building, also includes a

seven-minute, multi-image, audio-visual show that celebrates the 75th anniversary of Cornell Cooperative Extension.

The fair continues through Sept. 1 in Syracuse.

Cornell's exhibit is a joint effort of the College of Agriculture and Life Sciences, the College of Human Ecology, and the Agricultural Experiment Station at Geneva, and was designed and created by the staffs of Media Services and the Geneva station.

CALENDAR

All items for publication in the Calendar section, except for seminar notices, should be submitted (typewritten, double spaced) by mail or in person to Fran Apgar, Central Reservations, 531 Willard Straight Hall, who prepares the Calendar notices for these listings. She must receive the notices at least 10 days prior to publication. 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, dance, music, etc.).

Seminars only should arrive at the Chronicle office, 110 Day Hall, no later than noon Thursday prior to publication.

All deadlines will be strictly enforced.

DANCE

Cornell Folkdancers

The Cornell Folkdancers will meet in the North Room of Willard Straight Hall on Sundays in September. Instruction from 7:30 to 8:30 p.m. followed by request dancing until 10:30 p.m. Free. Beginners welcome. No partners needed. For more information call 257-3156 or 255-7149.

EXHIBITS

Johnson Art Museum

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

"Thirty Years of Contemporary Prints from the Permanent Collection" will be shown through Aug. 31. Displaying outstanding modern prints from the museum's holdings, the works include silkscreens, lithographs, etchings and collages by Claes Oldenburg, Helen Frankenthaler, Willem and Elaine De Kooning, Robert Motherwell, Janet Fish, Alice Neel, and others.

Tiffany vase with vertebrae markings on exhibit at the Johnson Museum.

"American Silver: Selections from the Mary Palmer Rockwell Collection" will be shown through Aug. 31. Sixteen examples of American silver by some of America's leading early silversmiths are on exhibition for the first time. The pieces represented span 100 years of silver craftsmanship from the late 17th century to the late 18th century, illustrating transitions in style and form found in American silver work during this period. Included are pieces by Peter Van Dyck, John Heath, Jeremiah Drumer, Meyer Meyers, and Paul Revere. These works are on loan from Mary Palmer Rockwell, benefactor of the museum's Asian collection.

"Select Examples of Glass by Louis Comfort Tiffany" will be shown through Aug. 31. The core of the museum's collection of Tiffany glass — vases, tiles, footed compote, seal, and paperweight — was a gift of the Louis C. Tiffany Corp. through the courtesy of Tiffany glassblower A. Douglas Nash, whose son is a Cornell alumnus. The remainder of the museum's collection, a gift from Edythe de Lorenzi, consists of vases, perfume bottle, finger bowl, footed compote, and pitcher of gold and green iridescent glass.

An early 20th century Amish quilt from Lancaster County, Pa., has been purchased with the help of Johnson Museum visitors who have voluntarily contributed funds at the main entrance. The quilt displays the qualities of highly prized Amish quilts — fine stitching, striking colors, and traditional design. This distinctive example of traditional American folk art will be on display in the museum from through Aug. 31.

"Taking Shape: The Figure in Contemporary Art," focusing on various ways artists have chosen to depict the human form in recent years, is on view through Aug. 31. Featured are works by such established artists as George Segal and Philip Pearlstein, as well as local artists David Smyth and James O. Mahoney. As many of the 32 works, which are taken from the permanent collection, are rarely on view, the show is an excellent opportunity for the public to see the breadth of the museum's collections.

Olin Library

American Anniversary — The Declaration of Independence, the political events that led up to it, the patriots who composed it, signed and fought for it, together with photographs of the Statue of Liberty will be exhibited through mid-September. Hours: Monday to Friday, 8 a.m. to noon, and 1 p.m. to 5 p.m.



FILMS

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

Thursday 8/28

**Hiroshima, Mon Amour" (1959), directed by Alain Resnais, with Emmanuelle Riva and Eiji Okada. 8 p.m. Uris Hall Auditorium. Open.

Friday 8/29

**The Official Story" (1985), directed Luis Puenzo, with Hector Alterio and Norma Aleandro. 7:15 p.m. Uris Hall Auditorium. Open.

**Hannah and Her Sisters" (1986), directed by Woody Allen, with Woody Allen, Mia Farrow, Diane Wiest, Michael Caine and Barbara Hershey. 7:30 p.m. Statler Hall Auditorium. Limited.

**Singin' in the Rain" (1952), directed by Gene Kelly and Stanley Donen, with Gene Kelly, Debbie Reynolds and Donald O'Connor. 9:45 p.m. Uris Hall Auditorium. Limited.

**Pretty in Pink" (1986), directed by Howard Deutch, with Molly Ringwald, Harry Dean Stanton and Andrew McCarthy. 10 p.m. Statler Auditorium. Limited.

**Eraserhead" (1977), directed by David Lynch, with John Nance and Charlotte Stewart. Midnight. Uris Hall Auditorium. Open.

Saturday 8/30

**Singin' in the Rain" (1952). 7:15 p.m. Uris Hall Auditorium.

**Pretty in Pink" (1986). 7:30 p.m. Statler Auditorium.

**The Official Story" (1985). 9:30 p.m. Uris Hall Auditorium.

**Hannah and Her Sisters" (1986). 10 p.m. Statler Auditorium.

**Eraserhead" (1977). Midnight. Uris Hall Auditorium.

Sunday 8/31

**Previous Engagements" (1986), directed by Marc H. Johnson and Robert Gross. World Premiere. 7:30 and 9:30 p.m. Uris Hall Auditorium. Open.

Monday 9/1

**Rashomon" (1950), directed by Akira Kurosawa, with Toshiro Mifune and Machiko Kyo. 8 p.m. Uris Hall Auditorium. Open.

Tuesday 9/2

**Modern Times" (1936), directed by Charlie Chaplin, with Charlie Chaplin and Paulette Goddard. Uris Hall Auditorium. Open.

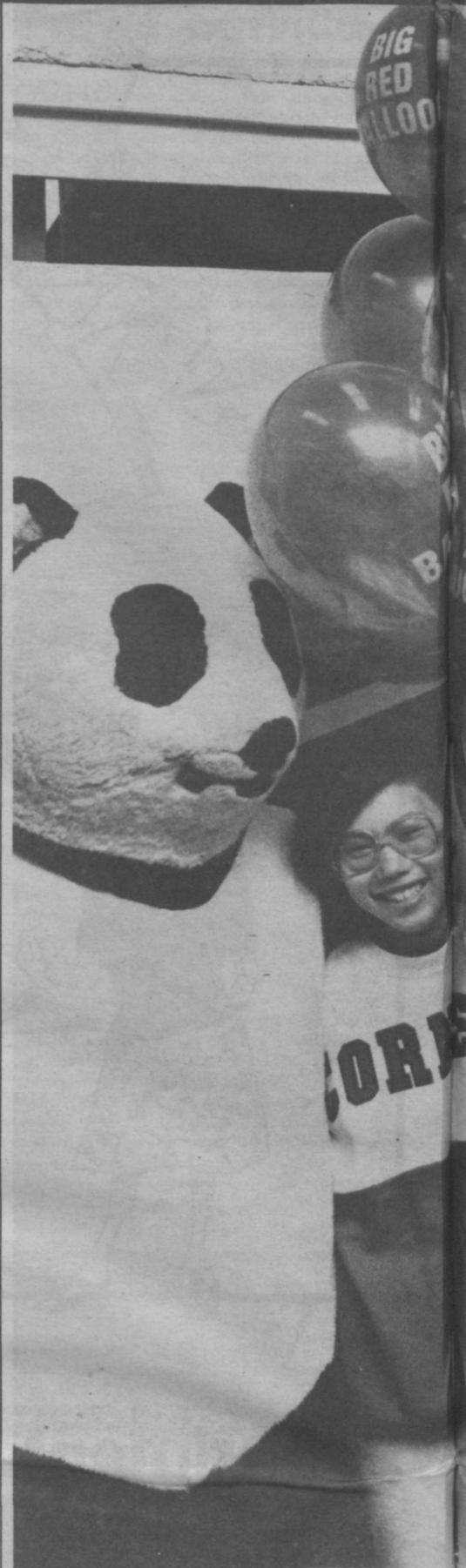
Wednesday 9/3

"What Happened to Kerouac?" (1986), directed by Richard Lerner and Lewis MacAdams. Ithaca Premiere. Documentary. 8 p.m. Uris Hall Auditorium. Open.

MEETINGS

Cornell Wives Club

The Cornell Wives Club will hold its membership meeting Sept. 2 at 7:30 p.m. in the Bess Brown Center, behind Hasbrouck Apartments #59. Membership is for wives of Cornell students and wives who are Cornell students. Among this year's activities are exercise, cooking, crafts, games, and ski trips. Annual dues are \$2. For more information, call Julie Peckham at 257-7524.



INTERNATIONAL THEMES: A giant panda and a 10th grader whose sister Lisa is a member of the

MUSIC



Bound for Glory

On Aug. 31, Tuin, fine Celtic music will be featured in the Bound for Glory series. Performances at 8:30, 9:30, 10:30 p.m. in the Commons Coffeeshouse in Anabel Taylor Hall, broadcast live on FM 93.

Chamber Music

There will be chamber music concert Aug. 30, 8:15 p.m., in Barnes Hall. Works by Vivaldi, Debussy, Rachmaninoff, Bartok, and Brahms will be played, featuring Roberta Crawford, Einar Holm, Richard MacDowell, Michael Salmirs, Rolfe Sokol, and Alice Talbot.

Gilbert & Sullivan Sing-Along

Gilbert & Sullivan Sing-Along with Cornell Savoyards 2:30 to 6 p.m. Sunday, Aug. 31, North Room, Willard Straight Hall. Scores and refreshments provided. All welcome.

AUGUST						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				



Broo greet Jennifer Fukuhara, a of '90, as she shops in the campus store.

sion play produced in the 1960s; "Odds Against Evens" and "Ministry in Question."

At present, Marvin is working on a book titled "Fool's Circle." He is heard frequently on the BBC.

Catholic

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

Every Sunday, 10 a.m., Anabel Taylor Auditorium. Mass.

Monday through Friday, 12:15 p.m. Anabel Taylor Chapel. Daily Mass.

Sacrament of Reconciliation by appointment. Call 255-4228, G-22, Anabel Taylor Hall.

Episcopal (Anglican)

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

Great Commission Students

Every Sunday, 10:30 a.m. Multi-Purpose Room, Robert Purcell Union. Worship Service.

Every Wednesday, 7:30-8:30 p.m. G-03 Founders Hall. Discussion group/fellowship.

Jewish

Morning Minyan: Monday and Thursday, 7:30 a.m. Young Israel House, 106 West Avenue.

Morning Minyan: Sunday, 8:30 a.m. Young Israel House, 106 West Avenue.

Reform Shabbat Services: Every Friday, 7 p.m. Young Israel House, 106 West Avenue.

Conservative/Egalitarian Shabbat Services: Every Friday, 7:30 p.m. Anabel Taylor Founders Room. Watch for time changes.

Orthodox Shabbat Service: Every Saturday, 9:15 a.m. Anabel Taylor Edwards Room.

Conservative Shabbat Service: Every Saturday, 10 a.m. Anabel Taylor Founders Room.

Young Israel

Friday, 7 p.m. Orthodox, 272-5810, Young Israel, 106 West Avenue.

Korean Church

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

Muslim

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

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



THEATRE

Savoyards Tech-together

Savoyards need volunteer technical help with set construction, props, costumes for fall production of "Yeomen of the Guard." Sept. 4, 7:30 p.m., 403 Barton Hall. No experience necessary. Call 273-0570.

Cornell Savoyards

The Cornell Savoyards and WHCU-FM will present a live dramatic radio version of Nicholas Meyer's "The West End Horror" on Saturday, Aug. 30. The performance will be broadcast from 8 to 10 p.m. from the First Street Playhouse and a limited number of free admission seats are available. Meyer's 1975 novel, a follow-up to "The Seven-Percent Solution," involves Sherlock Holmes with G.B. Shaw, Oscar Wilde, Gilbert and Sullivan, Bram Stoker, and others in a chilling murder investigation in Victorian London. Call 273-4226 for more information.

Savoyards Auditions

Auditions for Gilbert & Sullivan's "Yeomen of the Guard," will be held from 7:30 to 10:30 p.m., Sept. 1, in 205 Ford Hall, Ithaca College; Sept. 2, Women's Community Building, 100 W. Seneca St.; Sept. 3, 116 Lincoln Hall, Cornell. Bring a prepared piece to sing in English. Accompanist provided. Information, 273-0570.

The Conference of the Birds

The Rochester Folk Art Guild will visit Cornell to present "The Conference of the Birds," a play adapted by Peter Brook from a Middle Eastern fable. Peter Brook's troupe has presented the play in Europe, throughout Africa, as well as in the United States. It received rave reviews such as this one from the New York Times: "The play is a flying carpet gliding us aloft into a land of mystery, splendor and ritual." Performances Aug. 30 and 31 at 8 p.m., the Drummond Studio, Lincoln Hall. Tickets available at the door. For more information call 255-4060.

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 Thursday 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.

International Nutrition

"Assessment of Iron Status of the Population of the Island of Grenada," Marcia Middleton, Division of Nutritional Sciences, 12:15 p.m. Thursday, Sept. 4, 100 Savage Hall.

Theoretical and Applied Mechanics:

"Temperature Effects on Cracking in Glassy Polymers," Edward Kramer, Materials Science and Engineering; 4:30 p.m. Wednesday, Sept. 3, 205 Thurston Hall.

MISC

Classes At Cornell This Fall

Update job skills, work toward a degree, or explore a special interest through Extramural Study at Cornell. Continue your education by applying for admission to virtually any course the university offers through Extramural Study. Late afternoon and evening courses are available. Classes begin Thursday, Aug. 28. For information, call 255-4987 or write to Extramural Study, Box 94, B12 Ives Hall, Ithaca, N.Y. 14850. Registration for Extramural Study will be held on Aug. 28 and 29 from 8:30 a.m. to 4:30 p.m. in Barton Hall.

Tours of Olin Library

The Olin Reference Department is continuing its tours of Olin Library for graduate students and faculty. The tours last approximately 45 minutes and are scheduled for the following times: Thursday, Aug. 28, 10:15 and 11:15 a.m.; Friday, Aug. 29, 11:15 a.m. and 1:15 p.m.; Tuesday, Sept. 2, 9:15 a.m.; Wednesday, Sept. 3, 2:15 p.m.; and Thursday, Sept. 4, 10:15 a.m. Meet in the lobby of Olin Library. For more information, call 255-3319.

Tours of Uris Library

Tours of the Uris undergraduate library will be held weekdays through Sept. 5. Meet at the Uris circulation desk at the following days and times: Aug. 28, 3 p.m.; Friday, Aug. 29, 10:10 a.m.; Tuesday, Sept. 2, 10:10 a.m.; Wednesday, Sept. 3, 12:20 p.m.; Thursday, Sept. 4, 2:30 p.m.; Friday, Sept. 5, 11:15 a.m.; Handicapped students needing special tours should call 255-2339.

Ithaca Rape Crisis

Ithaca Rape Crisis is accepting applications for its volunteer counselor training program. Interested women should be willing to make at least a one-year commitment. No previous experience is necessary. Contact Ithaca Rape Crisis, P.O. Box 713, Ithaca, N.Y. 14851; 273-5589.

Intramural Tennis: Men, Women (doubles)

Deadline for entries is Tuesday, Sept. 2 at 4 p.m. in the intramural office, Helen Newman Hall. Two to enter. Fee is \$10 per team, due with roster to enter. Checks only, payable to "Cornell University." Post-deadline entries will not be accepted. No refund after deadline.

Intramural Football: Men, Women

Deadline for entries is Wednesday, Sept. 3 at 4 p.m. in the intramural office, Helen Newman Hall. Minimum of 12 to enter. Playing days are Monday through Friday starting at 4:35 p.m. Please specify your preferred day of play (1st, 2nd, and 3rd choice). Ten per team to enter, due with your roster. Checks only, payable to "Cornell University." Post-deadline entries will not be accepted. No refunds after deadline.

Alternatives Library

Located in 122 Anabel Taylor Hall, this library contains more than 5,000 books, 180 periodicals and 350 tapes and slide shows on topics of individual, social and ecological transformations. Areas include eco-justice, holistic health, Native Americans, sustainable agriculture, appropriate technology, gay issues, political and economic analysis, spirituality and mysticism, among others. Open to the public from 9 a.m. to 5 p.m. weekdays.

Emotions Anonymous

Are you having problems with your emotions? Emotions Anonymous meets every Tuesday at 8 p.m. at 109 Oak Ave. (The Lutheran Church.) Everyone is welcome.

Johnson Art Sale

A wide variety of objects from all areas of the museum's collections are available for purchase in the lecture room. Offerings will change throughout the month. Hours are Tuesdays through Saturdays, noon to 4 p.m. Museum members receive a 10 percent discount on purchases.

Alcoholics Anonymous

Faced with a drinking problem? Perhaps Alcoholics Anonymous can help. Open AA meeting every Monday, Tuesday, and Thursday at noon in the Anabel Taylor Hall Forum and every Wednesday at noon in 314 Anabel Taylor Hall.

Personal Effectiveness Seminar

This eight-week personal development workshop helps you develop self-awareness and self-confidence, take responsibility for your growth, build commitment, integrity, creativity, and learn stress management for vitality, relaxation and peace of mind. Meets eight Thursdays, 7 to 10 p.m., from Sept. 18 to Nov. 13. Call instructor Let Davidson, 272-4131, for information.

Making Relationships Work

An eight-week workshop on guidelines and skills for generating loving, satisfying and productive relationships, for individuals and couples. Meets eight Tuesdays, 7 to 10:30 p.m., from Sept. 16 to Nov. 4. Call instructor Let Davidson at 272-4131 for information.

Personal Growth Workshops Registration

To register or for more information about the following workshops, visit 103 Barnes Hall or call 255-3608. The programs are free and confidential. Registration begins Aug. 29. Workshops begin the week of Sept. 8.

Workshops: assertiveness; women, food and self-esteem; building self-esteem; building satisfying relationships; lesbian? bisexual? a support and discussion group for women (ongoing, open, meets Wednesdays from 7 to 9 p.m. in 103 Barnes Hall); gay? bisexual? a support and discussion group for men (ongoing, open, meets Tuesdays from 4 to 6 p.m. beginning Sept. 2 in 314 Anabel Taylor Hall.); new student connections (sections for freshmen, transfers, grads).

Experimental College Registration

Sign-up for Experimental College courses Sept. 8 and 9 at Willard Straight Hall's Memorial Room, 6 to 8 p.m., or pick-up a brochure at the following locations and register by mail: Noyes Center, Straight Hall, Day Hall Information and Referral Center, and the Tompkins County Library.



RELIGION

Sage Chapel

The Rev. Ernest C. Marvin, minister at St. Columba's Church in Cambridge, England, will preach at the opening service of Sage Chapel's 111th year Sunday, Aug. 31, at 11 a.m.

Marvin, who graduated from St. John's College, Oxford (politics, philosophy, economics) and Westminster College, Cambridge (theology), is author of "A Man Dies," a rock pas-

Job Opportunities

Jobs listed here are prepared by Staffing Services. The list of current vacancies is part of the university's commitment to promotion from within, affirmative action, and equal opportunity employment.

Employees seeking transfer to other jobs should contact Staffing Services for appropriate procedures and forms. Employment applications are available at Cornell's employment office, East Hill Plaza

(Judd Falls and Ellis Hollow roads), 9 a.m. to noon Monday through Friday. Mail completed forms to Cornell Staffing Services, 160 Day Hall, Ithaca, N.Y., 14853-2801.

This listing also is on CUINFO, the university's computerized info of the Information and Referral Center in Day Hall and other campus locations.

August 28, 1986
Number 34
University Personnel Services
Cornell University
160 Day Hall
Ithaca, New York 14853-2801

NOTICE TO ALL APPLICANTS:
Job Opportunities will publish vacancy announcements on a limited basis until further notice. Staffing Services will continue to accept employment applications and employee transfer requests. However, these items will be processed only after individuals with official University layoff status are given preferential consideration.

Assist catering manager. Prepare equipment lists, hire and supervise catering employees, and coordinate special events including cross country gourmet, summer conferences and reunion weekend.
Requirements: Associate's degree. One year food service supervisory experience. Knowledge of food and health codes. Send cover letter and resume to Ralph D. Jones by September 4, 1986.

RESEARCH SUPPORT SPECIALIST II (PT3311)
Agronomy
Manage and conduct field, greenhouse, growth chamber, and laboratory experiments related to physiology, production, and management of forage crops under direction of project leader.
Requirements: M.S. in Agronomy or related field or equivalent experience. Must be certified to apply pesticides. Farming, agronomic field research, experimentation in laboratory and controlled environment experience preferred. Submit cover letter and resume to Cynthia Smithbower by September 5, 1986.

ASSISTANT DIRECTOR, CORNELL FUND (PA3310)
University Development
Assist Director of Cornell Fund in development of programs within the Cornell Fund with a particular emphasis placed on Reunion Class Campaigns. Assist with overall planning, development and implementation of the Cornell Fund's efforts to obtain support from other private sources. Enlist alumni leadership, set goals and facilitate Fund objectives. Conduct phanathon campaigns.
Requirements: Bachelor's degree. Experience working with volunteers and fund-raising experience desired. Travel will be required. Ability to communicate persuasively orally and in writing. Good organizational ability. Send cover letter and resume to Ralph D. Jones by September 4, 1986.

PRODUCTION COORDINATOR (PA3316)
Media Services
Provide overall coordination for production of publications and related graphics materials.
Requirements: Bachelor's degree or equivalent, preferably in graphic arts, business, or communications. Knowledge of graphic arts procedures with particular emphasis on printing processes, typesetting, estimating and scheduling. Strong interpersonal skills. Send cover letter and resume to Ralph D. Jones by September 11, 1986.

STAFF NURSE (PA335)
University Health Services
Screen, assess, and treat or refer outpatients, utilizing clinical nursing skills. Assist nursing supervisor with management of clinic flow. 9 month position.
Requirements: 3 year nursing program degree and New York State Nursing license required. 1 or more years recent experience in outpatient nursing. Send cover letter and resume to Ralph D. Jones by September 4, 1986.

RESEARCH SUPPORT SPECIALIST I (PT333)
Division of Nutritional Sciences
Develop plan of work, project design, implementation and coordination of New York State Nutritional Surveillance Program. Report writing, primary data collection, and data base management.
Requirements: Master's degree in nutrition, epidemiology or public health. Experience in applied research necessary. Experience in primary data collection desirable. Some travel in New York State. Please send cover letter and resume to Cynthia Smithbower by September 5, 1986.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

DINING MANAGER II (PA338)
Dining Services
Plan and direct all services, production, personnel and financial aspects of a dining operation including: budget preparation and controls, forecasting customer counts and menu planning, staff training and facilities maintenance.
Requirements: Bachelor's degree. 3 years supervisory training and knowledge of food handling and health regulations. Send cover letter and resume to Ralph D. Jones by September 4, 1986.

ASSOCIATE DIRECTOR, HUMAN RELATION TRAINING PROGRAM (PA329)
Unions and Activities
Directly responsible for developing and implementing training programs for students, staff and faculty of color. Assist Director in overall administration of Human Relations Training Program including coordination of training, staff and volunteer supervision, public relations, budget, consultation on human relations issues, training of trainers, and review and development of training-theory methods. Act in absence of Director.
Requirements: Master's degree preferred. Equivalent experience seriously considered. Must have experience in human relations training with individuals and groups and possess awareness and sensitivity regarding issues of race, gender, sexual orientation, class, ethnicity, physical ability, and age. Experience and interest in issues concerning people of color is of special importance. Budget and supervision experience preferred. Send cover letter and resume to Kris Miller, Human Relation Training Program, 535 Willard Straight Hall, Cornell University, Ithaca, NY 14853.

RESEARCH SUPPORT SPECIALIST I (PT3210)
Ecology and Systematics
Participate in research on agroecology of potatoes and competition in monocultures of leafless peas. Major tasks will be analysis of data, greenhouse studies, and maintenance of a laboratory.
Requirements: B.S. in biology, botany, agronomy, or ecology, or statistic-computers with background in biology. Experience using statistics and computers, especially with reference to biological or agronomic data. Greenhouse experience and knowledge of botany and ecology, especially with reference to potatoes or peas preferred. Submit cover letter and resume to Cynthia Smithbower by September 5, 1986.

ASSOCIATE DIRECTOR, HUMAN RELATION TRAINING PROGRAM (PA329)
Unions and Activities
Directly responsible for developing and implementing training programs for students, staff and faculty of color. Assist Director in overall administration of Human Relations Training Program including coordination of training, staff and volunteer supervision, public relations, budget, consultation on human relations issues, training of trainers, and review and development of training-theory methods. Act in absence of Director.
Requirements: Master's degree preferred. Equivalent experience seriously considered. Must have experience in human relations training with individuals and groups and possess awareness and sensitivity regarding issues of race, gender, sexual orientation, class, ethnicity, physical ability, and age. Experience and interest in issues concerning people of color is of special importance. Budget and supervision experience preferred. Send cover letter and resume to Kris Miller, Human Relation Training Program, 535 Willard Straight Hall, Cornell University, Ithaca, NY 14853.

RESEARCH SUPPORT SPECIALIST II (PT2310)
Plant Pathology
Aid in the investigation of disease epidemiology and management by assuming major responsibility for efficient and accurate construction of field, greenhouse, and laboratory experiments by contributing to experimental design, and by performing necessary manipulations to assure success of the experiments.
Requirements: Master's degree in plant pathology or Bachelor's degree and experience in plant disease research. Successful independent research experience with plant diseases as demonstrated by thesis or publication. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

BUSINESS MANAGER (PA298) Repost
Vice President for Campus Affairs
Responsible for overall business, financial and administrative affairs of Division of Campus Life. The Division has a budget of approximately \$60 million and is composed of the following student services and auxiliary enterprises: Campus Store, Dean of Students Office, Dining Services, Health Services, International Student Office, Office of the Assemblies, Public Safety, Religious Affairs, Residence Life, Transportation Services and Unions & Activities. The position is responsible to the Vice President for Campus Affairs.

ASSISTANT DIRECTOR OF ADMINISTRATION (PA342)
Human Ecology Administration
Assist in budget development for College, monitor performance. Provide financial analyses and develop income and expense projections. Responsible for College personnel database and provide information for decision-making. Review and approve personnel actions. Coordinate implementation of salary programs. Aid in coordination of administrative computing systems and services.
Requirements: Bachelor's degree with concentration in finance or accounting; MBA preferred. Minimum 3-5 years experience in financial analysis. Excellent communication skills required. Experience with microcomputer applications and familiarity with software packages such as Lotus 1-2-3 and DBase III. Send cover letter and resume to Ralph D. Jones by September 11, 1986.

EXTENSION SUPPORT AIDE (PC332)
Cornell Plantations
Provide support services utilizing research, writing and teaching skills to aid in development of an elementary science education program and accompanying teacher in service program. 1 year appointment.
Requirements: Bachelor's degree in biological sciences, education or related field. Minimum two or more years of elementary school science teaching. Knowledge of recent literature in children's learning theory. Some experience facilitating teacher in-service programs. Excellent communication (oral and written) skills. Send cover letter and resume to Esther L. Smith.

ASSISTANT CATERING MANAGER I (PA339)
Dining Services

TECHNICAL CONSULTANT II (PT3318)
Academic Computing
Provide consulting on microcomputing hardware (primarily Macintosh and IBM PC), software, and local area networks. Test, evaluate and write about new hardware and software products. Develop classes, teach and write articles and documentation about microcomputing issues. Assist users with selection and configuration of microcomputing systems.
Requirements: B.A. or equivalent with some background in Computer Science. Knowledge of at least one programming language; two to three years experience with microcomputing systems and software. Good speaking and writing skills required. Teaching and consulting experience very desirable. Submit cover letter and resume by September 5, 1986 to Cynthia Smithbower.

APPLICATIONS PROGRAMMER/ANALYST III (PT3319)
Academic Computing
Assist faculty with development of software on Macintosh microcomputer by writing programs, assisting student programmers and helping to debug, refine, and complete software designed or written by faculty. 15 to 19 months.
Requirements: B.A. or equivalent with strong background in Computer Science. Three or more years programming experience with knowledge of two programming languages including C or Pascal. Extensive experience with microcomputers helpful; previous Macintosh programming experience very desirable. Submit cover letter and resume by September 5, 1986 to Cynthia Smithbower.

MANAGING EDITOR (PC3212)
NYSSILR
Responsible for location, evaluation and development of manuscripts in field of labor relations; edit or supervise copy editing and proof reading; maintain editorial standards; manage orderly flow of publication process; write promotion copy for new titles; and contribute to overall marketing strategy.
Requirements: Bachelor's degree or equivalent. Minimum three years publishing experience. Working knowledge of industrial and labor relations essential. Send cover letter, resume or call Esther L. Smith in confidence (607-255-6874).

DEVELOPMENT ASSISTANT (PC323)
University Libraries Development Office
Assist Director of Development for University Libraries by coordinating and executing projects essential to marketing and stewardship aspects of University Libraries. Analyze gift data and acknowledgements; coordinate correspondence flow; coordinate special events on-campus sponsored by Libraries; maintain automated system for gift reporting from Public Affairs Records; act as liaison with Gift Records section. Other duties as assigned.
Requirements: Knowledge of Cornell University specifically familiarity with Cornell's gift giving procedures and public affairs records. Computer experience including knowledge of database information systems necessary. Demonstrated excellent communication (verbal and written) and strong organizational and interpersonal skills. Please send cover letter and resume to Michele Draiss, 235 Olin Library, Cornell University, Ithaca, NY 14853.
Minimum Biweekly Starting Salary: \$565.25

ASSOCIATE DIRECTOR, HUMAN RELATION TRAINING PROGRAM (PA329)
Unions and Activities
Directly responsible for developing and implementing training programs for students, staff and faculty of color. Assist Director in overall administration of Human Relations Training Program including coordination of training, staff and volunteer supervision, public relations, budget, consultation on human relations issues, training of trainers, and review and development of training-theory methods. Act in absence of Director.
Requirements: Master's degree preferred. Equivalent experience seriously considered. Must have experience in human relations training with individuals and groups and possess awareness and sensitivity regarding issues of race, gender, sexual orientation, class, ethnicity, physical ability, and age. Experience and interest in issues concerning people of color is of special importance. Budget and supervision experience preferred. Send cover letter and resume to Kris Miller, Human Relation Training Program, 535 Willard Straight Hall, Cornell University, Ithaca, NY 14853.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT3317)
Agricultural Engineering
Responsible for maintaining equipment, training personnel, carrying out experiments and providing analysis and write-ups of experiments. Responsible for day-to-day decision-making and experimental design. Necessary to maintain time schedules, input data into computers and write technical reports.
Requirements: B.S. in Agricultural Engineering or equivalent experience. Experience required in microbiology and water quality analysis. Experience also required operating tertiary-level sewage plants and interacting with regulatory agency personnel. Submit cover letter and resume to Cynthia Smithbower.

Requirements: MBA, 3-5 years financial experience desirable. Send resume and cover letter to Ralph D. Jones by September 10, 1986.

DIRECTOR OF ACCOUNTING, (PA3111)
Controller's (Accounting)

Manage and supervise daily operations of Endowed Accounting Office. Establish and administer University accounting policies and procedures. Direct preparation of University's annual financial report and serve as liaison between department and internal and external auditors. Provide support to assistant controller regarding computer systems enhancements, departmental planning, and development of University training programs.
Requirements: Bachelor's degree or equivalent required. Master's degree or CPA preferred. Considerable University and public accounting experience essential. Familiarity with computerized financial systems desirable. Must possess demonstrated supervisory ability and excellent verbal and written communication skills. Send cover letter and resume to Ralph D. Jones by September 26, 1986.

GRAPHIC CONSULTANT (PT318)
Theory Center, PSF
Support graphics applications running on Cornell's Production Supercomputer Facility which are interfaced to microcomputers or terminals on local or national computer networks. Develop materials and provide training to local and national supercomputer users on supercomputer graphics software, networking issues, and workstation hardware and software.
Requirements: Bachelor's degree or equivalent with coursework in computing or related fields. 3 to 5 years related experience. Detailed knowledge of mainframe graphics software required. Ability to develop graphics programs required on mainframe or microcomputer. Knowledge of microcomputer software and hardware in area of graphics (esp. IBM PCs and Macintosh). Knowledge of common graphics terminals. Excellent communication, interpersonal, organizational and planning skills. Send cover letter and resume to Cynthia Smithbower.

SENIOR ACCOUNTANT (PA3112)
Controller's (Accounting)
Provide general supervision for accounts payable operation. Prepare annual financial report and related schedules. Consult with departments on accounting procedures. Responsible for preparation of various financial analyses. Provide staff support to director of accounting.
Requirements: Bachelor's degree or equivalent in business or accounting.
Minimum of 3 years professional accounting experience. Strong interpersonal skills and previous supervisory experience highly desirable. Familiarity with computerized financial systems is essential. Send cover letter and resume to Ralph D. Jones by September 5, 1986.

STAFF WRITER II (PC316)
University Development
Create and write promotional brochures, articles, proposals and letters related to fund raising or public relations. Carry out special communication assignments and develop communication strategies working with various University faculty and staff.
Requirements: Bachelor's degree in English, journalism, marketing or communication arts. Minimum 1 year experience as a writer in fund raising, advertising, public relations or higher education. Send cover letter, resume, and 3 writing samples or call Esther L. Smith in confidence.

RESEARCH SUPPORT SPECIALIST II (PT302)
Textiles and Apparel
Plan and design experiments; collect, record and analyze data; contribute to published research findings, organize and acquire equipment and supplies for research laboratory and supervise other laboratory personnel.
Requirements: Master's of Science degree in physical science or Bachelor's degree in material science, chemistry; quantitative skills necessary. Math and computer skills needed in data acquisition and analysis, technical report writing required. Experience in electron microscopy and microtomy required. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT2310)
Plant Pathology
Aid in the investigation of disease epidemiology and management by assuming major responsibility for efficient and accurate construction of field, greenhouse, and laboratory experiments by contributing to experimental design, and by performing necessary manipulations to assure success of the experiments.
Requirements: Master's degree in plant pathology or Bachelor's degree and experience in plant disease research. Successful independent research experience with plant diseases as demonstrated by thesis or publication. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

RESEARCH SUPPORT SPECIALIST II (PT307)
Animal Science
Collect and analyze laboratory samples for professor conducting research on animal growth. Specific duties include modification, development, and routine conduct of analytical methods.
Requirements: Bachelor's degree in chemistry or biological sciences. Ability to work with minimum supervision; organization and supervisory ability; ability to search literature and develop assays; knowledge of quantitative chemical techniques, radioimmunoassays, autoradiography, cell and tissue culture helpful. Send cover letter and resume to Cynthia Smithbower.

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 5-6874 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 - 6:00p.m. 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.

ADMINISTRATIVE AIDE, GR23 (C347)
Theatre Arts
Market and promote Theatre Cornell. Develop audience for theatre productions material (brochures, programs, news releases); supervise box office operations and front of house staff. Monday through Friday, 9:00 to 5:00; some evenings.
Requirements: B.A. or B.F.A. in Arts or Arts-Business field or equivalent. Medium typing. Excellent writing skills. Non-profit performing arts management or marketing experience required. Knowledge of graphic arts. Experience with box office operations. Good organizational and interpersonal skills. Send cover letter and resume or call Esther L. Smith in confidence (607-255-6874).

ADMINISTRATIVE AIDE, GR22 (C347)
Music
Facilitate administration of Department of Music by assisting Chairman in his duties. Manage affairs of department office; maintain department's administrative timetable.
Requirements: A.A.S. degree or equivalent. Medium, accurate typing. Ability to supervise personnel. Handle many demands and deadlines concurrently. Familiarity with Cornell accounting procedures.
Minimum Biweekly Starting Salary: \$539.94

ADMINISTRATIVE AIDE, GR20 (C344)
Registrar
Provide receptionist and telephone support for department head; serve as lead operator for multi-user word processing system; maintain department financial accounts.
Requirements: A.A.S. degree or equivalent. Heavy typing. Minimum three years experience in secretarial field. Familiarity with Cornell procedures. Word processing experience needed.
Minimum Biweekly Starting Salary: \$482.33

SECRETARY, GR19 (C3415)
Arts and Sciences Public Affairs
Provide administrative and secretarial support for Associate and Assistant Director of Public Affairs. Type; file; assist in arranging events, meetings and staff travel; establish and maintain donor tracking and gift acknowledgement. Other duties as assigned. 9 month position.
Requirements: A.A.S. degree or equivalent. Medium typing. Minimum of two years secretarial experience required. Good typing, filing and telephone skills. Ability to work on projects independently and under deadlines. Knowledge of or willingness to learn word processing.
Minimum Biweekly Starting Salary: \$457.09

OFFICE ASSISTANT, GR19 (C3411)
Graduate School
Enter data on CRT, process forms related to graduate student records; answer phone and walk-in inquiries from students, faculty and other offices; assist in course enrollment; work at receptionist desk, hand out and receive forms. Other duties as assigned.
Requirements: High school diploma or equivalent. Light typing. Knowledge of college setting helpful. Filing skills. Ability to work independently. Communication skills important. CRT experience desirable but not necessary.
Minimum Biweekly Starting Salary: \$457.09

OFFICE ASSISTANT, GR18 (C341)
Hotel Administration-Computer Services
Perform operator activities on a WANG VS 100 computer system and provide clerical-secretarial assistance to Director of Computer Services. Assist system operator in providing support to WANG VS 100 users, both Hotel School and Statler Inn. Monday through Friday 8:00 - 4:30; flexible hours may be necessary.
Requirements: High school diploma or equivalent. Medium typing. Knowledge of or experience with computer hardware. Experience with word processing. Organizational, interpersonal and communication skills. Good typing skills.
Minimum Biweekly Starting Salary: \$431.43

OFFICE ASSISTANT, GR18 (C3410)
Law School
Assist Admissions staff with processing application materials and records; type correspondence; telephone and receptionist duties; use IBM PC for word processing.
Requirements: High school diploma or equivalent; business or secretarial school desirable. Medium typing. Good verbal and

written communication skills. Ability to process large amounts of information quickly and accurately. Ability to deal with highly confidential material. Knowledge of IBM PC or willingness to learn.

Minimum Biweekly Starting Salary: \$431.43

EDITORIAL ASSISTANT, GR18 (C349)
University Press

Act as assistant to editor responsible for acquiring scholarly books in the humanities. Type; file; follow-up; some contact with authors and Press advisers. 2 year appointment, renewable.

Requirements: A.A.S. degree or equivalent desirable. Heavy typing. Interest in book publishing as a possible career. Prior experience in publishing helpful.

Minimum Biweekly Starting Salary: \$431.43

SPECIAL COLLECTIONS ASSISTANT, GR18 (C3412)

N.Y. Historical Resources Center-Olin Library

Edit and index data gathering forms for state-wide historical documents inventory. Enter data into RLIN database, proofread printouts; update database and prepare material for publication. Regular, full-time until June, 1987 with possible extension.

Requirements: B.A. in humanities, social sciences or related field preferred. Light typing. Writing skills and good handwriting. Experience in editing, indexing, proofreading and data entry desirable. Accuracy and ability to do detailed work with minimum supervision required. Some knowledge of New York State history desirable. Experience with RLIN desirable.

Minimum Biweekly Starting Salary: \$431.43

RESEARCH AIDE, GR17 (C3416)
Natural Resources

Provide a variety of support services to 5 professional research staff. Table and figure preparation; literature review; coding; conduct telephone interviews; other clerical assistance.

Requirements: High school diploma or equivalent. Associate's degree preferable in Natural Resources or related field. Light typing. Coding, figure preparation, familiarity with computers, especially output for tabulation from SPSS and SAS, microcomputer experience using WordPerfect and MacWrite.

Minimum Biweekly Starting Salary: \$409.53

STACKS ASSISTANT, GR16 (C3413)

Access Services, Olin Library
Maintain book stacks of library; shelve large volume of materials; process incoming serials on daily basis and maintain orderly academic environment. Other duties include staffing library security desk.

Requirements: High school diploma. Familiarity with libraries and an academic setting, some public service experience desirable. Strong organizational and communication skills.

Minimum Biweekly Starting Salary: \$390.08

ACCOUNTS ASSISTANT, GR18 (C3312)

Cooperative Extension Administration
Process standard and travel vouchers; interdepartmental; billings; maintain renewal of leases; verify accuracy of expenditures for Extension Administration.

Requirements: High school diploma or equivalent. Light typing. Minimum two years experience in accounting. Knowledge of Cornell's accounting system desired.

Minimum Biweekly Starting Salary: \$431.43

ASSISTANT COSTUME SHOP SUPERVISOR (C294) Repost

Theatre Arts
Assist lecturer in charge of costumes with operation of Theatre Cornell costume shop. Purchase supplies; organize and schedule work; drafting, cutting and costume construction as needed. Full-time, regular; end of August until Mid May.

Requirements: Graduate degree in theatrical costuming preferred or undergraduate degree and some professional theatre experience. Supervision of costume construction. Operation and maintenance of costume shop equipment. Patternmaking. Costume construction. Budgeting skills. Send cover letter and resume or call Esther L. Smith in confidence by August 29, 1986.

Minimum Biweekly Starting Salary: \$572.27

General Service

Outside applicants for general service positions should apply in person at the East Hill Plaza Employment Office, Monday - Friday, 9am - 12 noon. Phone requests and cover letters are not accepted unless specified. Regular Cornell employees should submit an employee transfer application.

TRADES ASSISTANT (G344, G345)

Maintenance and Service Operations
Assist union tradesperson. Pick up and deliver supplies to job site; load and unload materials and equipment; return material and supplies to tool crib or inventory clerk; act as union tender at job site; keep shop areas clean; operate small equipment.

Requirements: 1 to 2 years unskilled construction experience desirable. Valid NYS drivers license required. Working knowledge of tools used in all types of construction. Ability to perform strenuous physical labor and lift 100 pounds. Alert, cautious and customer oriented. Must pass physical and join union.

DISPATCHER II, SO18 (G343)

Maintenance and Service Operations - Endowed

Serve as primary communication link between campus community and Maintenance and Service Operations for maintenance requests. Issue job tickets utilizing mainframe terminal. Dispatch tradespersons and assistants via radio communication system.

Requirements: High school diploma. Medium typing. Excellent interpersonal and telephone skills. Ability to work under pressure, with careful attention to details. Experience with computers and radio communication

helpful. Training or experience in public relations, sales or service preferred.

Minimum hourly rate: \$5.71

SALES ASSISTANT, GR17 (G341)

Dining Services
Maintain efficient market operation through training, scheduling and supervision of cashiers, food service workers and other staff. Operate cash register; assist customers; stock shelves; inventory goods; monitor time cards for accuracy; assist in preparation of performance appraisals; ensure sanitary procedures and unit security. Monday through Friday including some evenings.

Requirements: High school diploma or equivalent. 1-2 years related experience. Ability to operate cash register. Good interpersonal, organizational and supervisory skills essential. Some clerical skills preferred.

Minimum Biweekly Starting Salary: \$409.53

CUSTODIAN, SO16 (G346, G347, G348)

Buildings Care - Endowed
Provide general maintenance and custodial care of buildings and grounds in immediate vicinity of assigned area. G346 and G347: Saturday, Sunday 4 a.m. to 12:30 p.m.; Wednesday, Thursday 6 a.m. to 2:30 p.m.; Friday 6 a.m. to 1:30 p.m. G348: Friday, Saturday, Sunday, Monday 11 p.m. to 7:30 a.m.; Tuesday: 11 p.m. to 6:30 a.m.

Requirements: High school diploma or equivalent. Ability to use a variety of heavy power operated equipment, climb an 8 foot ladder and lift 50 pounds.

Minimum hourly rate: \$5.14

COOK, SO22 (G332)

Dining Services
Responsible for preparation and presentation of full variety of foods for breakfast, lunch and dinner service, including soups, sauces, casseroles, meats and vegetables. Coordinate timely production and presentation of menued foods; maintain portion control through standardized recipes; control amounts of food prepared, served and leftover; ensure sanitary procedures and NYS health code standards; assist in management, menu planning and utilization of leftovers; supervise and assist in cleaning equipment and kitchen areas; supervise proper storage of food items. Functional supervision and technical guidance of employees as assigned. Monday through Friday, 40 hours per week.

Requirements: High school diploma or equivalent. 3-5 years experience in preparing a full range of entrees, sauces, soups and accompaniments, in addition to food preparation and knowledge of food cooking processes (grilling, frying, toasting and steaming) in an institutional environment. Skilled in presenting and garnishing food. Working knowledge of use and maintenance requirements for charbroilers, steam jacket kettles, pressure steamers, ovens, slicers, mixers, choppers and various hand tools. Good interpersonal, communication and organizational skills. Ability to supervise others.

Minimum hourly rate: \$7.07

BAKER, SO20 (G333)

Dining Services
Prepare a full variety of baked goods including rolls, breads, cakes, cookies, pastries and decoration. Scale ingredients, mix batters and doughs for production and bake as assigned. Operate and maintain choppers, dough sheeters, ovens, mixers, proofers and various hand tools. Ensure sanitary procedures and NYS health code standards. Receive food and supplies and maintain storage areas. Assist in cleaning assigned areas. Prepare orders for delivery; make deliveries on campus as assigned.

Requirements: High school diploma or equivalent. 1 year related experience with working knowledge of baking equipment listed above. Good interpersonal, communication and organizational skills.

Minimum hourly rate: \$6.34

COOK, SO20 (G335)

Dining Services
Responsible for preparation of full variety of foods. Maintain portion control; record amounts of food prepared, served and leftover; maintain sanitary procedures and NYS health code standards; assist in cleaning equipment and kitchen areas; oversee and train staff as assigned by management. Monday through Friday; 40 hours per week.

Requirements: High school diploma or equivalent. 1-2 years experience in food preparation and knowledge of food cooking processes (grilling, frying, roasting, steaming) in an institutional environment. Working knowledge of charbroilers, steam jacket kettles, pressure steamers, fryers, ovens, slicers, mixers, choppers and various hand tools. Good interpersonal, organizational and communication skills preferred.

Minimum hourly rate \$6.34

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 Smith-bower. Current Cornell employees should submit an employee transfer application, resume and cover letter. Outside applicants with training or experience in the following areas are encouraged to apply: biochemistry, chemistry, microbiology, electronics, physics and licensed animal health technicians.

RESEARCH ASSISTANT I or II (T342)

Boyce Thompson Institute
Maintain insect cell cultures, perform plaque assays and general lab maintenance. Perform extraction, restriction enzyme analysis and cloning of viral DNAs.

Requirements: Bachelor's degree in biological sciences. Experience with techniques in molecular biology desirable. Send cover letter and resume to D. C. Torgeson, Boyce Thompson Institute for Plant Research, Tower Road, Ithaca, NY 14853.

Minimum Starting Salary: \$11,920

RESEARCH ASSISTANT I or II (T343)

Boyce Thompson Institute
Insect Pathology Laboratory: Participate in and provide support for research on fungal diseases of insects, including purchasing scientific supplies, maintaining reprint and slide collection, providing support for project scientists in Brazil and the Philippines.

Requirements: Bachelor of Science degree or equivalent experience. Lab experience with insects or microorganisms and computer experience (word processing, data base, spreadsheets, statistics) desirable. Send cover letter and resume to D.C. Torgeson, Boyce Thompson Institute for Plant Research, Tower Road, Ithaca, NY 14853.

Minimum Starting Salary: \$11,920

ELECTRONICS TECHNICIAN, GR22 (T347)

Structural Engineering
Order, assemble, operate, and maintain computerized data acquisition equipment. Write, troubleshoot and perform system-level programming, light assembly of fixtures and hydraulic equipment.

Requirements: Associate's degree or equivalent necessary. Knowledge of digital circuitry and programming necessary. Initiative and willingness to undertake challenging hardware-software problems related to data acquisition. Experience with hydraulics and light wood or metal fabrication useful. Ability to communicate with and assist graduate students with both hardware and software.

Minimum Biweekly Starting Salary: \$539.94

TECHNICIAN, GR22 (T341)

Vet Microbiology
Assist in research on isolation and synthesis of the peptide fragment that carries the epitope of S. equi M protein active in mucosal immunity in the horse.

Requirements: B.S. in biochemistry, chemistry or microbiology with concentration in biochemistry. Sterile microbiologic technique, harvesting of bacteria from mass culture, gel-filtration or ion exchange chromatography, SDS-PAGE techniques, immunoblotting, familiarity with electrophoresis and chromatography apparatus. Send cover letter and resume by September 12, 1986.

Minimum Biweekly Starting Salary: \$539.94

COMPUTER OPERATOR, GR22 (T346)

Animal Science
Responsible for computer night shift, putting out daily run, distribute output and listings, run tests and jobs submitted by programmers and keep shelves supplied with forms. Monday, Thursday, 11:30 p.m. to 7:30 a.m.; Tuesday, Wednesday, Friday 11:30 p.m. to 8:00 a.m.

Requirements: Associate's degree in Data Processing. 1-2 years experience desirable particularly with IBM mainframe. Apply by September 5, 1986.

Minimum Biweekly Starting Salary: \$539.94

TECHNICIAN, GR18 (T344)

Chemistry
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. Part-time possible.

Requirements: Bachelor's degree in Chemistry. Knowledge of Chemistry lab techniques and procedures. 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 September 5, 1986.

Minimum Biweekly Starting Salary: \$431.43

TECHNICIAN, GR23 (T332)

Vet Microbiology
Carry out molecular and genetic analysis of bacterial genes encoding gene transfer functions and cell surface antigens. Will involve an extensive amount of DNA sequencing and similar techniques, as well as monitoring departmental recombinant DNA equipment.

Requirements: B.S. in microbiology, biochemistry or genetics plus either graduate training or experience in nucleic acid chemistry techniques. Ability to handle bacteriologic or tissue cultures aseptically. Experience in handling toxic chemicals, radioisotopes, and recombinant DNA.

Minimum Biweekly Starting Salary: \$572.27

TECHNICIAN, GR22 (T337)

Agricultural Engineering
Provide technical support in examination of kinetics of apple pomace conversion to soluble products. Design and construct models, conduct and analyze experiments, prepare reports based on experimental work; interface computer systems for data storage and analysis, use and maintain analytical equipment, and maintain laboratory.

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

Minimum Biweekly Starting Salary: \$539.94

TECHNICIAN, GR21 (T334)

Genetics and Development
Carry out, record and assist in analysis of experiment in Drosophila molecular biology and population genetics under direction of principal investigator; contribute to supervision of general laboratory functioning; and assist in teaching techniques to new personnel.

Requirements: Bachelor's degree in biology, chemistry or equivalent. Background in molecular biology, biochemistry or genetics desirable. Previous laboratory experience and ability to work independently. Apply by September 5, 1986.

Minimum Biweekly Starting Salary: \$512.32

TECHNICIAN, GR21 (T333)

Chemistry
Perform amino acid analysis and protein sequence analysis; assist in establishing an oligonucleotide synthesis facility.

Requirements: Bachelor's degree in Chemistry or Biochemistry. Prefer at least 2 years experience-training in amino acid analysis, protein sequence analysis, specialized training in HPLC or automated chemical analysis techniques. Apply by September 5, 1986.

Minimum Biweekly Starting Salary: \$512.32

TECHNICIAN, GR19 (T335)

Diagnostic Laboratory
Function as technical support for Bacteriology section of Diagnostic Lab in performing microbiological and immunological tests on specimens as requested by clinicians to aid in diagnosis of infections in animals and humans.

Requirements: Bachelor's degree or equivalent in microbiology or related field. Must have a working knowledge of chemistry, microbiology and immunology. Familiarity with laboratory instruments such as PH meters, autoclave, analytical balance, sterile techniques required. Apply by September 5, 1986.

Minimum Biweekly Starting Salary: \$457.09

TECHNICIAN, GR19 (T338)

Agricultural Engineering
Monitor and feed biochemical reactors. Responsible for computer based data management, analysis, gas chromatography utilization and upkeep, report preparation, laboratory upkeep and ordering supplies.

Requirements: B.S. in Agricultural Engineering or equivalent experience.

Experience in microbiology and wet chemistry analyses essential.

Minimum Biweekly Starting Salary: \$457.09

TECHNICIAN, GR21 (T322)

Chemistry
Assist in carrying out research projects in biochemistry such as enzyme preparations, assays, characterization; responsible for laboratory administration including ordering chemicals, keeping inventory and radiation safety records, and supervising student dishwashers.

Requirements: Bachelor's degree in Chemistry or Biochemistry. Experience working with proteins and enzymes and with biochemical preparations. Good organizational skills. Apply by September 5, 1986.

Minimum Biweekly Starting Salary: \$512.32

COMPUTER OPERATOR, GR22 (T242)

Repost
Computer Services-Academic Computing
Coordinator of a campus computing facility. Duties include general knowledge of microcomputers (IBM, Apple, DEC and Hewlett-Packard), answer general consulting questions, help users access Cornell's various computer systems, train new staff and help develop new policies and procedures.

Requirements: Associate's degree in data processing or equivalent experience. One year previous computer experience, preferably at Cornell; working knowledge of Cornell's computer system, strong oral communication, interpersonal and organizational skills.

Minimum Biweekly Starting Salary: \$539.94

TECHNICIAN, GR22 (T251) Repost

Plant Pathology (Geneva)
Assist in conducting research in a cytology laboratory and oversee usage and service of equipment; such as, electron microscopes.

Requirements: Bachelor's degree in biology or relevant field. Experience or training in light transmission electron microscopy preferred. Previous experience in a microbiology or cytology laboratory would be helpful.

Experience with immunocytochemical methodologies useful.

Minimum Biweekly Starting Salary: \$539.94

TECHNICIAN, GR20 (T124) Repost

Neurobiology and Behavior
Assist in design and conduct of electrophysiological and behavioral research, and aid in administration of a small laboratory. The research program concerns electrophysiology of the lateral line system of tropical fishes and studies of communication behavior among fish.

Requirements: Bachelor's degree in some field of experimental biology. Master's degree desirable. Experience in a research laboratory environment. Familiarity with electrophysiological, neurobiological and animal behavior techniques. Excellent hand-eye coordination for hand work; skilled in use of laboratory equipment and tools.

Minimum Biweekly Starting Salary: \$482.33

Part-Time

COOK, SO18 (G342, G3410)

Residence Life - Endowed
Clean, prepare and cook food for University-owned fraternity. Clean all food preparation areas, cooking areas and assist in keeping storerooms and refrigerators sanitary. Aid student steward in menu-planning and food purchases as needed. Varying work hours in response to special menu plan functions.

Requirements: High school diploma or equivalent. Able to follow recipes accurately, operate standard food preparation and cooking equipment. Experience in large quantity preparation essential. 1-2 years institutional cooking experience. Good organizational skills. Able to work with little supervision and with student volunteers; able to supervise student helpers. Apply in person, Monday through Friday, 9 a.m. to 12 noon at the East Hill Plaza employment office.

Minimum hourly rate: \$5.71

RECORDS ASSISTANT, GR16 (C3414)

Catalog Department - Olin Library
Participate in project to convert library catalog records in sciences and technology into machine-readable form using RLIN system. Input original catalog records into RLIN, photocopy catalog cards, sort and file worksheets, stamp shelflist representing completed records. 20 hours per week, may require evening hours. Regular-part time until June 30, 1987.

Requirements: High school diploma. Medium typing. Ability to perform detailed and repetitive tasks accurately. Knowledge of computer input helpful. Some office experience helpful. Knowledge of, or experience with, foreign languages helpful.

Minimum Full-time equivalent: \$390.08

CASHIER, GR15 (G349)

Dining Services

Transact cash and credit sales utilizing an electronic cash register; tabulate daily figures

and prepare deposit. Monday through Friday, 30 hours per week.

Requirements: High school diploma or equivalent. 1-2 years related experience. Basic reading and computation skills. Good interpersonal and communication skills required.

Minimum hourly rate: \$4.76

COMPUTER TECHNICAL ADMINISTRATOR II (PT3211)

Government-History
Select, purchase, install, maintain and support hardware and software in a microcomputer-mainframe terminal facility. Responsible for mainframe account administration, physical security and microcomputer software lending. Will be social science statistics consultant. Regular part-time, 30 hours per week.

Requirements: Graduate Degree, preferably in social sciences. Substantial experience with statistical and wordprocessing computing on IBM mainframes and microcomputers. Minimum 2-3 years computing experience with MVS, tapes, CMS, SAS, SCRIPT, SPSS, IBM PCs, DOS, Wordperfect, SYSTAT, Macintoshes, Microsoft WORD. Please submit cover letter and resume by September 5, 1986 to Cynthia Smithbower.

RESEARCH AIDE, GR19 (C3214)

Animal Science
Serve as technical assistant for research in microbiology. Collect, organize, analyze, and summarize data and prepare manuscripts for publication. 25 hours per week.

Requirements: Bachelor's degree in Agriculture or the Biological Sciences. Medium typing. Word processing experience preferred. Knowledge of computers and basic statistics. Ability to organize and work independently. Experience in technical editing or publishing. Some experience with graphics and artistic layout. Laboratory experience highly desirable. Please send cover letter and resume or call Esther L. Smith in confidence (607-255-6874).

Biweekly full-time equivalent: \$457.09

Temporary

TEMPORARY OPPORTUNITIES: Individuals qualified for temporary work and interested in clerical-secretarial; if you have experience or skills, and are interested in learning more about these opportunities, please call Laurie Worsell at 255-5226.

TECHNICIAN (T345)

Vegetable Crops
Field work, harvesting, data collection on samples (including pH, acidity and firmness measurements), gas chromatography.

Requirements: Related coursework preferred. Basic laboratory skills requested. Must be able to work independently and have some experience in laboratory; interest in field. Send cover letter and resume to Cynthia Smithbower.

ADMINISTRATIVE AIDE (C3418)

Natural Resources
Provide clerical assistance for Cooperative Extension program. Type correspondence and reports from dictaphone; arrange meetings; send mailings. Receptionist duties include answering telephone, greeting public. Monday through Friday, 6 hours per day - flexible.

Requirements: Associate's degree or equivalent. Medium typing. Minimum 2-3 years work experience, excellent communication skills required.

Minimum hourly rate: \$6.00

RECORDS ASSISTANT (C348)

A.R. Mann Library
Input data into RLIN database. File catalog cards into card catalogs. Type cross-reference cards, shelve books; other duties as assigned. Part-time, temporary until June 3, 1987.

Requirements: High school education or equivalent. Medium typing. Ability to perform highly detailed and repetitive tasks accurately. Office or computer experience helpful.

Minimum hourly rate: \$4.00

ADMISSIONS ASSISTANT II (PA3312)

Arts and Sciences Admissions
Interview prospective students and answer questions about Cornell's academic programs, student life and admissions. 20 hours per week until mid-December.

Requirements: BA in Liberal Arts, MA preferred. Send cover letter and resume to Ralph D. Jones by September 4, 1986.

COMPUTER OPERATOR (T321)

Computer Services
Responsible for a computer room: locking up, logging users on and off, and operating printers and hardware. 4 days per week. 12 a.m. - 4 a.m.

Requirements: Some related experience preferred. Send cover letter and resume to Cynthia Smithbower.

Academic

RESEARCH ASSOCIATE (A341)

Agronomy
Major responsibility for conducting electron microscopic investigations of behavior of plasma membrane and endomembrane systems at low temperatures related to cryopreservation, cryoinjury, and cold acclimation of plant and animal tissues and organs. Work closely with team of physiologists, biochemists, biophysicists in area of cryobiology.

Requirements: PhD degree and experience in electron microscopy, including TEM, SEM, and freeze fracture. Experience in freeze-fracture of membranes-vesicles-liposomes and knowledge of lipid mesomorphism. Send resume, copy of transcripts and three letters of reference to: Dr. Peter L. Steponkus, Department of Agronomy, 609 Bradford Hall, Cornell University, Ithaca, NY 14853-0144.

Sunspot theory

Early relief unlikely for Southeast drought

A Cornell scientist who uses the so-called sunspot theory to make long-term weather predictions sees no signs of early relief for the Southeast, now suffering the worst drought in a century.

Douglas A. Paine, a professor of atmospheric science, says it may take another year for the current drought to break.

As for the Northeast, the drought that persisted for years, causing serious water shortages for major metropolitan areas last year, ended in the fall after hurricane Gloria swept through the region, Paine says.

"The Northeast is doing very well now, with reservoirs replenished with adequate water supplies," Paine says.

Controversial theory

Paine bases his projection for the Southeast on a controversial long-range weather forecasting technique that takes into account the waxing and waning of sunspot activity.

Using this theory, Paine predicted as early as winter 1981 that severe drought would occur for several years in a row through 1986 for a significant part of the nation, including the Northeast and the region south of the Great Lakes to the Gulf Coast.

"Earlier drought projections based on this theory have been more or less on target," Paine says. "One surprise is that the Northeast drought has shifted to the Southeast."

Dark patches that appear on the sun increase and decrease in number periodically, ultimately affecting the weather patterns on Earth, Paine says, adding that the current drought was in the making in the late 1970s when the number of these sunspots reached a peak. A series of droughts hit much of the eastern United States during the first half of the 1980s.

A similar celestial event took place in the late 1950s, resulting in several successive years of severe drought in the Northeast that persisted into 1966, Paine explains.

The high level of sunspot activity of the late 1970s has diminished to a point where the number of sunspots is now minimal, a condition that will trigger normal precipitation in a year or two, Paine predicts.

Colossal magnetic storms

The dark patches that appear on the surface of the sun are colossal magnetic storms raging

within the incredibly hot gases shrouding the sun. In the process of their formation, the sun sends out more ultraviolet light to Earth.

Increased amounts of ultraviolet light create more ozone and heat in the stratosphere, an atmospheric layer about 30 miles above Earth.

The additional heat acts to decrease the exchange of air between the stratosphere and lowest atmospheric levels, reducing the number and intensity of major storms in the East, Paine explains, adding that such storms account for a major share of the rain and snow east of the Mississippi.

Paine believes that the degree of stability in the stratosphere may hold the key to the riddle as to why drought occurs.

Citing the prolonged dry spell in the Northeast in the 1960s, Paine notes that the ocean temperature off the Atlantic coast along the New England states at that time was two to five degrees Fahrenheit below normal. Back then, meteorologists blamed the colder-than-normal ocean temperature for the drought, a theory that has been generally accepted thus far.

But, Paine questions the validity of that hypothesis. He points out that the ocean temperature off the Atlantic seaboard is now normal, yet the Southeast is suffering from a devastating drought.

Looking for a break

"We (meteorologists) may have to look for additional causes of drought," Paine argues, adding that his theory of the atmospheric stability in the stratosphere may play a role in causing droughts. Paine says he is monitoring the stability of the stratosphere, watching for signs of a break in the pattern.

Paine's sunspot theory for long-range weather forecasting has been a subject of debate among meteorological scientists. Many remain skeptical.

Nevertheless, Paine is not throwing in the towel. Using his theory, he predicts that sunspot activity, now at its lowest ebb since last fall, will reach its next peak in 1992. Based on sunspot records dating back about 2,000 years, the number of sunspots varies about every 11 years.

Because Paine expects the number of sunspots in the early 1990s to be well below the peaks observed in the late 1950s and 1970s, he does not look for a return of drought conditions in the East during the next decade.

— Yong H. Kim



Joe Moravec and Darryl Lapidus, orientation counselors, help freshmen move.

Barton Blotter

Human skull found on campus

Public Safety and Ithaca Police are investigating the discovery of a human skull on campus at about 3 a.m. Aug. 26. Three unidentified males reportedly dropped a cardboard box near Willard Straight Hall and fled the scene when approached by safety officers. The box contained a human skull, which has been turned over to city police who are trying to determine if the skull came from the city cemetery between Stewart and University avenues.

Eighteen of the 43 thefts reported on campus during the period Aug. 1 to 24 involved \$736 in cash taken from wallets, purses, and offices and

rooms on campus, according to Public Safety's morning reports.

In total, \$10,134 in cash and valuables were stolen during the 24-day period. Among the larger thefts were three separate incidents of computer equipment worth \$1,259, \$910 in stereo equipment taken from 201 Thurston Ave., a \$1,003 balance taken from Plant Science, \$700 and \$500 cameras taken from Rockefeller Hall and Robert Purcell Union, respectively, and a \$350 gold bracelet stolen from University Hall No. 4.

New parking scheme to begin

With traffic subject to detours and parking space subject to temporary disappearance thanks to a dozen campus construction projects, a new zoned parking scheme will become effective Sept. 2.

A 700-space parking garage is nearing completion, but is not scheduled to open until Sept. 15. Therefore, staff members whose permits authorize them to park in the garage are being notified by mail of the location of temporary parking arrangements for the first weeks of September.

A new 300-car parking lot is now open between Tower Road and Upper Alumni Field, and 60 temporary spaces will be available on the west end of the Ag Quad for employees with "J" permits, until the garage is open.

The availability of parking spaces for campus visitors will be limited until the new garage is open, notes William Wendt, director of transportation services.

The new zone system eliminates the university's unrestricted "U" permit. The zones were developed to "provide a better permit-to-space ratio and to ease traffic and parking disruptions created by construction projects on campus," Wendt explains.

Some 335 people who have applied for parking permits will not receive them until parking and traffic fines are paid, says Sally VanEtten, manager of the traffic bureau. She said some owe more than \$100 in fines, and one person has 55 violations, with the fines totalling \$875.

To ameliorate the dislocations caused by the construction, a coordinator has been appointed in each college and major research unit to identify problems and provide up-to-date information to faculty and staff. To provide instant information, receive reports of problems, and identify coordinators for those who need to contact them, a telephone hot line will be available. The number is 255-4394.

Senior staff members will be available to give briefings at departmental meetings.

Where possible, contractors will work evenings and weekends to minimize disruption, according to Senior Vice President William G. Herbster. A full-time inspector will enforce noise abatement procedures. Classroom assignments have been changed, where necessary, to minimize noise and disruptions.

"If Cornell is to remain in the first rank of American universities, modern laboratories, classrooms, offices, and residence halls must be provided," says Herbster. "When completed, these new renovated facilities will significantly enhance virtually all of our academic programs and will improve the quality of life for all members of the university community."

Herbster acknowledged "the inevitable disruption to campus operations and inconvenience to faculty, staff, and students that so major a capital program will cause." He added that "all



Parking problems hotline: 255-4394

involved in these programs are committed to do everything possible to minimize inconvenience for people and programs during this intensive period of construction."

Among the major buildings under construction will be a new Stalder Inn, a biotechnology center, and the performing arts complex in Collegetown. Nine campus buildings are in for extensive renovation or addition of new floors or wings, and another half dozen projects will begin in the near future.

Schoellkopf Drive will be closed to traffic between Garden Avenue and Lynah Rink Aug. 28 and 29, because of a water line relocation project. Vehicles with the proper parking permits will be able to enter the parking area from Kite Hill lot.

Labor Day bus service

Campus bus service will be limited Monday, Sept. 1, for the Labor Day Holiday.

The AB Local and B Lot-Collegetown buses will run on reduced schedules throughout the day. The first bus leaves B lot at 6:45 a.m. Collegetown service will begin at 7:45 a.m. at Sheldon Court and continue at half-hour intervals for the day. The West Campus and Blue Light buses will operate on their normal schedules.

The East Ithaca Transit, Ithaca-Dryden Transit, Ulysses and Newfield Transit, and North-East Transit Route 2 will not operate Monday. Ithaca Transit and North-East Transit Route 1 will run on their normal schedules.

Faculty and staff members whose vehicles are registered with the Traffic bureau may park on central campus on Labor Day, regardless of type of parking permit held. Students must park in their regular permit areas.

For further information, call the Office of Transportation Services at 255-4600.

Packaging microchips challenges engineers

Cornell's materials scientists and electrical and mechanical engineers are collaborating in an industry-funded attempt to overcome a serious bottleneck facing microelectronics: the packaging of integrated circuits.

Maintaining a constant operating temperature for microelectronic equipment and ensuring the reliability of microchips in climates ranging from the equator to the polar caps is one goal of Cornell's Electronics Packaging Sciences Research Program.

"Electronic system performance improvement will result more from packaging technology development than from integrated circuit technology during the next 10 years," says D. Howard Phillips of the Semiconductor Research Corp.

SRC, the consortium of U.S. firms in the electronics, computer, and communications businesses initiated the packaging sciences program with a first-year contract for \$250,000 and plans to continue this research as a multi-year program.

Support for the packaging sciences program also is coming from individual industries, including IBM and General Electric Co., both SRC members.

Electronic packaging is the means of protecting the wafer-thin integrated circuit chips and connecting them to the rest of a system. Included in packaging are the substrates — usually ceramic or plastic materials on which chips are mounted — as well as the dozens or hundreds of fine wires or solder joints carrying signals to and from the chips, and tiny metal couplings connecting the package to larger circuit boards.

While great progress has been made in increasing the speed and capacity of integrated circuits, packaging technology has lagged.

"We are now at a turning point in electronics technology; the chip has out-paced the package," says Che-Yu Li, professor of materials science and engineering, and one of the two principal investigators in the new program.

"Improvements in electronic packaging should enhance U.S. competitiveness," says Arthur L. Ruoff, the other principal investigator and a professor and director of Cornell's Department of Materials Science and Engineering.

"The Japanese already dominate the market for ceramic packages for low-end uses. They have long-emphasized manufacturing technology and miniaturization," Ruoff says.

"Establishment of this program represents a continued effort at Cornell to contribute to areas of technology that are vital to U.S. industries," says Joseph M. Ballantyne, Cornell's vice president for research and advanced studies and a professor of electrical engineering. "The SRC-supported research is a direct response to the needs of the semiconductor and information industry."

The packaging program will draw on the resources of several national centers at Cornell: the National Research and Resource Facility for Submicron Structures, the national supercomputer center, and the X-ray diffraction laboratory at the Cornell High Energy Synchrotron Source.

Related activities include the recent establishment of a ceramics initiative program and the expansion of the polymers program in the Department of Materials Science and Engineering. Both programs have the support of industry for new faculty members and research, and are expected to have a direct impact on electronic packaging research.

Five universities, out of nine that originally sought the designation, were invited by the Semiconductor Research Corp. to prepare formal proposals for the packaging program. SRC chose Cornell and Lehigh University.