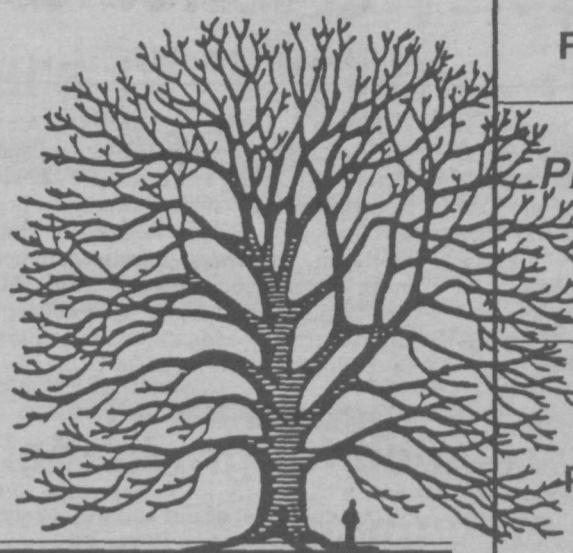


CORNELL CHRONICLE

Volume 21 Number 29 April 19, 1990

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Poetic inspiration

AirborneLainie Rivere, a junior communication major, and her dog, Mr. Schnitzel, play with a stick near Bailey Hall.
Tim Moersch

State-supported units face \$2.7 million budget cut

The state-supported colleges and divisions of Cornell would have to cut the equivalent of 71 jobs and severely curtail programs under a \$2.7 million funding reduction that the State University of New York (SUNY) has advised the university to expect.

"We have met with the deans and agree it is difficult to meet these demands without some layoffs and real cuts in programs," said John F. Burness, vice president for university relations. "We're past the point where we can respond with mere belt-tightening to what is becoming a chronic state fiscal crisis."

Burness stressed that final decisions have not been made but added that the magnitude of the problem suggests that "cuts would touch faculty positions, administrative, clerical and custodial staff, researchers and graduate-student assistants, as well as curtailing research and extension programs that serve state government, business and citizens, ranging from environmental research to programs for abused children and the elderly."

The state budget for the fiscal year that began April 1 still is being negotiated by legislative leaders and Gov. Mario Cuomo, whose executive budget proposal was presented Jan. 16. It seems clear, however, that SUNY will be required to cut about \$35 million as part of a plan to implement the Cuomo proposal and to share in additional state-agency spending cuts of \$500 million, according to Nathan Fawcett, director of statutory college affairs.

SUNY has advised Cornell that its state-supported colleges' share of that \$35 million would be about \$2.7 million, and deans are developing tentative plans for how they would make those cuts, Fawcett said.

"The executive budget itself deleted \$984,000 in core programs that sustained 15 positions," Fawcett said. "It also failed to fund about \$650,000 needed just to maintain existing programs. Still, with difficulty, we could have kept our academic programs strong."

"But requiring another \$2.7 million in

cuts, out of Cornell's executive budget allocation of \$118.5 million, moves us to a point where we have to shrink our size to maintain the quality of education for students and of research and extension programs we provide for citizens across the state."

Provost Malden C. Nesheim said that the magnitude of state funding shortfalls has to be seen in a context that includes past years' cuts and long-range impact.

"Even before the cuts for fiscal year 90-91, Cornell's four state-supported units absorbed five separate reductions, totaling more than \$2.8 million, between July 1988 and December 1989," Nesheim said. "That included the cutting of 68 positions, 43 per-

'It is difficult to meet these demands without some layoffs and real cuts in programs. We're past the point where we can respond with mere belt-tightening to what is becoming a chronic state fiscal crisis.'

— John F. Burness

manently. In the last 20 years, in fact, state-funded positions at our statutory colleges have declined dramatically by a total of 19 percent, from 2,254 to 1,823. And that figure does not include the latest projection of 71 more positions."

Nesheim noted that the current cuts follow projection of a gap of at least \$1.5 billion between state revenues and expenditures.

"Even beyond 1990-91, the state's financial picture looks grim," he added. "Since SUNY is a major state agency and Cornell's statutory units require about one-twelfth of SUNY's general funds, it is clear that stable funding is imperiled."

Continued on page 6

Astronaut's visit highlights Science & Technology Week events

A visit by space shuttle astronaut G. David Low, an address by U.S. Rep. Sherwood Boehlert honoring talented young faculty researchers and a "Create a Creature" contest for schoolchildren are only a few of the activities to be sponsored by Cornell as part of its celebration of National Science & Technology Week from Sunday, April 22, through Saturday, April 28.

National Science & Technology Week, coordinated by the National Science Foundation, is aimed at increasing public awareness of science and technology and its role in society. Events are being sponsored by schools, colleges, universities, professional organizations and museums nationwide.

The Cornell Science & Technology Week celebration, which coincides with recognitions of Earth Week and Mathematics Awareness Week, is perhaps the largest concentration of outreach activities that the university has ever sponsored to honor science and technology. All events are free and open to the public, except where indicated.

Here is a list of activities, by date:

- Sunday, April 22, Earth Day — EarthRise Festival, noon to 6 p.m., on the Arts Quadrangle, will include environmental displays, demonstrations, nature walks, live entertainment, games and ecologically sound concessions.

- Monday, April 23 — Cornell will honor its Presidential Young Investigators in the auditorium of Kennedy and Roberts halls (Academic I) on the Agriculture Quadrangle. A poster session from 4 to 5 p.m. will explain the research of Cornell's Presidential Young Investigators, scientists named by the National Science Foundation as among the most promising young scientists in the country. Boehlert will speak at 5 p.m.

- Tuesday, April 24 — More than 170 area high school students will tour research facilities in plant studies, supercomputing, geology, chemistry, veterinary medicine and microelectronics. The students will hear a luncheon talk by alumnus G. David Low, who flew aboard the Space Shuttle Columbia last January.

- Tuesday, April 24 — Astronaut Low



**NATIONAL
SCIENCE
&
TECHNOLOGY
WEEK '90**

APRIL 22-28

will deliver a public talk on his shuttle mission at 4:30 p.m. in Alice Statler Auditorium. The talk is sponsored by the NASA/Cornell Space Grant Program and is a colloquium of the Sibley School of Mechanical and Aerospace Engineering.

- Wednesday, April 25 — The 12th annual Egg Drop Contest, sponsored by the Cornell chapter of the American Society of Mechanical Engineers. Entrants will construct packages that allow a raw egg to survive a four-story plunge. Registration will be at 4:30 p.m. in first floor lounge of Upson Hall.

- Thursday, April 26 — Cornell scientists will visit area middle schools to give science demonstrations. David Heath, professor of operations research and industrial engineering, will demonstrate computer simulation in DeWitt Middle School eighth-grade mathematics classes. Sue Merkel and colleagues at the Center for Environmental Research will demonstrate composting techniques at Boynton Middle School sixth-grade science classes.

Continued on page 6

NOTABLES

Physics Professor Toichiro Kinoshita is the 1990 recipient of the American Physical Society's J.J. Sakurai Prize, which carries a \$5,000 cash award. A member of the Cornell faculty since 1958, Kinoshita was cited "for his theoretical contributions to precision tests of quantum electrodynamics and the electroweak theory, especially his pioneering work on the computation of the lepton magnetic moments."

Simon A. Levin, the Charles A. Alexander Professor of Biological Sciences and director of Cornell's Center for Environmental Research, will be awarded a honorary doctor of science degree by Eastern Michigan University during commencement exercises on Saturday, April 21, in Ypsilanti, Mich. Levin will deliver the commencement address in recognition of the 20th anniversary of Earth Day.

Olin site being readied for graduation

Temporary restoration is to begin late this week on the site for the new Olin Library extension, between Stimson and Goldwin Smith Halls.

Snow fences are coming down and the ground is being reseeded to spruce up the southeast corner of the Arts Quadrangle, which will be the launch site for the commencement procession on May 27. The ground was dug up in December to relocate underground pipes in preparation for building 90,000 square feet of underground library space.

Two days after commencement, the summer-long excavation will begin, with six days a week of digging, drilling, blasting of subsurface rock and removal of

50,000 cubic feet of dirt and rock to sites in the Cornell Orchard on Route 366.

Several public meetings will be held on campus in early May to explain the disruptive effects of the two-year project, which last month received conditional approval from the city of Ithaca's Landmarks Preservation Commission and its Planning and Development Board.

The extension is needed because a 1988 study said the building would be unable to hold any more books after the end of 1992.

The underground plan meets the strong faculty preference to keep the new space near the existing library while also assuring that the Arts Quadrangle will be virtually unchanged in appearance.

Home builders



Tim Moersch

Ithaca Mayor and Professor Emeritus Benjamin Nichols (left) and Larry Palmer, vice president for academic programs, help build trusses on campus last week. The roof supports are destined for a Homer house as part of a project by the Cornell Chapter of Habitat for Humanity.

CORNELL CHRONICLE

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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, \$20 for six months; \$38 per year. Make checks payable to Cornell Chronicle and send to Village Green, 840 Hanshaw Road, Ithaca, N.Y. 14850. 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, 840 Hanshaw Road, Ithaca, N.Y. 14850.

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. Sexual harassment is an act of discrimination and, as such, will not be tolerated. Inquiries concerning the application of Title IX may be referred to Cornell's Title IX Coordinator (Coordinator of Women's Services) at the Office of Equal Opportunity at 234 Day Hall, Cornell University, Ithaca, N.Y. 14853-2801 - telephone (607) 255-3976.

Cornell University is committed to assisting those handicapped students who have special needs. A brochure describing services for the handicapped student may be obtained by writing to the Office of Equal Opportunity, 234 Day Hall, Cornell University, Ithaca, N.Y. 14853-2801. Other questions or requests for special assistance may be directed to that office.

BRIEFS

■ Spring Employee Day: As part of the Spring Employee Day sponsored by the Athletic Department, employees may purchase discounted tickets at \$1 each for the Dartmouth-Cornell lacrosse game at Schoellkopf Field on Saturday, April 21, starting at 1 p.m. The discounted tickets, six to a family, are available only at the Grumman Squash Court Ticket Office across from Teagle Hall from 9 a.m. to 4 p.m. today and tomorrow, April 19 and 20. Also included will be a coupon for discounts on food and beverages at the Schoellkopf concession stand.

■ Chomsky to lecture: Philosopher Noam Chomsky, the Institute Professor at the Massachusetts Institute of Technology, will discuss "Manufacturing Consent: The Political Economy of the Mass Media," on Monday, April 23, at 7:30 p.m. in Bailey Hall. He will be giving the 1990 Spencer T. and Ann W. Olin Foundation Lecture sponsored by the Graduate School.

■ New track coach: Vincent J. Lananna, assistant director of athletics for cross country and track and field at Dartmouth College since 1980, has been named to replace Cornell's head cross country and track coach, Jack Warner, who is retiring June 30 after 23 years of coaching at Cornell.

■ Coughlan named: Cornell Extension Associate Mary Coughlan, a specialist in consumer law, has been named director of the newly established President's Council of Cornell Women. The council is a newly created national network of Cornell alumnae who have been invited by President Frank H.T. Rhodes to advise him directly on issues concerning Cornell women faculty, staff, students and alumnae. There are to be some 100 members on the council.

■ \$750 history prize: Tuesday, May 8, is

the deadline for submitting dissertations for the 1990 Messenger-Chalmers Graduate Prize to history Professor Charles E. Peterson, 450 McGraw Hall. Entries will be judged on "evidence of the best research and most fruitful thought in the field of human progress and the evolution of civilization during some period in human history or during human history as a whole." Entries should be submitted with a pen name and a sealed envelope containing the real name and pen name.

■ Glee Club video: An hour-long videotape of the Cornell Glee Club's tour of Asia in January 1988, which combines elements of concert film, travelogue and classic music video, is available at a cost of \$35 through the Educational Television Center in Martha Van Rensselaer Hall, telephone 255-5431.

■ Teach English: The Cornell Campus Club is seeking volunteers to teach English as a second language during the summer for two hours a week, plus time for preparation. For more information and to volunteer, contact Joan McMinn at 277-0013 or Lara Stanton at 257-0566.

■ Logo contest: The Global Environment Program is holding a logo design contest for the New Cornell Climate Change Initiative newsletter. Monday, April 30, is the deadline for submissions. The winner will receive a commemorative edition of John Muir's book, "My First Summer in the Sierra." For details, contact Judy Landers at 255-4558.

■ MOS closed April 24: The Sales Office and Demonstration Room at 110 Maple Ave. and the Distribution Facility at 33 Thornwood Drive of Microcomputers & Office Systems will be closed for an annual inventory on Tuesday, April 24.

Alumni elect two trustees

An Ithaca College professor, Donald Lifton, and a financial executive with Seagram International, Judith H. Monson, have been elected by Cornell alumni to four-year terms on the university's Board of Trustees.

James D. Hazzard, director of alumni affairs, announced the results following the counting of approximately 25,000 alumni ballots. On July 1, Lifton and Monson will take seats being vacated by alumni-elected trustees Stephen W. Filo and Margaret Osmer-McQuade.

Lifton and Monson outpolled the three other alumni candidates. Hazzard said ballot counts are never made public.

Lifton, who teaches management in Ithaca College's School of Business, co-chairs the college's Academic Policies and Curriculum Committee, and has been active in Ithaca-area civic and political matters, most recently as a member of the Tompkins County Board of Representatives. He is a 1968 graduate of the School of Industrial and Labor Relations and in 1988 received a

Cornell Ph.D. degree in development sociology.

Monson, vice president of finance for a Seagram division with affiliates in 28 countries, is a 1969 graduate of the School of Hotel Administration. She joined Seagram in 1978 and spent four years with the company in London, where she also became a member of the Royal Institute of International Affairs. She is active in a wide range of Cornell alumni work, in women-in-business issues and in international affairs, having been a member of the Council of Foreign Relations.

Last month, a sophomore in the School of Industrial and Labor Relations, Linda Richichi, was elected by about 3,000 student voters to a two-year term on the board. Richichi, who won from a field of four candidates, will succeed Bethany Dreyfus July 1 on the 42-member board, which includes eight members elected by alumni, two by students, two by faculty and one by employees.

—Sam Segal

GRADUATE BULLETIN

May degree: The deadline for completing all requirements for a May degree is May 18. Professional master's degree candidates should check with their field regarding the deadline of submitting dissertations and theses, as that deadline may be earlier than the Graduate School's.

Registration: Forms for summer graduate registration will be available on May 7 at the information desk in Sage Graduate Center. Students receiving summer support from the Graduate School must submit their forms by May 21. Students must register if they are receiving financial aid during the summer, wish to use campus facilities during the summer or are off campus but require credit for summer study. Registration must be done in person at the Graduate School. Student identification is required. Graduate students who have been registered for a regular semester during the preceding academic year do not pay tuition for non-credit summer registration. Tuition must be paid for summer courses.

BARTON BLOTTER

Computer equipment worth \$7,370 was reported stolen from Room 438 of Kennedy and Roberts halls, according to the morning reports of the Department of Public Safety for April 9 through 15.

The theft was among 14 reported on campus, with losses of \$8,683 in cash and valuables. Other thefts included a \$400 tape deck taken from Noyes Center, a \$150 calculator removed from a backpack in Willard Straight Hall and a 10-speed bicycle worth \$200 stolen from Bradfield Hall.

Three female students reported receiving a series of harassing phone calls.

Computerized copies of the most current safety report may be called up on CUINFO under the title SAFETY.

CUINFO terminals are situated in the main lobbies of Day Hall, Gannett Clinic, Willard Straight Hall, Sage Hall (Graduate Student Lounge) and Uris, Olin, Mann, ILR, law, engineering, physical sciences and Johnson Graduate School of Management libraries.



James A. Krumhansl

Charles Harrington

Program to honor physics professor for 50 years of teaching, research

An all-day physics symposium on "Electrons, Phonons and Disorder" will take place here on Saturday, April 21, honoring James A. Krumhansl, who will retire June 30 after a 50-year affiliation with Cornell as a graduate student, faculty member and administrator.

The scientific program in the Schwartz Auditorium of Rockefeller Hall will begin with opening remarks by President Frank H.T. Rhodes.

Participants in the program will include Sir R.J. Elliott of Oxford University; Nobel Laureate J.R. Schrieffer of the University of California, Santa Barbara; A.K. McMahan of Lawrence Livermore Laboratory; and Robert L. Sproull, president emeritus of the University of Rochester. Sproull was the first director of Cornell's Laboratory for Atomic and Solid State Physics, which Krumhansl headed from 1960 to 1964.

Krumhansl, 70, the Horace White Professor of Physics, will give a talk titled "Five Decades in Physics, Half a Century at Cornell."

Krumhansl came to Cornell as a graduate student in 1940 after receiving a bachelor's degree from the University of Dayton in 1939 and a master's degree from Case Institute in 1940.

He received a doctorate from Cornell in 1943, served as an assistant professor from 1948 to 1950 and was an associate professor from 1950 to 1954.

Krumhansl returned to Cornell in 1959 as a professor after five years as an assistant and associate director of research with Union Carbide Co.

He served as assistant director for mathematics, physics and engineering at the National Science Foundation from 1977 to 1979.

Named to the White Professorship in 1980, Krumhansl is credited with playing a key leadership role in guiding the early growth of Cornell's Laboratory of Atomic and Solid State Physics.

His research interests have included non-linear phenomena in solids, geophysical and engineering application of modern wave-theoretic methods, and the physics of ultrasmall structures.

Krumhansl's work has spanned the areas of electrical engineering, biophysics, applied mathematics, materials science and condensed-matter physics.

He was president of the American Physical Society in 1988-89 and has served on numerous committees of that professional organization.

Krumhansl also has served as a consultant to the Department of Defense, Ford Motor Co., General Electric Co., International Business Machines Corp., Los Alamos National Laboratory, the National Academy of Sciences, Oak Ridge National Laboratory and Xerox Corp.

His most recent awards include fellowship in the American Association for the Advancement of Science, a Royal Society Visiting Fellowship and an honorary doctorate of science from Case Western Reserve University.

Other speakers at the symposium in his honor will include Cornell President Emeritus Dale R. Corson.

— Martin B. Stiles

Animal kingdom on display at Vet College open house April 21

Piglets and puppies, cats and camels, a horse on a treadmill and a cow with a "window" in its side — and the people learning to care for them — will be featured at an open house of New York state's only veterinary college on Saturday, April 21.

Several thousand visitors from across the Northeast are expected to visit the New York State College of Veterinary Medicine for this near-quarter-century-old tradition.

Exhibits will be designed for children, adults interested in pet care, and high school and undergraduate college students

curious about the profession of veterinary medicine.

"Because of how special animals are in our lives, and because we are so excited about what we do, we want to share with people who we are, what goes on here and what we are learning about what makes animals tick," said Amy Adler, a student organizer.

The event is organized and will be staffed by the students of this school, where the nation's first doctor of veterinary medicine degree was awarded in 1876.

Adler said that activities planned for children include a petting zoo with "baby everything," including a nursery of animals only days old; horse-drawn wagon rides; and a chance to milk a cow.

For pet owners, there will be exhibits on first aid and nutrition, the dangers of poisonous plants, spaying and neutering, and the care of newborn and aging pets.

Advanced medical technologies will also be featured, including ultrasound, endoscopy, cardiology, clinical pathology and laser fiber optics.

Visitors will learn how to judge the age of a horse by its teeth; listen to the heartbeats of animals with murmurs and other cardiac oddities; and observe a horse jog on a treadmill, as part of a physiology study. Exotic animals and agriculturally important animals, including aquatic species, birds and reptiles, will be among the exhibits.

The open house will be held rain or shine from 9 a.m. to 4 p.m. Free parking is available in the B Lot, east of the college on Route 366.

— Lisa Bennett

Xerox, CU institute will improve computer-aided design systems

Designers of future machines from auto engines to entire factories could be aided by an advanced computerized assistant that really understands their projects, thanks to a new research partnership of Xerox Corp. and Cornell.

An agreement establishing the partnership as the Design Research Institute has been announced by William J. Spencer, group vice president, corporate research, for Xerox, and Norman R. Scott, Cornell's vice president for research and advanced studies.

Under the agreement, a group of Xerox scientists and engineers will work in Ithaca with their Cornell counterparts. The Design Research Institute plans to seek federal funding and the involvement of other corporations to enhance its work.

'Universities must learn to work more closely with corporations if our findings are to be useful and if we are to understand their needs for basic advances.'

— Norman R. Scott

One aim of the new institute is to create a computer system that would "understand" how its human boss likes to approach design problems and the language used to talk about them, would remember past projects and even anticipate its user's needs for data.

The system would allow designers to "build" and "test" realistic models of machines on a computer screen, reducing the need for expensive real-life prototypes. The system would also help the engineer to design a manufacturing process.

Such a computer system for designers and engineers would exceed the capabilities of current computer-aided design systems. It could speed the product-delivery process — from initial concept, through development and design, to production for the mar-

ketplace — for a huge array of products, Xerox and Cornell researchers say.

The Design Research Institute will involve researchers in Cornell's College of Engineering, including the Department of Computer Science, the Center for Theory and Simulation in Science and Engineering and the Sibley School of Mechanical and Aerospace Engineering. It will also involve the Webster Research Center of Xerox, located in the Rochester, N.Y., suburb of Webster, at the company's Joseph C. Wilson Center for Technology.

Viewing the new institute from an industrial standpoint, Spencer finds great significance in the undertaking.

"This collaboration of a major university and a large corporation working intimately toward a common technical goal is a major initiative for both institutions," he said.

"If American corporations are to compete effectively in the world arena, they must accelerate the pace and reduce the cost of product development and delivery," Spencer continued. "We believe that this Xerox-Cornell initiative will be enormously helpful to domestic industry in achieving those goals."

This partnership is seen by Scott as a promising response to the academic community's increasing concern about the need for better cooperation in research between universities and corporations.

"Universities," he said, "must learn to work more closely with corporations if our findings are to be useful and if we are to understand their needs for basic advances," he said. "This partnership with Xerox represents an extremely promising model, one that will provide an invaluable experience for both Cornell and Xerox."

"The new institute's researchers," Scott added, "will collaborate with colleagues in the laboratories of the Xerox Corporate Research Group."

"With this support," he said, "they will analyze the product-development work flow, decision process, information needs and problems of manufacturers of technology-based products."

— Dennis Meredith

Seeking new heights



Tim Moersch
Mechanical engineering majors and track-team members Mike Bunning (left) and Ryan Stevenson practice pole vaulting in Barton Hall.

CALENDAR

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

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

Notices should also include the subheading of the calendar in which the item should appear.

DANCE

Cornell International Folkdancers

All events are open to the Cornell Community and general public. Admission is free, unless stated otherwise. For further information, call 257-3156.

Advanced Balkan Dance Workshop by Ed Abelson, April 22, 6:30 to 7:30 p.m.; review of workshop dances and requests, 7:30 to 10:30 p.m., North Room, Willard Straight Hall.

Global Dance, co-sponsored by the Cornell International Folkdancers and the Cornell Wellness Program, polka, 7:30 p.m., April 24, and Scandinavian and bluebell polkas, 9 p.m., Dance Studio, Helen Newman Hall. Partners not necessary. For information, call 273-0707.

Israeli Folkdancing

Israeli Folkdancing, Thursdays, 8:30 p.m., Edwards Room, Anabel Taylor Hall.

EXHIBITS

Johnson Art Museum

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

"Estilo Latino: 20th Century Latin American Art," the second annual intern exhibition concentrating on works by contemporary Latin American artists and organized by the student interns at the museum, through May 6.

The works of Wu Guanzhong, contemporary Beijing artist, will be on exhibit through May 27. Included are Chinese ink paintings, oil paintings, drawings and sketch books.

Hartell Gallery

Raumplan-Plan Libre — Adolph Loos and LeCorbusier, through April 27. The gallery is in Sibley Dome and is open Monday through Friday, 8 a.m. to 5 p.m.

Olin Library

"The Book in Southeast Asia," early Southeast Asian manuscripts and books, fabricated from palm leaves or the bark of mulberry trees and written in exotic scripts, along with colonial and modern books, Monday through Friday, 8 a.m. to 5 p.m., through June 12.

Tjaden Gallery

MFA Exhibition: Maggie Smith, through April 20; MFA Exhibition: Jim Biglan, April 22 through 27. The gallery is in Tjaden Hall, open 8 a.m. to 4:30 p.m.

University Library

"Human Sexuality: A Selection of Library Resources," an exhibit in Uris and Olin libraries, manuscripts and archives, through June. The exhibition covers topics such as witchcraft, AIDS, heterosexual relationships, the evolution of lesbian and gay writing, lesbian and gay liberation, reproductive rights and directions of current research.

FILMS

Films listed below are sponsored by Cornell Cinema unless otherwise noted. Most Cinema films cost \$3, except for weekend films in Uris and Statler, which are \$4, and are open to the public unless otherwise stated. An () means admission is charged.*

Co-sponsorship proposals for film screenings and series in fall 1990 are due to Cornell Cinema by May 3. Faculty and local organizations are invited to apply. Call 255-3522 for more information.

Thursday, 4/19

"Construction of the Bridge," part of the video saga "Ramayan," an Indian epic, co-sponsored by the South Asia Program and Cornell University Libraries, 7:30 p.m., 310 Uris Library.

"Fat Man and Little Boy" (1989), directed by Roland Joffe, with Paul Newman and John Cusack, 7 p.m., Willard Straight.*

"Sans Soleil" (1982), directed by Chris Marker, sponsored by Pentangle, 7:30 p.m., Film Forum, Center for Theatre Arts.

"Steel Magnolias" (1989), directed by Herbert Ross, with Sally Field, Dolly Parton, Shirley McLaine and Daryl Hannah, 9:50 p.m., Willard Straight.*

Friday, 4/20

"Sidewalk Stories" (1989), directed by Charles Lane, with Charles Lane and Nicole Alyisia, 7 p.m., Uris.*

"Steel Magnolias," 7:10 p.m., Willard Straight Hall.*

"Speaking Parts" (1989), with guest film maker Atom Egoyan, directed by Atom Egoyan, with Michael McManus and Arsinee Khanjian, 9:20 p.m., Uris.*

"Brides of Dracula" (1960), directed by Terence Fisher, with Peter Cushing, Martita Hunt and David Peel, 9:50 p.m., Willard Straight.*

"Ziggy Stardust and the Spiders from Mars" (1983), directed by D.A. Pennebaker, with David Bowie, midnight, Willard Straight.*

Saturday, 4/21

"Aadharshila," directed by A. Ahuja, with Naseeruddin Shah, Neena Gupta, sponsored by South Asia Program Film Series, 3:15 p.m., 302 Uris Library.

"Steel Magnolias," 7 p.m., Willard Straight.*

"Speaking Parts," 7:30 p.m., Uris.*

"The Lost Boys" (1987), directed by Joel Schumacher, with Kiefer Sutherland, Corey Haim and Jason Patric, 9:40 p.m., Willard Straight.*

"Sidewalk Stories," 9:45 p.m., Uris.*

"This is Spinal Tap" (1985), directed by Rob Reiner, with Christopher Guest, Michael McKean, Rob Reiner and Harry Shearer, midnight, Willard Straight.*

Sunday, 4/22

Whitney Biennial Video: Program 5: "Inside Life Outside," Sachiko Hamada and Scott Siskler; "Belchite-South Bronx: A Trans-Historical, Trans-Cultural Landscape," Francesc Torres, co-sponsored by CCPA, 2 p.m., Johnson Museum.

"Shri Ram and his Army Cross the Bridge," and "Spies Enter the Camp," part of the video saga "Ramayan," an Indian epic, co-sponsored by the South Asia Program and Cornell University Libraries, 3:30 p.m., 310 Uris Library.

"The Lost Boys," 4:30 p.m., Willard Straight.*

"Lives of Performers," directed by Yvonne Rainer, shown with Pooh Kaye's shorts "Sticks on the Move" and "Wake-Up Call," 8 p.m., Willard Straight.*

Monday, 4/23

"The Tempest" (1980), directed by Derek Jarman, with Heathcote Williams, Toyah Wilcox and Karl Johnson, 4:30 p.m., Willard Straight.* (Tickets on sale at main floor Straight ticket office only.)

"Where The Green Ants Live" (1985), directed by Werner Herzog, with Bruce Spence and Wandjuk Marika, 7 p.m., Willard Straight.*

"SideWalk Stories," 9:30 p.m., Willard Straight.*

Tuesday, 4/24

"Foreign Body" (1985), sponsored by Southeast Asia Film Series, 7:30 p.m., 310 Uris Library.

"Cannes Goods II" (1988), selected commercials from 30 countries, 7 p.m., Willard Straight.*

"Steel Magnolias," 9:30 p.m., Willard Straight.*

Wednesday, 4/25

"Goodbye Boys" (1966), directed by Mikhail Kalik, shown with Mikhail Tsedhanovsk's "Pacific," 7 p.m., Willard Straight.*

"Steel Magnolias," 9:15 p.m., Willard Straight.*

Thursday, 4/26

"Keep On Rockin'" (1969), directed by D.A. Pennebaker, with Bo Diddley, Chuck Berry, Little Richard and Jerry Lee Lewis, 7:30 p.m., Willard Straight.*

"Two Laws" (1981), directed by Carolyn Strachan and Alessandro Cavolini, 7:30 p.m., Film Forum, Center for Performing Arts.

"Tangos" (1985), directed by Fernando E. Solanas, with Marie Laforet and Philippe Leotard, 8 p.m., Anabel Taylor.

"Black Rain," directed by Ridley Scott, with Michael Douglas, 9:45 p.m., Willard Straight.*

LECTURES

A.D. White Professors-at-Large

"Perestroika in Social-Psychological Perspective," Igor S. Kon, USSR Academy of Pedagogical Sciences and USSR Institute of Ethnography, April 19, 4:30 p.m., Kaufmann Auditorium, Goldwin Smith Hall.

Aerospace Engineering

"Rapid Mixing and Combustion: A Challenge of Hypersonic Flight," Frank E. Marble, California Institute of Technology, the sixth annual W.R. Sears Distinguished Lecture, April 19, 4:30 p.m., B-17 Upson Hall.

EarthYear 1990

Earthrise Lecture Series, "The Need for Radical Economic Change If We Are to Achieve Effective Environmental Growth," Bill Griffin, Cortland State College, April 19, 7:30 p.m., auditorium, Anabel Taylor Hall.

Earthrise Lecture Series, "The Need For and Design of Ecologically Sound Homes and Businesses," David Seller, architect, Vermont, April 21, 11 a.m., Kaufmann Auditorium, Goldwin Smith Hall.

Distinguished Ocean Scholar Seminar Series, "Global Ocean Productivity," James McCarthy, Museum Comparative Zoology, Harvard University, co-sponsored by the Global Environmental Program, April 26, 4:30 p.m., A106 Corson/Mudd Hall.

Hillel

"Yiddish: The Everyday Language of East European Jews — Past, Present and Puppets," April 19, 7 p.m., Kosher Dining Hall, 106 West Ave.

History

Becker Lectures

"Women on the Margins in the Seventeenth Century," Natalie Davis, Princeton University, Hollis E. Cornell Auditorium, Goldwin Smith Hall; "Metamorphoses of Marie Sibylla Merian," April 19, 4:30 p.m.

Law

"Translating Treaties into Action: Problems and Opportunities for Implementing Global Environmental Agreements," Steven Rayner, Cornell, part of the series "Crossroads Between Development and Environment: Juggling the Burdens," April 19, 4 p.m., G-85 Myron Taylor Hall.

Mathematical Sciences Institute

"Cohomological Dimension and Its Applications," Alexandre N. Dranishnikov, Steklov Institute of Mathematics, The Soviet Academy of Sciences, April 23, 4:30 p.m., 294 Caldwell Hall.

Messenger Lectures

"Freedom, Anger, Tranquillity: An Archaeology of Feeling," Myles Burney, Robinson College, Cambridge, 4:30 p.m., 115 Rockefeller Hall; "Epicurean Tranquillity," April 19.

Near Eastern Studies

"The Politicization of Islam in Soviet Central Asia," Martha Olcott, Colgate University, co-sponsored by Comparative Muslim Societies Seminar Series and Soviet Studies, April 23, noon, G-08 Uris Hall.

Neurobiology & Behavior

"The Ontogeny and Phylogeny of Behavior: Case Studies Using Fishes and Salamanders," George V. Lauder, April 26, Morison Seminar Room, Corson/Mudd Hall.

Olin Foundation Lecture

"Manufacturing Consent: The Political Economy of the Mass Media," Noam Chomsky, Massachusetts Institute of Technology, sponsored by the Graduate School, April 23, 7:30 p.m., Bailey Hall.

Philosophy Students' Association

Title to be announced, Christine Overall, Queen's University, April 25, 4:30 p.m., Guerlac Room, A.D. White Hall.

Physical Education

"Movement: Instinct or Influence? Transcultural Approach to Daily Life Postures," Francois Raoult, Center for Aplomb and Yoga, April 25, 6:30 p.m., Helen Newman Lounge.

Society for the Humanities

"On Repetition in Kierkegaard and Others," Ame Melberg, University of Oslo, April 23, 4:30 p.m., Guerlac Room, A.D. White House.

"The Literary Field and the Race for Leadership in 17th Century France: The Case of Chapelain," Christian Jouhaud, Centre de Recherches Historiques, Ecole des Hautes Etudes en Sciences Sociales, Paris, April 24, 4:30 p.m., Guerlac Room, A.D. White House.

Southeast Asia Program

"Thoughts on Monarchy in 20th Century Vietnam and Thailand," Bruce Lockhart, Cornell, April 19, 12:20 p.m., 102 West Ave. Extension.

"Cambodia Today," Jamie James, freelance writer and archaeologist, April 26, 12:20 p.m., 102 West Ave. Extension.

Statler

"Columbus's Coming: A Discussion of the Route to Discover America," John M. Kingsbury, Cornell, April 24, 8 p.m., Terrace Lounge, The Statler Hotel.

Theory Center

"Biased Monte Carlo Computation of a Relaxation Time: The Viscosity of Rouse Chains With and Without Excluded Volume Interactions," Harry Frisch, SUNY Albany, April 20, 11 a.m., Morison Room, Corson/Mudd Hall.

"Molecular Modeling of Some Industrial Polymers," P.R. Sundararajan, Xerox Research, Center of Canada, April 25, 11 a.m., G-01 Biotechnology Building.

Veterinary Medicine

"The Role of Papadnaviruses in Hepatocarcinogenesis," Bud C. Bennett, Cornell, April 26, 4 p.m., G-3 Vet Research Tower.

Western Societies Program

"General Motors' Labor Relations Abroad: Austria and the Federal Republic of Germany," Karen Shire, University of Wisconsin, April 19, 4 p.m., 300 ILR Conference Center.

"European Integration, Eastern Europe, and German Unification: The British Perspective," Ray Raymond, British Consulate General, April 19, 4:30 p.m., 152 Goldwin Smith Hall.

"Belgium, Federalism, and the European Community," Liesbet Hooghe, University of Leuven, April 20, 12:15 p.m., 153 Uris Hall.

"Without Women There Can Be No State: Changes as Viewed by an East German Feminist," Daniela Dahn, East German writer and feminist, April 23, 4:30 p.m., G-08 Uris Hall.

"Living Conditions of Yugoslav Immigrants in Sweden," Sonja Drobnić, Cornell, April 25, 12:15 p.m., G-08 Uris Hall.

Women's Studies Program

"Gender and Professional Identity in the History of Social Work," Daniel Walkowitz, New York University, co-sponsored by HDFS, history, HSS and ILR, April 24, 4:30 p.m., Hollis E. Cornell Auditorium Goldwin Smith Hall; Video of the recent miner's strike in the Ukraine, April 24, noon, 216 Ives Hall.

MUSIC

Department of Music

MIDI concerts, April 19, 1:24 p.m., 304 Lincoln Hall

Monique Cho will give a student piano recital on April 20 at 8:15 p.m. in Barnes Hall. Featured compositions will be Franz Schub



A scene from the "Goodbye Boys," directed by Mikhail Kalik, being shown with Tsedhanovsk's "Pacific" on Wednesday, April 25, at 7 p.m. in the Willard Straight Theater as part of Cornell Cinema's series, "Unknown Soviet Cinema."

Mozart, Op. 12 and Sonata VI in B-flat Major, Hob. J. 12; Haydn's Sonata in A Major, Hob. J. 11; and Mozart's Violin Duo in G Major, Hob. J. 3.

Conductor Timothy Hamel and pianist Christopher Morgan Loy will present a concert of works on April 23 at 8:15 p.m. in Barnes Hall. Performances will be Beethoven's *Adelaide*, Zart's *Liebe*; Schumann's *Der Liederkreis*; Wolf's *Spotted*, *Der neue Amadis*, *Der Hohenfänger*, *Anakreons Grab* and poems by e.e. cummings.

The Sweeting/Furzeig Duo will perform a piano concert April 24 at 8:15 p.m. in Barnes Hall. The program ranges from jazz to free improvisation to avant-garde and will include works by Thelonious Monk, Dave Brubeck, Duke Ellington and by the performers, as well as improvisations on works of Bartok. Also on the program will be the Eight Bohemian Dances of Karel Husa.

Pianist Bart van Oort will present a concert on April 25 at 8:15 p.m. in Barnes Hall. Included in the concert will be works on the Broadwood fortepiano by Haydn, (Sonata in E Major), Dussek (Sonata in E Major). Mozart's Sonata in B-flat Major will be played on the much smaller Stein copy of a 1784 instrument.

Bound for Glory
John Rossbach and friends, with American traditional music and bluegrass, will perform in three live sets in the Commons Coffeehouse, Anabel Taylor Hall, on April 22. Bound for Glory can be heard Sundays from 8 to 11 p.m. on WVBR-FM, 93.5.

Cornell Folk Song Club
The trio of Cindy Kallet, Ellen Epstein and Michael Cicone will perform in concert on April 21 at 8:30 p.m. in Kaufmann Auditorium, Goldwin Smith Hall. Although they accompany themselves with two guitars and hammered dulcimer, the trio emphasizes vocal harmonies and contemporary songs, including a few written by Kallet. Tickets are available at Borealis Books, Rebob Records and the Commons Coffeehouse in Anabel Taylor Hall. All seats are \$6, with a \$1 discount to Folk Song Club members and a \$2.50 discount for children and senior citizens.

Hillel Hava Yovel, Israeli folk singer, in a concert for Yom Ha'Atzmaut, April 25, 8 p.m., One World Room, Anabel Taylor Hall. Tickets are available at the door or at Hillel G-34, Anabel Taylor Hall.

READINGS

English
Lorie Moore, fiction, April 19, 4:30 p.m., Kaufmann Auditorium, Goldwin Smith Hall.
Natalia Delbanco, fiction, April 26, 4:30 p.m., Kaufmann Auditorium, Goldwin Smith Hall.

RELIGION

Sage Chapel

Placid Stroik, director of pastoral care, Covenant House, New York City, will deliver the sermon at Sage Chapel on April 22. Service will begin at 11 a.m., followed by Roman Catholic Eucharist. Music will be provided by the Sage Chapel Choir. Sage is a non-sectarian chapel that fosters dialogue and exploration with and among the major faith traditions.

Baha'i

Weekly meetings on campus. Call 257-7971 for information.

Catholic

Mass: Saturdays, 5 p.m., Anabel Taylor Auditorium.

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

Daily Masses, Monday through Friday, 12:20 p.m., Anabel Taylor Chapel.

Christian Science

Testimony Meeting: Thursdays, 7 p.m., Anabel Taylor Founders Room.

Episcopal (Anglican)

Sundays, worship and Eucharist, 9:30 a.m., Rev. Gurdon Brewster, chaplain, Anabel Taylor Chapel.

Friends (Quakers)

Sundays, 10 a.m., adult discussion; 11 a.m. meeting for worship, Edwards Room, Anabel Taylor Hall. Call 272-8755 for information.

Jewish

Shabbat Services: Friday, Reform, 6 p.m., Chapel, Anabel Taylor Hall; Conservative, 6 p.m., Founders Room; Orthodox, Young Israel (call 272-5810 for times). Saturday, Orthodox, 9:15 a.m., Edwards Room; Conservative/Egali-tarian, 9:45 a.m., Founders Room.

Morning Minyan at Young Israel, 106 West Ave. Call 272-5810.

Holocaust Memorial Program, April 22, 8:30 p.m., chapel, Anabel Taylor Hall.

Korean Church

Sundays, 1 p.m., Anabel Taylor Chapel.

Lutheran

Bible Study and Communion, Fridays 12:20 p.m., G-3A Anabel Taylor Hall.

Muslim

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

Protestant

Protestant Cooperative Ministry: Bible study, Sundays, 10 a.m., G-7 Anabel Taylor; Sunday worship, 11 a.m., Anabel Taylor Chapel.

Zen Buddhism

Zazen practice every Tuesday at 7 p.m. and Thursdays at 5:10 p.m. in the chapel, Anabel Taylor Hall. For more information or to arrange beginner's instruction, telephone Jon Warland at 272-0235.

SEMINARS

Anthropology

"The Adulterous Priest and Tupac Amaru: Local and National History in Peruvian Colonial Documents," Jean-Jacques Decoster, Cornell, April 23, 3:30 p.m., 303 McGraw Hall.

Applied Mathematics

"Nonlinear Oscillations in Suspension Bridges," P.J. McKenna, University of Connecticut, April 20, 4 p.m., 322 Sage Hall.

Astronomy

"Southern Sky Redshift Surveys: A Review," Luiz DaCosta, Harvard-Smithsonian Center for Astrophysics, April 19, 4:30 p.m., 105 Space Science Building.

"The Cosmic Background: Preliminary COBE Results," Stephan S. Meyer, Massachusetts Institute of Technology, April 24, 4:30 p.m., 105 Space Sciences Building.

Biochemistry

"Probing Mechanisms of Molecular Recognition and Catalysis: A Protein Engineering Study of Cysteine Proteases," Andrew Storer, Biotechnology Research Institute, National Research Council of Canada, April 20, 4 p.m., Large Conference Room, Biotechnology Building.

"Membrane Lipid Traffic in Animal Cells," Richard Pagano, embryology, Carnegie Institution of Washington, April 26, 3:30 p.m., Large Conference Room, Biotechnology Building.

Biophysics

"Protein Trafficking and Sorting in Polarized Epithelial Cells," E. Rodriguez-Boulan, Cornell Medical College, April 25, 4:30 p.m., 700 Clark Hall.

Boyce Thompson Institute

"Genetics and Cancer," Sir Walter Bodmer, Imperial Cancer Research Fund Laboratories, London, April 25, 4 p.m., Large Conference Room, Biotechnology Building.

Chemistry

Baker Lectures

"Dynamics of a Classical Spin on a Lattice," John Waugh, Massachusetts Institute of Technology, and the George Fisher Baker Lecturer, April 19, 11:15 a.m., 119 Baker Laboratory; "ANTIOPE — A Computer Game for SPin Dynamics," April 24, 11:15 a.m., 119 Baker Laboratory; "Nuclear Magnetic Resonance at Low (but not negative) Temperatures," April 26, 11:15 a.m., 119 Baker Laboratory.

CISER

"Electricity Generation and Clean Air: Controls or Taxes," Timothy Mount, Cornell, sponsored by Program on the Social and Economic Dimensions of Global Warming, April 24, 12:15 p.m., 401 Warren Hall.

Ecology & Systematics

"Sources of Phenotypic Variation in Neonatal Reptiles," Gary C. Packard, Colorado State University, April 25, 4:30 p.m., Morison Seminar Room, Corson/Mudd Hall.

Electrical Engineering

"Research on the Magnetron at The Radiation Laboratory, 1940-45," James E. Brittain, Georgia Institute of Technology, April 24, 4:30 p.m., 219 Phillips Hall.

Environmental Toxicology

"Monooxygenase (FMOs and P-450)," Ernest

Hodgson, North Carolina State University, Raleigh, April 20, 12:20 p.m., 304 Farnow Hall.

Epidemiology

"Problems in the Testing of Intelligence in Deaf Children: Confounding by an Unmeasured Variable," Steve Schwager, Cornell, April 20, 12:20 p.m., 260 Warren Hall.

Floriculture & Ornamental Horticulture

"Theory and Application of Lighting Design in Landscape Architecture," Craig McDonald, Cornell, April 19, 12:15 p.m., 404 Plant Science.

"Groundcovers: Annual Rates of Spread and Weed Suppression," Duncan Himmelman, Cornell, April 26, 12:15 p.m., 404 Plant Science Building.

Food Science

"Physico-Chemical Role of Emulsifiers in Food Emulsions — An Overview," Kali Das, Cornell, April 24, 4:30 p.m., 204 Stocking Hall.

Immunology

"Relationship of Effector T Cell Maturation to Organization of Transmembrane Signalling Molecules," Kim Bottomly, Howard Hughes Medical Institute at Yale, University School of Medicine, New Haven, Conn., April 20, 12:15 p.m., G-3 Vet Research Tower.

International Development & Women

"The Democratization of the Family and Social Relations in Argentina," Beatriz Schmukler, Institute of Latin American Studies, UNC, April 19, 4:30 p.m., 102 West Sibley.

International Nutrition

"Studies on Vitamin A Deficiency and Mortality in Tanzania," Godwin Ndossi, Cornell, April 19, 12:15 p.m., 200 Savage Hall.

International Studies in Planning

"Capital Flight from the Less Developed Countries," William G. Darity Jr., University of North Carolina, co-sponsored by Program on Comparative Economic Development, April 20, 12:15 p.m., 115 Tjaden Hall.

"Social Issues of Urban Design in Cities of Developing Countries: Towards a More Participatory Process of City Building," Omar Hernandez, Cornell, and Universidad Simon Bolivar and Universidad Central de Venezuela, April 20, 2:30 p.m., 115 West Sibley.

"Social Movements Across the Center Periphery Divide — Latin America and The First World," David Slater, Interuniversity Centre for Latin American Research and Documentation (CEDLA) in Amsterdam, co-sponsored by Latin American Studies Program, April 24, 4 p.m., 102 West Sibley.

Institute for African Development

"Agriculture in the Gambia: Writing a Textbook for Secondary and Post-Secondary Schools," Kabba Colley, Cornell, April 23, 12:30 p.m., 115 West Sibley.

Jugatae

"Field Release of a Genetically-Engineered Viral Pesticide," Alan Wood, Boyce Thompson Institute, April 23, 4 p.m., Morison Seminar Room, Corson/Mudd Hall.

Natural Resources

"Engelmania: Rocky Mountain Subalpine Spruce-Fir Up Close and Personal," Mary Arthur, Cornell, April 23, 12:20 p.m., 304 Farnow Hall.

"Nitrogen Fertilization and Acidic Mist Affect Growth, Physiology, and Response to Cold

Continued on page 8

Campus activities to mark 20th Earth Day

The Cornell community will observe the 20th anniversary of Earth Day from noon to 6 p.m. on Sunday, April 22, with dance, song, workshops, exhibits and nature walks on the Arts Quadrangle.

Earthrise events include performances by the Sufi Center Dancers of Universal Peace, Ithaca Peace Child in "Children Sing for the Earth," and the Ecology House Players in "The Lorax." Music will be provided by Barefoot Blues, Jamie Notaromas, Garden of Surgery and Parachute Something. Outdoor workshops on making recycled paper, being an environmental consumer and letter writing for environmental action are planned, as are a variety of exhibits.

Families will learn more about some other important inhabitants of this planet when Cornell Plantations celebrates Earth Day 1990 on Sunday, April 22, with an educational program called "The Tree and Me" in the Newman Arboretum from 1 to 4 p.m.

The first 200 families to complete the 12-stop program of learning activities will receive tree seedlings to plant at home. There is no charge or preregistration required for the event. Demonstrations will include composting to recycle leaves, wood-chipping for mulch and tree-planting. Children who correctly answer riddles will receive an example of energy storage in trees — a crisp apple from Cornell Orchards.

Also, Cornell Facilities and the Cornell Greens are working together to encourage energy conservation across campus this weekend by asking everyone to turn off unnecessary lights, computers, office equipment and other uses of energy, beginning at 1 p.m. on Friday, April 20, and lasting through Sunday. The Greens will hold a rally on Friday at noon in front of Willard Straight Hall to discuss energy conservation.

Hotel Ezra Cornell celebrates world travel this weekend

After a year of planning, 800 students enrolled in the School of Hotel Administration will spend a weekend with hospitality industry leaders to celebrate today's world of travel.

Students will serve food and wine of countries from France to the Pacific Islands to hospitality-industry executives who will attend the school's 65th annual Hotel Ezra Cornell from Friday, April 20, through Sunday, April 22, when students operate the Statler Hotel without any professional assistance.

"Color Your World" is the theme for this year's student-run hotel. The theme will be carried out in functions dedicated to the diverse colors of the world and its people.

"Our theme reflects the international aspect of our industry," said Jeannine Facht, a senior who is the managing director of the program. "As we move into the '90s, globalization becomes a key issue, and we are becoming more aware of the extent to which service stretches across all frontiers."

We are inviting our guests to step into a more colorful world."

Liv Gussing, a junior who is the marketing director for Hotel Ezra Cornell, said the students will present a world of exotic travel while recognizing the plight of America's homeless.

In between breakfasts, lunches, dinners and cocktail parties based on foreign menus, two Hotel School faculty — Professor James Eyster and Assistant Professor Ann Hales — will conduct a seminar on how the hospitality industry can make a difference in housing and feeding the homeless. Their presentation will be based on their nationally publicized course that applies the skills of running hotels and restaurants to providing shelters and meals for the homeless.

Other seminars will deal with computer programs in the hospitality industry and developing and operating hotels that are sensitive to cultural groups.

Emphasizing the diversity of their world,

students of color have arranged a wine tasting to honor the school's first African-American professor, the late Vance Christian, for whom the school's wine and beverage center is named.

"An international traveler and consultant, Christian transcended cultural and ethnic barriers, bringing the name and expertise of Cornell University to the most remote areas of the globe," said Roben Allong, a junior. "He was an exemplary educator, dedicated wine expert and connoisseur, and an outstanding minority luminary in the hospitality industry."

Before his death in 1984, Christian developed the Hotel School's course in wine education and management that attracts more than 500 students each semester, many of them from outside the Hotel School.

Allong and three other minority students — seniors Todd Alexander and Lucretia Montgomery and junior Michael Bajit — planned and managed the event at which 14

different wines from around the globe will be tasted.

Meals will feature dishes from the American Southwest, the seven continents, Paris, the Pacific Islands, the Palais des Nations and a seaside village. Colors perceived by vision will be the theme of a black-tie banquet entitled "A Twist of the Kaleidoscope."

The school's 61 candidates for master's degrees will give a dinner during which the colors of servers' uniforms and walls of the dining area will be changed for each course.

The weekend's keynote speaker will be Stephen A. Wynn, chairman and president of Golden Nugget Inc. in Las Vegas, Nev. Wynn received a bachelor's degree in English literature at the University of Pennsylvania and managed his family's bingo business in Maryland before moving to Nevada and developing the Golden Nugget into a major resort, after concluding a real estate transaction with Howard Hughes.

— Albert E. Kaff

Students to hold conference on community service

Cornell students are joining the national discussion on volunteerism by holding a conference on community service on Friday, April 20, and Saturday, April 21.

Some 100 representatives from 20 institutions of higher education in upstate New York are expected to take part, according to C. David Walsh, a Cornell senior majoring in agricultural economics and chairman of the conference steering committee.

He said the Cornell conference is an attempt to build a network of campus groups involved in community service. Workshops and panel discussions will include financing community service, service in rural areas, and involving fraternities and sororities in community service.

Among the guest speakers will be Leslie Samuelrich, campaign director of the National Student Campaign Against Hunger and Homelessness, and Louy Meacham, managing director of Campus Outreach Opportunity League (COOL), a national non-profit organization.

President Frank H.T. Rhodes will address the group on April 21 at 10 a.m. in Malott Hall.

There is a registration fee of \$35 for students and \$50 for staff. Additional details may be obtained from the office of CIVITAS (Cornell-Ithaca Volunteers in Training and Service) in Cornell's Anabel Taylor Hall; the phone number is (607) 255-7513.

Budget continued from page 1

"The latest cuts projected by our deans clearly reduce not only our ability to provide on-campus programs of the highest quality but also the service we can provide to state citizens, business and government agencies," Burness said. "Of necessity, we have increasingly sought non-state funding — from alumni, federal agencies, corporations and foundations — to help maintain stable instructional and research programs for our students. But this reliance on external funds increasingly limits our ability to respond to state priorities."

"The uncertainty also means that, at some point, we may have to begin limiting enrollments at least in some areas and giving priority to those areas that can be buttressed with outside support," Burness said.

Even if the governor and legislators agreed on an increase in SUNY tuition, the first since 1983, that would not brighten the picture materially, according to Cornell officials. They said that the added tuition revenue would likely be used to plug further revenue gaps that the state has not yet addressed.

As many as 38 of the projected 71 state-funded jobs could come from layoffs or retrenchment, "but this is unpredictable because it is expected that part of the SUNY cut may be through a new early-retirement plan whose details remain unclear," Fawcett said.

The remaining position reductions would be achieved mainly through freezing vacant lines or moving positions to non-state funding.

"For our employees' sake, we of course hope reductions will include a minimum of layoffs," Fawcett said. "As for the quality of our academic enterprise, however, the impact is as great whether positions are eliminated by layoff, retirement or any other means."

While all state-supported units see the

latest cuts as seriously impairing programs, the impact varies by college.

• The College of Agriculture and Life Sciences receives more than one-half of the state's allocation and therefore would absorb more than half of the cut. The college's tentative plan might reduce state positions by up to 34, including eliminating unfilled faculty positions, retrenchment of non-faculty positions, shifts to other fund sources and the elimination of graduate assistantships.

Eliminating assistantships will increase crowding in large introductory course sections and reduce the research and scholarship that these graduate students could have helped to produce, said Dean David L. Call. Call said he doubted the cut could be taken "without having a major impact on applied research and extension programs of importance to the state's agriculture and food industries. In addition, environmental initiatives, such as the protection of water resources, will have to be reduced."

• The Agricultural Experiment Station in Geneva would absorb about 10 percent of the total cut, eliminating up to nine positions. After the cutbacks of recent years, Geneva officials expect significant reduction in the value of service it can provide the state's fruit and vegetable production and processing industries.

• The College of Human Ecology, which would absorb about 10 percent of the \$2.7 million cut, expects to eliminate the equivalent of 4.7 full-time positions, affecting research, extension work, student services and clerical staff. Dean Francille M. Firebaugh said the result would be so far-reaching that high-priority programs — including some targeting youth-at-risk, the aged and child abuse — may be jeopardized.

• The School of Industrial and Labor Relations, also absorbing about 10 percent of the projected cut, would eliminate seven

positions, including five by freezing hiring.

Because three faculty members resigned unexpectedly, "this poses great difficulties for the remaining faculty members in the departments, and we don't know how, or if, their courses will be available next fall," said Dean David Lipsky.

ILR's extension division could be forced to charge higher tuition for off-campus credit courses offered to working adults in labor and management, Lipsky said. "That's a shift we're uncomfortable with: it favors students from companies that can afford to pay, and it discourages the thousands of union members who also take our courses at ILR offices across the state," Lipsky said. "But we have to generate funds to offset years of state reductions, and that requires adjusting courses and enrollments to generate those funds."

• The College of Veterinary Medicine, which would absorb about 18 percent of the cut, projects holding open four professorial positions and eliminating one support position. But noting the series of cuts and loss of six positions since July 1988, Dean Robert Phemister said that "these cumulative reductions run directly counter to the state-initiated efforts which began in 1984-85 to correct serious funding deficiencies that were hindering the college's ability to meet the needs and expectations of the public, the animal industries of the state, and the biomedical community."

The budget cuts would not, however, affect plans — to begin this summer — for major improvements to the college's physical plant, Fawcett said.

• The General Services Division, which serves the state-supported colleges, would absorb five percent of the cut and eliminate the equivalent of 11.3 jobs, impacting custodial and central financial services for the four colleges.

— Sam Segal

Science continued from page 1

• Friday, April 27 — Cornell Environmental Improvement Awards, sponsored by the Center for Environmental Research, will be presented to the designers of the best posters depicting how to minimize environmental impact through science and technology. Students from kindergarten through college submitted posters, which will be on display all day in the Corson Hall atrium. The awards will be presented at a reception in the atrium from 3 to 4 p.m.

• Saturday, April 28 — "Kids on Campus" program sponsored by the Center for Theory and Simulation in Science and Engineering. Hands-on science experiments, videos and computer games, and demonstrations for children, parents and teachers will take place from noon to 4 p.m. on the seventh floor of Clark Hall. Also, winners of the "Create a Creature" drawing contest will be announced. Area schoolchildren were asked to invent and describe a creature to solve an environmental problem.

Throughout the week, the Cornell Department of Mathematics will feature contests, talks and awards aimed at increasing the appreciation of mathematics among high school students.

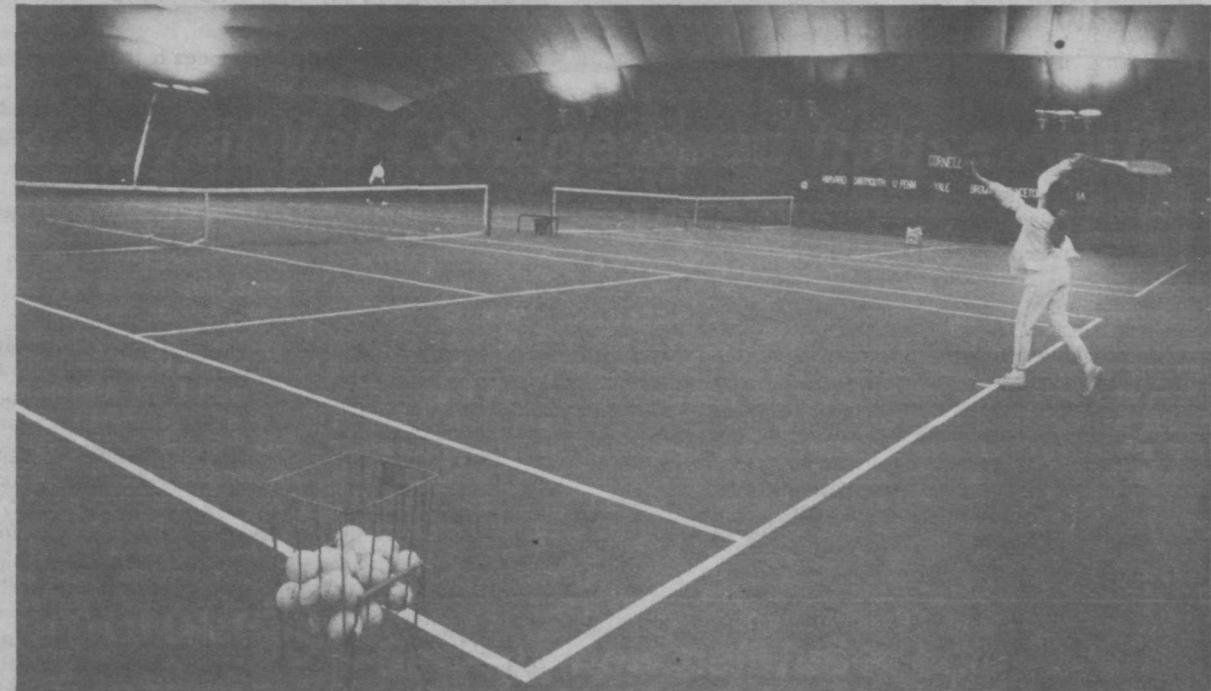
As part of Mathematics Awareness Week, the department held a contest at Ithaca High School to design a logo celebrating the week. The logo has been incorporated into T-shirts, which will be given to the high school math teachers and awarded as prizes in problem-solving contests.

During the week, members of the Cornell Mathematics Department also will visit high school math classes to discuss mathematics and what mathematicians do.

Also, the department will present the first annual Cornell Mathematics Award, to be given to a high school senior who has excelled in math and demonstrated originality and innovation in the subject.

— Dennis Meredith

Practice, practice, practice



Sophomore Alice Mui, a government major, practices her serve in the tennis bubble.

Tim Moersch

Robert Morgan

Writer is inspired by farm tractors and the heavens

Robert Morgan's muse recently was sighted driving a tractor through a North Carolina cornfield. She also was seen poring over celestial images from a giant telescope.

"Sigodlin," the title of Morgan's eighth book of poetry, is a Southern mountain carpenter's term for askew or out-of-line, while the ideas behind his poem about anti-time — the theory that, if the Big Bang reaches its limits, the universe will reverse itself — came from articles in Scientific American and physics journals.

Morgan, who was raised on a small farm in the Blue Ridge Mountains, finds science "very poetic."

"Physics is to modern poets what Thomas Aquinas was to Dante," said Morgan, a professor of English here. "So much is happening in astronomy and physics and chaos theory that is good material for poetry."

To him, "Everything is rich material for poetry. Except for the suburbs."

Through the short stories he wrote recently, Morgan has rediscovered an interest in soldiers. "A Brightness New and Welcoming" is the story of a Confederate soldier slowly dying in a Union prison camp while remembering his home, his wife and infant son. And "Tailgunner" tells of a World War II veteran and former prisoner of war remembering his last flight, when he was downed by a Messerschmitt.

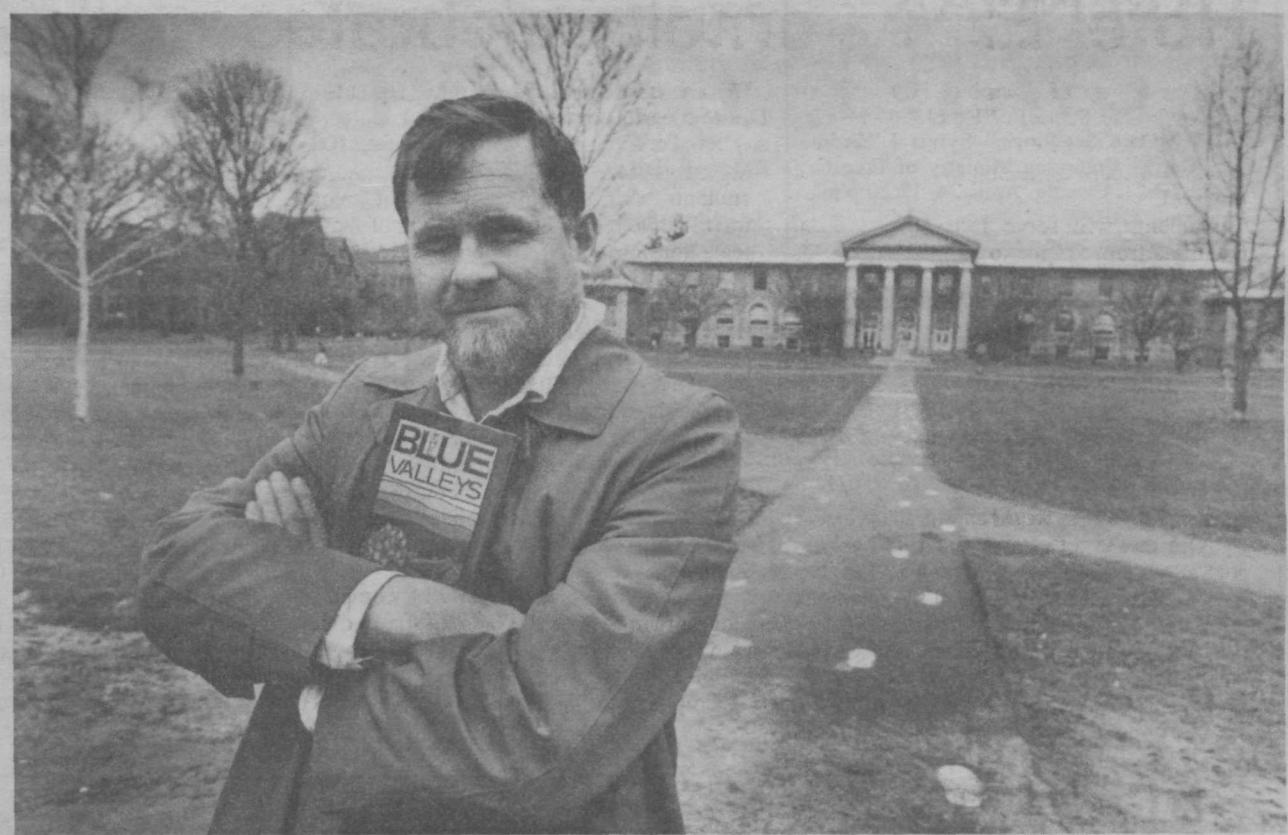
As a youth, Morgan had hoped for an appointment to West Point and had hoped to become a pilot. He would have done it, too, but for imperfect eyes.

Instead, he became a teacher, a salesman, a house painter, a farmer and a free-lance writer. Nineteen years ago he came to Cornell on a one-year lectureship and never left. During this time he did a five-year stint as an editor of Epoch, the literary magazine published here, and in 1983 became a full professor in the English Department.

He teaches verse writing, fiction writing and American poetry, and because he loves both poetry and prose, he's happiest teaching creative writing classes, whether with sophomores or seniors, where the two forms can both be included.

In a Dec. 10, 1989, review of "The Blue Valleys" in The New York Times, reviewer Joanne Kennedy wrote: "The strong, pungent stories in 'The Blue Valleys,' a first collection by the poet Robert Morgan, are set in the Blue Ridge Mountains of North Carolina, whose hills and valleys are a sturdy home for his characters, mostly working people at the mercy of circumstance..."

"The resilience of childhood, the misery of life in a trailer and the humor of December romance are also among the diverse subjects in this beautifully crafted collection, a procession of tales rich with native detail and character, told in language as plain and deep as the hills, the whole



Tim Moersh

Robert Morgan with "The Blue Valleys," a collection of his poetry.

weighted with an awareness of death that looms over the struggle for a meaningful life."

On March 29 and 30, Morgan was celebrated as writer of honor at Emory and Henry College's Eighth Annual Literary Festival.

"The talks were interesting, and the praise was just embarrassing," he said. At 46, he is the youngest writer to be honored by the western Virginia college.

This latest recognition of Morgan's work joins fellowships from the Guggenheim Foundation, National Endowment for the Arts and New York Foundation for the Arts, and awards that include the Southern Poetry Review Prize in 1975, the Eunice Tietjens Prize in 1979 and the Jacaranda Review Fiction Prize in 1988. He has published eight collections of poems.

"Blue Valleys" was published last June. Morgan wrote 12 of its 13 stories in just 12 weeks, during a summer vacation in 1984.

"Nothing like that had ever happened to me before," he said. "They just came out like they had to happen. It was a heady experience writing those stories. I've never written that fast or that hard again."

Eight more stories and two novellas will be coming out in the spring of 1991 under the title, "Watershed."

Currently, the poet and short-story writer is working on a novel set in the South in the 1960s. It will attempt to capture the enormous changes that took place then: state colleges becoming universities, the civil rights movement,

the free speech and anti-war movements, and the sexual revolution.

"In a novel, a whole community or a city can be your main character. You have space to develop the lives of many people, of a community, of a time in history," Morgan said.

He was at the University of North Carolina in Chapel Hill studying mathematics from 1963 to 1965 and at the University of North Carolina in Greensboro, earning a master of fine arts degree from 1967 to 1968.

The mathematics and physical sciences that he remembers from those days enable him to read widely in physics, astronomy, mechanics and geology. Sometimes he listens to lectures on campus given by physicists and astronomers, just as Walt Whitman attended lectures by astronomers as he wrote "When I Heard The Learn'd Astronomers," a poem about direct experience.

And often stories told by Morgan's father and grandfather enable him to write about American history. "Poinsett's Bridge," a story in Epoch, describes the way stonemasons constructed a turnpike bridge a century and a half ago.

So it is not difficult to imagine Morgan standing at night on a Blue Ridge mountaintop, gazing into space and in the next moment thinking of how a draft horse would have sweat to pull a load up that hill. He is a poet who finds fertile ground both in the southern Appalachian mountains and in interstellar dust.

— Carole Stone

New microscope technique lights the way through living cells

A new microscope technique that uses a stream of ultrafast laser pulses to light the way through the living cell has been developed by Cornell physicists.

The new technique will allow unprecedented, precise three-dimensional pictures of the chemistry of the living cell that could reveal details of chromosomes, receptor sites for drugs and other cell structures. Receptors are the biological "locks" into which drugs and other substances fit to activate cell responses.

The technique, called two-photon laser scanning fluorescence microscopy, also will allow "chemical microsurgery" on living cells, in which a targeted beam of laser pulses releases "caged" biologically active chemicals introduced into the cell. These caged chemicals, released at precisely controlled points in the cell, then could react with specific receptors or other cell organelles.

In an area far from biology, the laser technique also might be used to improve experimental techniques of storing massive amounts of computer data in tiny three-dimensional blocks of light-sensitive plastic. The scanning laser beam could be used to write data into the structure of the block, as well as read it out, the scientists theorize.

The new laser technique, reported in the April 6 issue of the journal *Science*, was invented by former Cornell physics graduate student Winfried Denk, applied physics graduate student James Strickler and Professor of Applied Physics Watt Webb. Denk currently is at the IBM Research Laboratory in Ruschlikon, Switzerland. Their work is supported by the National Institutes of Health and the National Science Foundation.

The new technique represents an improvement over existing methods of laser scanning microscopy. Basically, such techniques involve scanning a laser beam



David Lynch-Benjamin

Professor Watt Webb (left) and graduate students Winfried Denk (center) and James Strickler with computer images formed using an ultrafast laser that pulses through a living cell.

across a sample of living tissue to which special molecules called fluorophores have been added. Such fluorophores, which may be tailored to adhere to specific structures in the cell, fluoresce when exposed to light.

In laser microscopy, the laser beam is focused at a specific level in the cell, although it illuminates the full depth of the cell. The same lenses and moving mirrors that focus the laser beam also carry visible light from the fluorophores back to the detectors. A pinhole in the detector restricts the returning light to only the single scanning point where the illumination is in sharp focus.

A major problem with current laser microscopy has been that the fluorescent marker molecules are destroyed throughout the cell by the scanning laser beam, in a process called photobleaching. Also, many of the most useful fluorophores are excited only by ultraviolet light. Unfortunately, such light can destroy living cells in a process similar to the cell destruction that occurs when humans suffer sunburn.

The Cornell two-photon technique surmounts the problem of ultraviolet damage by using a more benign red visible-light laser. Denk, Strickler and Webb found that a stream of 100-femtosecond (one hundred

quadrillionths of a second) red laser pulses focused at the point within the cell could cause a fluorophore to absorb two photons of red light simultaneously. These two low-energy photons could combine to become the equivalent of a higher energy ultraviolet photon. The two red photons then would cause the fluorophore to emit light. A photon is the basic unit of light.

Thus, the scientists could use the red laser system to safely scan throughout a living cell, with little danger of cell damage or photobleaching. Also, the lens systems used to focus the red laser can also precisely focus the visible return light from the sample.

Although the focused laser pulse is extremely bright at the target point — about 100 billion times brighter than sunlight — its extremely brief duration does not damage the cell. Specifically, the 100-femtosecond pulses, which repeat 80 million times per second, produce an intensity at the focal point of 1,014 watts per square meter.

The advantage of the Cornell two-photon technique is that photoexcitation occurs only at the brightest focal point of the scanning laser. Two-photon excitation increases with the square of the laser pulse intensity. Therefore, fluorescence, photobleaching and photolysis occur only in the plane of focus of the scanning laser beam. Hardly any photobleaching or fluorescence background arises above or below the plane of focus of the image.

The scientists can reconstruct clear, three-dimensional images of a living cell by scanning a succession of such planes within the cell and "stacking" those planes.

In testing the system, Denk, Strickler and Webb already have produced images of tiny plastic beads and of fluorescently labeled DNA in the chromosomes of living cells.

— Dennis Meredith

CALENDAR

continued from page 5

of Red Spruce Seedlings," Sylvia L'Hironnelle, British Columbia Ministry of Forests, Victoria, B.C., Canada, April 24, 12:20 p.m., 304 Farnsworth Hall.

Neurobiology & Behavior

"Developmental Changes in a Simple Behavior in the Moth, *Manduca sexta*," Carol Miles, April 19, 12:30 p.m., Morison Seminar Room, Corson/Mudd Hall.

Nutrition

"Role of Tissues in Sulphur Amino Acid Metabolism in the Rat," Rolando Garcia, Cornell, April 23, 4:30 p.m., 100 Sage Hall.

Operations Research & Industrial Engineering

Manufacturing Seminar, "Engineering and the Capital Formation Process," A.L. Carter, Eastman Kodak, April 19, 4:30 p.m., B-14 Hollister Hall.

Ornithology

"Birding Adventures in Costa Rica," Laura Brown, Cornell, April 23, 7:45 p.m., Laboratory of Ornithology, 159 Sapsucker Woods Road.

Peace Studies Program

"Bananas, Beaches and Bases: Making Feminist Sense of International Politics," Cynthia Enloe, Clark University, Worcester, Mass., April 19, 12:15 p.m., G-08 Uris Hall.

Pharmacology

"Muscarinic Regulation of Phosphatidylcholine Hydrolysis, Protein Kinase C Activation, and Gene Expression in Astrocytoma Cells," Joan Brown, University of California, San Diego, April 23, 4:30 p.m., G-3 Vet Research Tower.

Plant Biology

"The Production, Accumulation and Possible Functions of 4-Aminobutyrate in *Asparagus* Mesophyll Cells," Alan W. Bown, Brock University, Ontario, Canada, April 20, 11:15 a.m., 404 Plant Science Building.

Plant Breeding

To be announced, William Burnquist, Cornell, April 24, 12:20 p.m., 135 Emerson Hall.

Plant Pathology

"The Ecology and Survival of *Pseudomonas solanacearum* Race 1: A Progress Report," Christine Stockwell; "Potential Role of Trichoderma spp. from Maple Bark in the Prevention of Bark Diseases," Miguel Appleman, April 24, 4:30 p.m., 404 Plant Science Building.

"Biological and Serological Properties of Zucchini Yellow Mosaic Virus and its Control by Cross Protection," Hui Liang Wang, Cornell, April 25, 3 p.m., A133 Barton Lab, Geneva.

Physiology

"Pattern of Calcium Mobilization in Embryonic Birds and Reptiles," Katherine Packard, Colorado State University, April 24, 4:30 p.m., G-3 Vet Research Tower.

Psychology

"Memory in a Social Context," Michael Ross, University of Waterloo, April 20, 3:30 p.m., 202 Uris Hall.

Sociology

"Justice and Social Freedom," Richard Miller, Cornell, April 20, 3:30 p.m., 302 Uris Hall.

Soil, Crop & Atmospheric Sciences

"Selective Reductive Dissolution of Iron Oxides in Soils," Ray Bryant, Cornell, April 24, 4 p.m., 135 Emerson Hall.

South Asia Program

"Reconstruction of Patriarchy in the Asian Indian Community," Shamita Das Dasgupta, Bengali poet and writer, April 20, 11:15 a.m., 251 Malott Hall.

"Do 'Good Works' Work: State vs. Private Initiatives for the Rural Poor," Joel Barman, Cornell, April 25, 12:15 p.m., 153 Uris Hall.

Stability, Transition & Turbulence

"Turbulence, Aerosols and Clouds in the Coldest Place on Earth — the Summer Polar

Mesosphere," M.C. Kelley, Cornell, April 24, 12:30 p.m., conference room, Grumman Hall.

Statistics

"Asymptotic Expansions for Cumulative Distribution Functions," Nancy Reid, University of Toronto, April 25, 3:30 p.m., 100 Caldwell Hall.

Textiles & Apparel

"Cotton Fiber Modification via Polymerization/Crosslinking," K.N. Yeh, University of Maryland, April 19, 12:20 p.m., 317 Martha Van Rensselaer Hall.

Theoretical & Applied Mechanics

"Plasticity of Fibrous Metal-matrix Composites," Y. Bahei-El-Din, Rensselaer Polytechnic Institute, April 25, 4:30 p.m., 205 Thurston Hall.

Vegetable Crops

"Vegetable Production in Mexico and Central America: Potential Competition for New York Growers?" Enrique Figueroa, April 19, 4:30 p.m., 404 Plant Science Building.

"The Controlled Environmental Agriculture Program at Cornell," Robert Langhans, Cornell, April 26, 4:30 p.m., 404 Plant Science Building.

Women's Studies Program

"The Ladder of Writing: The School of Dreams and the School of Roots," Helene Cixous, comparative literature and writer, University of Paris and the College International de Philosophie, France, co-sponsored by the Council of Creative and Performing Arts, Society for the Humanities, Western Societies, Theatre Arts and Romance Studies, April 19, 4:30 p.m., 110 Ives Hall; discussion group, April 20, 12:05 p.m., 340 Uris Hall; "Birds, Women and Writing," April 20, 4:30 p.m., 281 Goldwin Smith Hall.

SYMPOSIA

Society for the Humanities

"Oedipus at the Crossroads: Psychoanalysis, Philosophy and the Classics," co-sponsored by the departments of Classics, English and Romance Studies, College of Arts and Sciences and Western Societies Program, April 20 and 21. On April 20, 2 p.m. to 6 p.m., Guerlac Room, A.D. White House; 8 p.m. a performance of scenes from Sophocles "Oedipus." On April 21, 9 a.m. to 5 p.m., Guerlac Room, A.D. White House. For more information, call 255-4086.

THEATER

Department of Theatre Arts

"Cyrano De Bergerac," directed by David Feldshuh and starring Gabriel Barre, a guest artist, and Neer Rellan, a student of the art's advanced undergraduate training program, April 25 through 28 and May 2 through 5 at 8 p.m. at the Center for Theatre Arts. Tickets are on sale for \$4 and \$6. To make reservations or for more information, call 254-ARTS.

Experiment in Nontraditional Casting: Scenes from "As You Like It" and "The Dark at the Top of the Stairs," presented by the Department of Theatre Arts and Delta Sigma Theta Sorority, April 20, 8 p.m. and April 21, 5 p.m., Center for Theatre Arts. For more information, call Graham Stewart, 254-2730.

S.A.F.E.R.

(Sexuality & AIDS Facts, Education & Responsibility)

"One Night Stand," a theatre group from the University of Guelph, will present "We Want It Safe, We Want It Now," a revue promoting AIDS awareness, co-sponsored by Department of Theatre Arts and Balch Hall, April 21, 7 p.m., Unit 1 Lounge, Balch Hall.

Intramural Sports

"Turbulence, Aerosols and Clouds in the Coldest Place on Earth — the Summer Polar



Christian Steiner

Tokyo String Quartet

Great Soloist Series ends on May 3 with James Galway, Tokyo String Quartet

Flutist James Galway and the Tokyo String Quartet will share the stage for the last concert of the Great Soloist and Orchestra Series on Thursday, May 3, at 8:15 p.m. in Bailey Hall.

The program will include three flute quartets by Mozart: K.285b, K.298 and K.285; Beethoven's String Quartet, Op. 135; and Anton Reicha's Quintet for Flute and String Quartet, Op. 105.

Galway, who was born in Belfast and studied at the Royal College of Music and at the Paris Conservatory, has been a solo performer since 1975 when he left his position as principal flute with the Berlin Philharmonic Orchestra.

The Tokyo String Quartet, which began performing together 20 years ago this season, has spent this year giving concerts in Lincoln Center's Alice Tully Hall, in Carnegie Hall, the 92nd Street Y, the Metropolitan Museum of Art and Avery Fisher Hall.

Tickets for the concert are on sale at the Lincoln Hall ticket office from Monday through Friday, 9 a.m. to 1 p.m., telephone 255-5144; and at the Center Ithaca Box Office from Tuesday through Saturday 11:45 a.m. to 4:30 p.m., telephone 273-4497. Prices for the general public are \$19 to \$30 and for students from \$16 to \$25.

MISC.

Alcoholics Anonymous

Meetings are open to the public and will be held Monday through Friday at 12:15 p.m. and Thursdays at 9:30 p.m. in Anabel Taylor Hall. For more information, call 273-1541.

Committee on U.S.-Latin American Relations (CUSLAR)

Meetings are held Mondays at 5 p.m., in the Common Coffeehouse, Anabel Taylor. For more information call 255-7293.

Cornell Badminton Club

The club meets Wednesdays and Sundays at the Henry St. John gym. For more information, call Bill at 272-3594 or Tom or Lisa at 533-7384.

Cornell World Tae Kwon Do Assoc.

The club meets Mondays, Tuesdays, Wednesdays and Fridays from 7 to 8 p.m. in Barton Hall. For more information, call Sandy at 255-7923 or 273-7826.

Hebrew Conversation Club

Hebrew Conversation Club meets Thursdays, 11:45 a.m. to 12:15 p.m., 374 Rockefeller Hall.

Intramural Sports

Intramural fencing for men, women. Deadline is April 25, 4 p.m., 305 Helen Newman Hall; \$5/fencer entry fee. Meet will be held April 28.

Lesbian/Bisexual Women's Support Group

Group for all interested women meets Wednesdays from 7 to 9 p.m., 103 Barnes Hall. For more information, call 255-3608.

Macintosh Users' Group

MUGWUMP, the Macintosh Users' Group for Writers and Users of Mac Programs, meets on the first Thursday of each month. Meetings are free and beginners are welcome. For more information, call 272-4158.

Narcotics Anonymous

A group of recovering addicts who live without the use of drugs, including alcohol. Membership requirement is a desire to stop using. Meetings are held weekly at 6 p.m., G-18 Anabel Taylor Hall.

Risley College

"Festival of the Arts" will be held through April 21 at Risley. Panel discussion on censorship vs. free expression, April 19, 8:30 p.m. to 10 p.m. and student films 10:30 p.m. to 1 a.m., Tammany Coffeehouse; "Pornography and Male Sexuality," Michael Kimmel, SUNY Stony Brook, editor, "Men's Lives," April 20, 3 p.m., Risley Theater and outdoor films 11 p.m. to 2 p.m.; "A Relaxing Afternoon" featuring live band music, Risley back courtyard, April 21, 1 p.m. to 7 p.m.

Veterinary Medicine

Annual Open House at the College of Veterinary Medicine, featuring a self-guided tour of exhibits on the care of pets, the education of veterinarians and advanced veterinary medical technology, April 21, 9 a.m. to 4 p.m.

CORNELL EMPLOYMENT NEWS

Including Job Opportunities

April 19, 1990

Volume 2, Number 17

1990 Personnel Manual Update: Revised Policies Reviewed

The Personnel Manual represents Cornell's guidelines to ensure the university's personnel policies and procedures are administered in a fair, equitable and consistent manner.

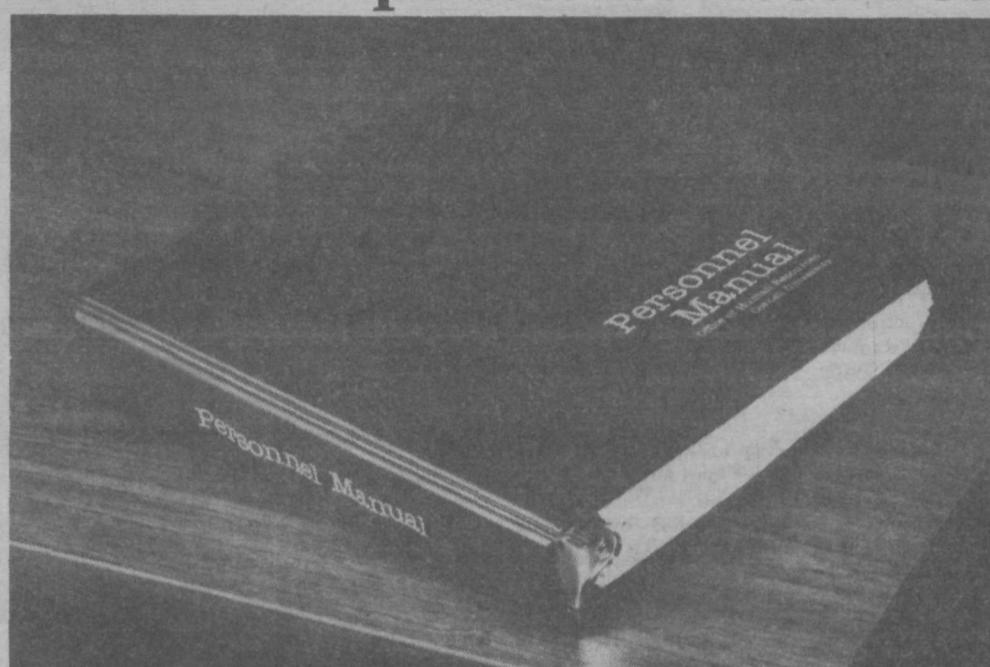
Personnel Manuals are available in your department and at the reference desks of all university libraries, in addition to the Information and Referral Center and the Office of Human Resources, both located in Day Hall.

The manual is meant to be shared and the information in it is knowledge which should be available for all.

The contents do not apply to employees in collective bargaining units, academic employees, temporary or casual employees or employees in the Medical College or Graduate School of Medical Science except where stated otherwise.

Personnel Manual policies are reviewed annually for content, accuracy, and clarity of language. Changes made to any policies or appendices during the annual update are sent to manual holders for insertion into the Personnel Manual each spring.

The annual update reflects an ongoing effort to provide policies which are current and with language that is as clear and precise as possible.



The 1990 manual update was recently sent to the 800 manual holders across campus. The update packet contains 21 revised policies - some with minor language changes - others with policy and procedure change. Also included were 12 updated appendices which represent new forms, updated salary schedules, etc.

This article will highlight some of the changes made this year. This is only a partial listing; other policy changes will be noted in upcoming articles. Also, what

follows is only a highlight of the changes; please refer to the manual for complete information on any policy. When you refer to updated policies, you will see that revised language is underlined for easy identification.

Policy #101 Filling Vacancies

Offers for Hiring Range I and II exempt positions must be approved by the Af-

firmative Action (AA) unit representative and the director of the Office of Equal Opportunity (OEO) prior to making an offer of employment.

Applicants may request a statement from the prospective employer explaining why they were not selected for employment.

The Human Rights Law states that such a request by applicants will be answered in writing by the employer within 30 days of the request.

The hiring department is responsible for conveying its decision in writing to all candidates who specifically applied for the position. Individuals referred by Staffing Services from a file search, who usually do not know they have been referred, do not have to be contacted.

The university must retain all records of the selection process for a period of five years.

Policy #103 Employee Transfer

Employees are encouraged to advance their career development by seeking career opportunities within the university.

Continued on page 4e

Office of Equal Opportunity Expands its Educational Role



by Valerie Hayes and Mary DeSouza

To assist departments in creating and maintaining a positive and civil work environment where diversity is viewed as an asset rather than a liability, the Office of Equal Opportunity (OEO), is expanding its educational role by offering more education and training on matters relating to affirmative action and equal employment opportunity. These training sessions are designed to focus on the needs of Cornell employees in their workplaces and raise consciousness through discussion of issues and laws dealing with race, sex (including sexual harassment), age, disability, Vietnam-era and disabled veterans, to name a few.

Some of these programs were developed as an affirmative approach to resolving discrimination complaints and handling the sometimes uncomfortable aftermath an investigation brings. Other programs are spin-offs of a more general information session on a topic previously provided to managers and supervisors. OEO sessions can be adapted to the particular needs and interests of a department. In addition, new sessions can be created in conjunction with the department to address specific employee concerns. Indeed, OEO welcomes this kind of active involvement from departments.

A sampling of the OEO programs include the following:

- Sexual Harassment Prevention
- Age Discrimination in Employment
- Hidden Disabilities
- Vietnam-era Veterans and Employment
- Racism and Sexism

The Office of Human Resources will join OEO in presenting the following programs:

- Recruitment and Retention
- Building a Positive Work Environment
- Cultural Diversity on Campus

If your department is interested in obtaining more information or in scheduling a program, please call 255-3976.

University Holiday Schedule

The schedule of the official 1990 university holidays:

Holiday	Day(s) of Observance
Memorial Day	Monday, May 28
Independence Day	Wednesday, July 4
Labor Day	Monday, September 3
Thanksgiving	Thursday, November 22 Friday, November 23
Winter Holiday Period	Tuesday, December 25 Wednesday, Dec. 26 Thursday, December 27 Friday, December 28 Monday, December 31 Tuesday, January 1, 1991

Attention All Employees: Is Your Campus Address Correct?

If not, it's your responsibility to report your new address.

If your campus address is not correct, please take the time to send the correct address along with the former address and your social security number to Operations, 147 Day Hall.

When you change your campus address, it is your responsibility to inform Operations. The change does not happen automatically. Please allow approximately three weeks for changes to take effect.

May 1, 1990 Deadline For Summer Session CCTS Applications

Employees who are now receiving the Cornell Children's Tuition Scholarship (CCTS) will automatically receive an application for the new academic year 1990-91.

Deadlines for submission of applications are as follows:

Summer Session – May 1, 1990

Academic Year 1990-91 – June 1, 1990

Fall Term Only – June 1, 1990

Winter-Spring Term Only – December 1, 1990

Employees who are not currently receiving CCTS and need to apply should request an application from the Training and Development Office, 107 Day Hall, or call Maureen Brull at 5-7170 or Adele Feierstein at 5-7509.

Caregivers' Resource Center Moves

The Caregivers' Resource Center at the Tompkins County Office for the Aging recently moved to a new location at 309 N. Tioga St.

The Center provides information and support to help caregivers of older persons cope effectively with the stresses of their situations. Services offered through the Center include caregiver workshops, support groups, a resource library, information, referral, and counseling.

Information is available on parent care, challenges faced by employed caregivers, and long-distance caregiving. Assistance is also available in the areas of health care, nutrition, transportation, housing, legal and financial planning.

For further information about the Caregivers' Resource Center, call Carolyn Croke at 277-0148.

April 19, 1990

JOB OPPORTUNITIES

Volume 2, Number 17

Staffing Services, 160 Day Hall, Cornell University, Ithaca NY 14853-2801
Day Hall: (607) 255-5226

East Hill Plaza: (607) 255-7422

- Employees may apply for any posted position with an Employee Transfer Application. A resume and cover letter, specifying the job title, department and job number, is recommended. Career counseling interviews are available by appointment.
- Requests for referral and/or cover letters are not accepted from external candidates unless specified in the ad. Candidates should submit a completed and signed employment application which will remain active 4 months. Interviews are conducted by appointment only.

Professional

Nonacademic professional positions encompass a wide variety of fields including management, research support, computing, development, finance and accounting, dining services and health care.

All external candidates must have a completed signed employment application on file with Staffing before they can be interviewed for a position.

Submit a resume and cover letter for each position, specifying the job title, department & job number. Employees should include an Employee Transfer Application.

Manuscript Editor (PA1305) C.U. Press-Endowed

Edit manuscripts and supervise freelance work on manuscripts that are assigned by the managing editor. Serve as project manager from a manuscript's arrival in the department through to bound books, acting as liaison between author, Press staff, and freelance copyeditors as necessary.

Requirements: Bachelor's minimum. Several years experience working in the editing department of a scholarly, scientific, or trade publisher. Send cover letter and resume to Cynthia Smithbower.

Assistant Dean for Development (PA1402) HRIII Engineering Public Affairs-Endowed

Direct the fund raising and alumni affairs efforts of the College of Engineering; responsible for developing and implementing the ongoing operating plan and strategy for the College; manage the College's portion of the campaign in conjunction with the Development Office, Regional Office, and College/Unit Public Affairs planning effort; work closely with the Dean of the College.

Requirements: Bachelor's; graduate degree desirable. Five years major gifts and capital projects fund raising experience; experience in working with volunteer groups (alumni and friends). Excellent communications (written and oral), interpersonal skills required. Send cover letter & resume to Cynthia Smithbower.

Administrative Manager II (PA1002) HRII Materials Science and Engineering-Endowed

Manage the finances, personnel administration, facilities and equipment, administrative data systems, and institutional analyses and act for the chairman in his absence. Will coordinate the teaching, research and development programs associated with the department.

Requirements: Bachelor's required (preferably in science or engineering) or equivalent combination of education and experience. 3-5 years experience with budgeting, accounting, personnel management, facilities, and institutional analysis required. Experience with corporate development and stewardship highly desirable. Send cover letter and resume to Cynthia Smithbower.

Computer Systems and Network Manager (PT1509) HRII Mann Library-Statutory

Manage multi-user computer systems and telecommunications networks for a large science library. Install and maintain software; configure and monitor networks; maintain data files; work with programmers and systems analysts in the development of electronic information systems. Provide guidance and consultation to staff and patrons.

Requirements: Bachelor's required, with course work in computer science or information science. At least 2-3 years experience in a technical capacity. Knowledge of minicomputers and telecommunications required. Knowledge of Unix and microcomputer software desirable. Send cover letter and resume to Sam Weeks.

Technical Services Support Engineer (PT1504) HRII Telecommunications Services-Endowed

Provide technical and engineering support to associate/staff engineer in installation and maintenance of telecommunications equipment. Provide day to day coordination of projects and services.

Requirements: Bachelor's or equivalent in electronics, engineering, computer science or related field. 5-7 years experience with extensive work in installation and maintenance of telecommunications equipment including PBX and electronic key systems. Ability to read equipment schematics, as well as building and underground prints; familiarity with appropriate communications and electric codes; good written and oral communication and interpersonal skills required; project management skill desired; supervisory experience helpful. Must be able to lift fifty pounds. Must hold and maintain valid NYS drivers license. Send cover letter and resume to Sam Weeks.

Research Support Specialist III (PT1501) HRII Division of Nutritional Sciences-Statutory

Oversee day-to-day operations of gas stable isotope ratio mass spectrometry lab. Operate and maintain two Finnigan mass spectrometers; construct and maintain preparatory lines; educate and oversee lab personnel and demonstrate equipment to visitors.

Requirements: Bachelor's or equivalent in Physics, Chemistry, Engineering, or related discipline; Master's or equivalent preferred. Mechanical aptitude is essential. Some electrical skills required and willingness to learn. Literacy in at least one common programming language, including BASIC and FORTRAN. Willingness to learn Pascal is a must. Send cover letter and resume to Sam Weeks.

Mechanical Engineer (PA1404) HRII Facilities Engineering-Endowed

Design, prepare cost estimates and drawings, specifications and construction documents for maintenance, repair, and alteration projects that relate to mechanical systems.

Requirements: Bachelor's in mechanical engineering or equivalent. 3-5 years experience as a mechanical engineer. Professional license desirable. Must have demonstrated track record of problem solving/innovations, ability to access areas that are physically restrictive (building mechanical rooms, etc.) and a valid driver's license. Send cover letter and resume to Cynthia Smithbower.

Director of Alumni Relations (PA1405) HRII Engineering Public Affairs-Endowed

Responsible for developing and implementing alumni activities for graduates of the College of Engineering; oversee maintenance and development of the dues paying organization of the Cornell Society of Engineers with particular attention to the Board of Directors. Plan and schedule engineering lectures, receptions and other programs for alumni and friends both on and off campus. Work directly with the Dean, college faculty and all members of the Public Affairs staff.

Requirements: Bachelor's or equivalent education, training and experience. Minimum of 3 years experience in university alumni and donor relations highly desirable; experience in working with volunteers highly desirable; strong interpersonal skills; excellent organizational, writing and communication skills. Experience with maintenance and use of computer based reports. Self motivating and ability to work independently. Send cover letter and resume to Cynthia Smithbower.

Director of Graduate Records (PC1304) HRII The Graduate School-Endowed

Responsible for all aspects of management of the Graduate Records Office. Interpret Graduate and University legislation regarding student status, degree requirements; oversee maintenance, accuracy and security of the permanent records of all students enrolled in the Graduate School; monitor and verify graduate students' status and progress toward the satisfaction of requirements of the specific advanced degree programs; the distribution of information regarding fields of study and programs available in the Graduate School to faculty and students

and coordinate policies with other offices; the development of the Graduate School Information System; and supervision of a permanent staff of four (the Degree Coordinator, the Information Secretary, and two Records Assistants).

Requirements: Bachelor's minimum. Graduate degree preferred. Be knowledgeable on all aspects of graduate programs and able to interact with sensitivity to students and faculty. Must be flexible and innovative in developing solutions for particular problems, and be capable of designing procedures to improve effectiveness within the office. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Senior Systems Analyst (PT0705) HRII Mann Library-Statutory

Work with researchers and librarians to define requirements for, coordinate the implementation of, and evaluate and revise systems for the electronic delivery of scholarly information. Also provide programming and technical support in the development of such systems. During the first year, manage a major system development effort in the delivery of electronic full-text for chemical literature.

Requirements: Bachelor's with significant coursework in computer or information science. Master's desirable. 3-5 years experience in programming, systems analysis, or related fields, including 1-2 years in technical or project management. Knowledge of at least 2 high level programming languages. Knowledge of microcomputers, workstations, and UNIX operating systems highly desirable. Send cov ltr & resume to Sam Weeks.

Senior Research Support Specialist (PT0315) HRII Materials Science Center-Endowed

Manage and extend a state-of-the-art Electron Microscopy Facility for the support of the research program of the Materials Science Center.

Requirements: Master's in material science or physics or equivalent required. PhD preferred. Minimum 2 years experience as a postdoc in relevant electron microscopy user field. Send cover letter and resume to Sam Weeks.

Project Leader I (PT9602) Level 35 Information Technologies-Endowed

In support of a major administrative computer system, will design, develop, modify, maintain and document complex applications software having many modules and interrelationships with other software modules. This includes logic relationships. Supervise and provide functional guidance for programmers/analysts and support staff.

Requirements: Bachelor's or equivalent with related courses. 3-5 years related experience. Knowledge of applications for interactive administrative systems; database management systems such as ADABAS; machine architecture; system utility programs; and VM/CMS. Knowledge of several languages such as PL/I, COBOL, and Natural. Ability to provide guidance and supervision. Send cover letter and resume to Sam Weeks.

Systems Programmer/Analyst III (PT0401) Level 34 CIT/Research and Analysis-Endowed

Design, implement, install, document and maintain system software, complex software programs in packages for DEC Vaxen running VMS, and other systems running UNIX. Assess performance and make recommendations related to the general operation of the various systems.

Requirements: Bachelor's or equivalent with computer related courses. 3-5 years programming and machine architecture experience; sound knowledge of VMS and/or UNIX operating systems. Knowledge of VAX cluster environment desirable. Several major programming languages, e.g., C, Pascal, Fortran, working knowledge of TCP/IP Protocols. Good interpersonal skills. Send cover letter and resume to Sam Weeks.

Systems Programmer/Analyst II (PT1406) Level 33 Electrical Engineering-Endowed

Assist computer manager in day-to-day operation of a general purpose system including VAX, Sun, HP, and AT&T computers. Design, maintain, and document application software for administrative computer systems, including Macintosh and IBM PCs. Maintain operating systems, make backups, and provide training and consulting for users.

Requirements: Bachelor's in computer science or related fields. 2-3 years experience with UNIX systems. Send cover letter and resume to Sam Weeks.

Applications Programmer/Analyst II (PT9605) Level 33 CIT-Endowed

As a member of a project team, design, develop, modify, maintain and document straight forward applications systems software in support of a major administrative system.

Requirements: 2-3 years experience. Knowledge of applications for interactive and batch administrative systems, database management systems, machine architecture, system utility programs, VM/CMS. Knowledge of at least 2 languages: PL/I, Natural or COBOL. Send cov ltr & resume to Sam Weeks.

Accounting and Billing System Supervisor (PT1105) Lvl 33 Information Technologies/Services-Endowed

Provide direct support services to CIT clients concerning the availability and appropriate use of multi-user computer systems. Assist with design and development for system billing statement. Supervise 2 accounts assistants.

Requirements: Bachelor's or equivalent experience. Coursework in information technology, business management or accounting. 2-3 years of computer related service delivery, functional knowledge of Cornell computing systems, experience using ADABAS or similar database with accounting/billing emphasis. Send cover letter and resume to Sam Weeks.

Technical Consultant II (PT6301) Level 33/HRII HDFS/Family Life Development Center-Statutory

Provide technical support, training and orientation to staff of approximately 30 on effective use of microcomputers in a complex local area network and electronic publishing environment.

Requirements: Bachelor's or equivalent in education. Minimum 2-3 years experience with micro computers. Macintosh experience required. IBM PC familiarity desirable. Working skills must include a fifth generation language, strong system diagnostic and telecommunications. Some experience in PASCAL, C or BASIC desired. Send cover letter and resume to Sam Weeks.

Systems Programmer/Analyst II (PT9608) Level 33 Engineering College Educ. Computing-Endowed

Provide system management for a network of UNIX-based graphics workstations; install and maintain system software and utilities, keep hardware operational and assist and consult with staff and users.

Requirements: Bachelor's in computer science or equivalent. 2-3 years programming; 2 years system management, familiarity with UNIX (prefer several versions), C, HOOPS and interactive graphics; excellent communication and interpersonal skills. Send cover letter and resume to Sam Weeks.

Technical Consultant I (PT1506) Level 32 Johnson Graduate School of Management-Endowed

Provide end user computing support and applications consulting to the faculty, staff and students of the Johnson School community. Do one-on-one training and consulting; and workshops, presentations, user satisfaction surveys, management of student consultants and user documentation.

Requirements: Bachelor's or equivalent experience. Completed work in the application of computing technology preferred. Minimum of two years experience with significant client contact and exposure to office automation systems. Demonstrated knowledge in at least one area of JGSM supported hardware and software (Vax/VMS, DOS, Mac), and a proven ability to develop consulting expertise in the full spectrum of supported systems. Send cover letter & resume to Sam Weeks.

Research Support Aide (PT1512) HRII Soil, Crop, Atmospheric Sciences-Statutory

Coordinate the maintenance and upgrades of PC hardware and software. Develop and maintain documentation. Develop, install, maintain, and modify software for administrative systems from PC to mainframe computers. Assist with computer operation and maintenance of ADABAS security systems.

Requirements: Bachelor's in computer science or equivalent. 1-2 years related experience. Work with PCs, IBM System 36, and Cornell mainframe desirable. Knowledge of JCL, CMS, MVS, and ADABAS. Some experience with machine architecture, production procedures and systems utility programs. Send cover letter and resume to Sam Weeks.

Financial Aid Counselor (PC1404) HRII Graduate School/Fellowships and Financial Aid-Endowed

Counsel graduate students, faculty and staff regarding Title IV need based financial aid programs. Award need-based financial aid to graduate students; supervise support, part time graduate and undergraduate student staff; oversee maintenance of Financial Aid Management System (FAMS), student financial aid files and federal need-based financial aid records; handle all need-based financial aid correspondence and requests for re-evaluation of award offers.

Requirements: Bachelor's or equivalent. 1-2 years prior financial aid experience, knowledge of Title IV federal programs and FAMS. Must be capable of working in detail-oriented,

and confidential environment. Computer or CRT experience preferred. Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants, send cover letter, resume and salary requirements to Esther Smith, Staffing Services, 160 Day Hall.

- Staffing Services will acknowledge receipt of all material by mail. Hiring supervisors will contact those individuals selected for interview by phone; please include two or more numbers if possible. When the position is filled, candidates should receive notification from the hiring supervisor.
- Cornell University is an Affirmative Action/Equal Opportunity Employer.
- Job Opportunities can be found on CUINFO

application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants, send cover letter, resume and salary requirements to Esther Smith, Staffing Services, 160 Day Hall.

Assistant Director, Alumni Affairs/Admissions Relations (PA1408) HRII Alumni Affairs-Endowed

Assist Cornell Alumni and their daughters, sons, grandchildren, etc. in exploring the educational opportunities and programs of the undergraduate and graduate schools and colleges of Cornell University. Provide on-campus contact for alumni families and encourage the maximum number of "next generation" Cornellians to enroll once accepted.

Requirements: Bachelor's or equivalent. 2-3 years related experience preferably at Cornell. Excellent public relations skills and ability to deal with sensitive issues. Some counseling experience helpful. Experience in program development and public speaking. Must be detail-oriented while able to see the larger picture. Willingness to travel. Send cover letter and resume to Cynthia Smithbower.

Administrative Supervisor (PA1409) HRII Human Service Studies-Statutory

The department of Human Service Studies has a position available to manage the personnel and business aspects of a program of research carried out by the Cornell Empowerment Group, five faculty members in Human Ecology that is funded by the Ford Foundation. Design, develop and produce theme based publications in the area of empowerment.

Requirements: Candidates should have a Bachelor's degree, or equivalent and 2-3 years experience in managing, supervision, editing and publishing. This is a full-time appointment but candidates interested in part time employment will be considered. The appointment has a termination date of 12/31/90. Send cover letter and resume to Cynthia Smithbower. Materials will be accepted until May 11 or until a suitable candidate is found.

Research Support Specialist II (PT1308) HRII Soil, Crop and Atmospheric Sciences-Statutory

Support a research program aimed at isolating and identifying natural plant compounds which are physiologically active on other species. Maintain and operate complex analytical equipment; independently conduct aspects of the research program; develop and evaluate methodology; statistically analyze results and survey literature. Until 9/30/90 with possible extension contingent upon funding.

Requirements: Bachelor's or Master's in biology, plant physiology, or biochemistry preferred. Work related experience including pesticide residue analysis and biochemical techniques preferred. Valid NYS driver's license helpful. Send cover letter and resume to Sam Weeks.

Research Support Specialist I (PT1306) HRII Neurobiology and Behavior-Statutory

Research assistant with ability to work independently. Collect data, perform experiments, do library research, prepare publications, take part in field work and perform general lab chores.

Requirements: Bachelor's in entomology or other branch of biological sciences or equivalent and 2-3 years experience required with high recommendation or Master's in lieu of experience. Send cover letter and resume to Sam Weeks.

Assistant Director, Records and Research (PA1302) HRII University Development-Endowed

Assist the Director of Development Research and Records in conducting research that supports the University's fund raising efforts. Coordinate requests for development research from various offices. Supervise staff of 5 researchers. Manage special projects. Conduct electronic database searches. Monitor quality control. Perform independent research on special prospects.

Requirements: Bachelor's or equivalent. 1-2 years related experience. Demonstrated writing/editing skills. Supervisory experience. Familiarity with Macintosh computer and electronic on-line databases. Send cover letter and resume to Cynthia Smithbower.

Research Support Specialist I (PT1204) HRII Agronomy-Statutory

Conduct field and lab experiments on soil and water management. Implement field trials throughout New York dealing with tillage, soil compaction, and drainage/irrigation. Do lab measurements on soil permeability and moisture retention. Compile, arrange and summarize data. Manipulate data using computers. Supervise summer field assistants. Construct equipment and instrumentation to be used in field and lab.

Requirements: Bachelor's in Agronomy or related field, Master's preferred. Understanding of soil and water management and related processes. Experience with farm and lab equipment and procedures. Ability in computer programming preferred. Send cover letter and resume to Sam Weeks.

Asst. to AVP for Working Family Programs (PC1109) HRII Associate Vice President for Human Relations-Endowed

Assist the Associate Vice President in assessing the family care needs of Cornell staff, faculty and students and in developing

Research Support Specialist I (PT0212) HRI**Animal Science-Statutory**

Provide supervisory and technical support for research programs involving the design and analysis of Dairy Management Systems utilizing the NY Dairy Herd Improvement database. Analyze and develop dairy herd performance measures that will predict economic returns to the dairy enterprise. Develop and program software to assist with dairy herd management. Requirements: Bachelor's or equivalent in animal science or agricultural economics. High level language, e.g., "C" programming experience, ability to use SAS, understanding of advanced computing techniques such as expert systems. Dairy farm background or experience helpful. Send cover letter and resume to Sam Weeks.

Professional Off-Campus**Research Support Specialist II (PT1508) HRI****Entomology/Geneva-Statutory**

Assist in the design, execution, and analysis of lab and field experiments of biology, ecology, and management of insect pests of vineyards. Manage temporary employees. Respond to grower inquiries. Assist visiting and postdoctoral researchers, and assist in the publication of research results.

Requirements: Master's in entomology, plant protection, or related curriculum preferred; Bachelor's required. Must demonstrate interest in fundamental and applied research in pest management, and good managerial, writing, and communication skills. Must have 2 years research/field experience in related area, and be willing to travel and work weekends and evenings if necessary. Skills in computer usage and statistical methods preferred. Valid NYS driver's license required. Send cover letter and resume to Sam Weeks.

Executive Staff Assistant (PC1301) HRI**Division of Nutritional Sciences/CNPP/Washington, DC-Statutory**

Provide administrative assistance to the staff of Washington, DC office (approximately 30 persons) for the Cornell Food and Nutrition Policy Program. Duties include assistance in the areas of office management and operations; personnel and hiring; travel and expenditures; project implementation, and facilities management.

Requirements: Bachelor's with 1-2 years experience or Associate's with 3-5 years previous office experience. Proven ability to work independently, take initiative and handle many assignments simultaneously. Experience with microcomputers and Wordperfect preferred. Familiar with international work and African geography. Foreign language useful. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Professional Part-time**Assistant Nursery School Teacher (PA1407)**

Unions and Activities/Cooperative Nursery-Endowed
Responsible for care and safety of 10-4-5 year old children. Responsible for planning, with Head teacher, communicating with parents and student workers in classroom. Able to plan developmentally appropriate curriculum. Mon-Fri, 12:30pm-4:30pm

Requirements: Bachelor's in early childhood education required. Master's preferred. Some child development courses. Experience in early childhood education essential. Send cover letter and resume to Cynthia Smithbower.

Accountant I (PC1411) HRI**Electrical Engineering-Endowed**

Administer sponsored research accounts; manage accounting office, and supervise staff of 2. Job sharing position. Hours to be arranged.

Requirements: Associate's or equivalent in business or accounting. Bachelor's preferred. 2-3 years related experience. Ability to use IBM PC and database software and to work under pressure. Good interpersonal skills. Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter, resume and salary requirements to Esther Smith, Staffing Services, 160 Day Hall.

Professional Temporary**Technical Consultant I (PT0109)****CISER-Endowed**

Handle walk-in computing consulting for CISER members. Provide internal computing support for CISER staff; teach computing skills via preparation of printer documentation; organize special education activities for users. 20 hours per week. Until 7/1/90.

Requirements: Bachelor's or equivalent in computer science or social science required. Experience with microcomputers, mainframe data tape and file management. Social science experience with Cornell's IBM mainframe, CMS, SAS/SPSS, JCL, MVS. Send cover letter and resume to Sam Weeks.

Computer Consultants (T8212)**Information Technologies**

Information Technologies is seeking applicants for part-time positions in customer (user) support. Successful applicants will have experience with a broad range of technologies (micro and mainframe) with general knowledge of major application software (wordprocessing, DBMS, operating systems etc.). Excellent communication skills and positive customer service orientation are essential. Knowledge of the Cornell computing environment preferred. Interested parties may submit their resume to Stephan Knapp, Cornell University, CIT Resource Services, CCC Bldg. Room 121, Ithaca, NY 14850.

Technical

As a prominent research institution, Cornell University has a diverse need for lab, electro/mechanical and computer support. Individuals with backgrounds in computer science, biology, microbiology, chemistry, animal husbandry, plant science and medical lab techniques are encouraged to apply; applicants with ASCP or AHT licenses are in particular demand.

All external candidates must have a completed signed employment application on file with Staffing before they can be interviewed for a position.

Submit a resume and cover letter for each position, specifying the job title, department and job number, to Sam Weeks, 160 Day Hall. Skill assessment check lists, available at the Day Hall office, are a valuable aid when applying for computer or lab related positions.

Research Aide, GR18 (T1303)**Lab of Ornithology-Endowed**

Minimum Biweekly Salary: \$529.35

Responsible for creating and analyzing computerized records for the Bird Population Studies Program by editing data, organizing computerized data records, and running data through analysis programs. Handle written and oral correspondences as well. Until 12/31/90.

Requirements: HS diploma or equivalent. Some college coursework in biological sciences strongly desired. Knowledge of birds preferred. 1 year related experience. Computer skills required. Ability to use P.C., work with mainframe helpful, work with statistics and programming helpful. Must be well organized and able to work well independently. Send cover letter and resume to Sam Weeks.

Animal Technician, GR18 (T1203)**Physiology-Statutory**

Minimum Biweekly Salary: \$529.35

Participate in long-term animal experiments with pregnant animals. Perform all aspects of general animal maintenance and maintain experimental records. Sample blood and prepare infusions. Perform general lab duties. Follow strict protocols for sterile or disease control environments and regulations for animal welfare.

Requirements: Associate's or equivalent biological sciences or equivalent. Bachelor's desirable. Pre-employment physical and immunizations required. Previous experience with sheep preferred. Send cover letter and resume to Sam Weeks.

Research Aide, GR18 (T0507)**Lab of Ornithology-Statutory**

Minimum Biweekly Salary: \$529.35

Create and analyze computerized records for Bird Population Studies by editing data records and running data through analysis programs. Handle written and oral correspondence for the program. 1 year appointment.

Requirements: Associate's or equivalent in biological sciences, wildlife management, resources management or related field. Able to identify all species of birds likely to occur in the

Cayuga Lake Basin, visually and/or by their sounds. Aptitude and enthusiasm for creative use of both micro and mainframe computing environments and software. Knowledge of identification and habitat ecology of North American birds. Send cover letter and resume to Sam Weeks.

Animal Technician, GR18 (T0106)**Lab Animal Services-Statutory**

Minimum Biweekly Salary: \$529.35

Provide care (feed, water, clean and monitor) for research animals following strict protocols for sterile or disease control environments and regulations for animal welfare. Maintain animal records. May include assisting Vets in treating and vaccinating animals. 5 days per week including weekends.

Requirements: HS diploma or equivalent. Associate's in Animal Science required. Assistant animal certificate helpful. Knowledge of a variety of lab animals and animal breeding required. 1 year animal experience. Ability to lift 50 pounds. Pre-employment physical and all necessary immunizations required.

Technician, GR19 (T1507)**Plant Pathology-Statutory**

Minimum Biweekly Salary: \$551.86

Conduct pathogen testing in potato plants, screen populations for disease resistance and maintain potato tissue and pathogen culture collections. Prepare clones for shipment. Work in the lab, greenhouse and field. Train graduate students.

Requirements: Associate's in biological science or chemistry or training in biology, biochemistry or chemistry. 1 year lab experience with knowledge of tissue culture and testing procedures. Drivers license essential. Send cover letter and resume to Sam Weeks.

Facilities Inventory Drafter, GR19 (T1409)**Facilities Engineering-Endowed**

Minimum Biweekly Salary: \$551.86

Responsible for maintaining and updating the drawings and floor plans of all Cornell buildings for the Facilities Inventory section. Create or revise plans from field sketches or construction drawings. Calculate and verify field data on space usage and gross and net square footage. Do field inspections. Maintain work log. Assist in training and supervision of student drafters.

Requirements: HS diploma or equivalent. Associate's preferred. 2 years drafting experience, strong communication and interpersonal skills. Experience with microcomputers and CADD desirable. Send cover letter to Sam Weeks.

Technician, GR20 (T1404)**Clinical Sciences-Statutory**

Minimum Biweekly Salary: \$575.30

Provide technical support for an immunological lab research staff. Prepare tissue culture, bacteriological media, buffers and other formulated reagents. Collect blood and milk samples from cows. Work with other common lab animals. Clean lab and glassware. Do literature searches.

Requirements: Bachelor's in biology or equivalent experience in microbiological techniques. 1-2 years experience handling lab animals and knowledge of lab procedures. Send cover letter and resume to Sam Weeks.

Animal Health Technician, GR20 (T1405)**Vet Medical Teaching Hospital-Statutory**

Minimum Biweekly Salary: \$575.30

Responsible for maintenance of aseptic conditions and coordination of surgery team in the operating room during a surgical procedure. Cleaning and sterilization of surgical and hospital equipment. Must be available when on-call for emergency duty. Some weekends and holidays required.

Requirements: Associate's in animal health technology. Licensed or eligible for licensure in NYS. 3 years operating room experience preferred. Send cover letter and resume to Sam Weeks.

Electrical Technician, GR20 (T0112)**Hotel Administration-Endowed**

Minimum Biweekly Salary: \$575.30

Provide support for all Mac microcomputers (this includes programming, software and hardware support), and coordinate the support of the Appletalk network for faculty and staff.

Requirements: Bachelor's or equivalent coursework in computing or related fields. 1 year related experience with computer facility operations. Familiarity with hardware maintenance activities required. Experience with the Macintosh required. Some knowledge of networks desired. Send cover letter and resume to Sam Weeks.

Histology Technician, GR20 (T0115)**Vet Pathology-Statutory**

Minimum Biweekly Salary: \$575.30

Prepare high quality microscopic slides for interpretation by Pathologist. Primary duties include embedding, sectioning and staining of animal tissue sections.

Requirements: Associate's or equivalent in medical lab technology with coursework in histological techniques. HT (ASCP) certification or eligible preferred. 1-2 years experience as a histology technician in a hospital or research lab preferred. Send cover letter and resume to Sam Weeks.

Technician, GR20 (T0706)**Floriculture and Ornamental Horticulture-Statutory**

Minimum Biweekly Salary: \$575.30

Conduct field, greenhouse and lab experiments designed to evaluate the effects of weeds and weed control agents (including herbicides and biological control agents) on plant growth. Apply and evaluate herbicides and biological control responses to herbicides and weeds, data analysis and summary. Supervise 2 student employees, interact with Graduate students, other faculty, and department support staff. Some travel within New York State will be required.

Requirements: Bachelor's in horticulture, agronomy, plant science or related field or equivalent. 1 or more years of the following experience: weed identification and control, microcomputers, macro-computers, pesticide application, physiology lab skills, culture and maintenance of turfgrass and ornamentals. NYS driver's license is required. Must have (or be capable of obtaining) an NY Commercial Pesticide Applicator's certification in categories 3A and 10. Send cover letter and resume to Sam Weeks.

Technician, GR21 (T1510)**Vet Pathology-Statutory**

Minimum Biweekly Salary: \$599.73

Prepare high quality microscopic slides for interpretation by the pathologist. Must be able to work independently without constant supervision. Assist in training new staff. Be able to set up and maintain histological equipment.

Requirements: Associate's or equivalent in Medical Lab Technology (Histology) or related field, with coursework in histological techniques. HT (ASCP) certified or eligible or Bachelor's with 1-2 years experience. 2-3 years experience as a histology technician in a hospital or research lab desired. Send cover letter and resume to Sam Weeks.

Technician, GR21 (T0904)**Diagnostic Lab-Statutory**

Minimum Biweekly Salary: \$599.73

Provide technical support for service, research, and teaching projects in diagnostic toxicology. Conduct analysis of toxicants and drug related compounds as requested. Maintain integrity of samples and chain of custody, prepare reagents, order supplies, and miscellaneous tasks related to good lab practices and safety.

Requirements: Bachelor's in science or equivalent experience. 1-2 years lab experience. Typing and computer skills. Send cover letter and resume to Sam Weeks.

Electronics Technician II, GR22 (T1401)**CIT/Network Resources-Endowed**

Minimum Biweekly Salary: \$625.24

Provide support for the Network Management Center, its campus clients and CU's connections to external networks. Monitor network, diagnose problems, coordinate and document service requests, & provide network access preventative maintenance.

Requirements: Associate's or equivalent. 1-3 years data communications experience. Understanding of data communications networks and hardware highly desirable. Experience diagnosing network problems (especially TCP/IP) helpful. Strong interpersonal skills. Send cover letter & resume to Sam Weeks.

Technician, GR22 (T1307)**Pharmacology-Statutory**

Minimum Biweekly Salary: \$625.24

Conduct experiments and analyze results in research on vertebrate phototransduction and epidermal growth factor receptor system. Participate in design and interpretation of results. Work with cell cultures, purify membrane proteins, and perform radioligand binding assays. Calculate, analyze and present data. Use computer for graphing and statistical analysis.

Requirements: Bachelor's in biochemistry or related field. 2 years lab experience required. Protein purification in cell

culture work helpful. Send cover letter and resume to Sam Weeks.

Technician, GR22 (T1108)**Pharmacology-Statutory**

Minimum Biweekly Salary: \$625.24

Conduct experiments and analyze results on biochemical research relating to calcium channels. Calculation and analysis of data-statistical and graphical. Perform independently, to some extent, in the design and interpretation of results.

Requirements: Bachelor's or equivalent in biochemistry, neurobiology or similar field. 2-4 years lab experience in a related field. Familiarity with balances, pH meters, centrifuges, gamma and scintillation counters, spectrophotometer, light microscope, and tissue culture equipment. Send cover letter and resume to Sam Weeks.

Research Equipment Technician, GR22 (T0406)**Nuclear Science and Engineering-Endowed**

Minimum Biweekly Salary: \$625.24

Build research lab apparatus using standard machine shop equipment; use and maintain research lab equipment; operate low power nuclear reactors; operate gamma irradiation facility; use radiation safety equipment.

Requirements: Associate's in mechanical and/or electrical technology or equivalent experience. 3 years related experience. Nuclear reactor operator license or certification highly desirable. Knowledge of use of machine shop tools and research lab test equipment. Willingness and ability to learn procedures and methods of radiation safety and reactor operations and to pass US operator license examination (after training). Send cover letter and resume to Sam Weeks.

Research Equipment Technician, GR22 (T0406)**Nuclear Science and Engineering-Endowed**

Minimum Biweekly Salary: \$625.24

Provide technical support for the campus telecommunications system, equipment and peripherals through assembly, installation, testing, and maintenance. Make the connections of ancillary hardware.

1990 Personnel Manual Updates

There is no minimum time in a position before an employee is eligible to seek a transfer. However, the success of employees' future career moves will depend upon their success in creating a solid and stable work history, so career moves should be carefully planned. Individuals who are considering a transfer before they have completed nine months in their current position are encouraged to discuss their decision with Employee Relations.

Policy #108 – Offers of Employment

Offers of employment are conditional upon completion of a signed employment application.

Policy #207 – Promotions and Downgrades

Pay increases - Grade changes of one level will effect a minimum of a five-percent salary increase and a pay grade change of two or more grade levels will effect a

Continued from page 1

minimum of a ten-percent salary increase or the minimum of the new grade whichever is greater. Factors such as the salary requirements of the applicant pool, internal pay relationships and funding should be considered prior to making a salary offer.

Policy #802 – Separating Employees from the Payroll

Discharge - In cases of discharge, an employee's last day of work should also be the last day of pay, with the exception of accrued vacation. Employee Relations must be consulted prior to making any exceptions to this procedure.

Exit interview questionnaire - Departments are encouraged to conduct their own exit interviews and should remind separating employees to complete the university's central interview questionnaire when they receive it.

Jobs

Continued from page 3

organizational and interpersonal skills essential. Some supervisory or library experience preferred. Unimpaired or corrected vision and hearing required. Ability to lift and carry equipment weighing up to 40 pounds. Light typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Accounts Assistant, GR20 (C1504)

Electrical Engineering-Endowed

Minimum Biweekly Salary: \$575.30

Responsible for processing the school's payroll; prepare transactions, monitor activity, and report on status of school accounts; maintain inventory listing for school and research; provide assistance for the Accountant.

Requirements: Associate's in business/accounting or equivalent; 2 years experience in office setting. Administrative experience and knowledge of bookkeeping/accounting, preferably at Cornell. Computer experience with use of database programs, spreadsheets and wordprocessing essential. Able to work independently in a busy work environment and to organize data and maintain confidentiality. Knowledge of foreign languages/cultures helpful. Medium typing. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Personnel Assistant, GR20 (C1416)

Office of Human Resources-Endowed

Minimum Biweekly Salary: \$575.30

Responsible for the maintenance and update of the academic database; research and correct related information; assist with implementation, maintenance, and interpretation of academic personnel policies and procedures; process academic appointment forms.

Requirements: Associate's or equivalent combination of education and experience in business and/or human resources. 2 years related experience. Knowledge/experience with computers and database maintenance (Macintosh SE helpful). Experience with academic/nonacademic appointment processing. Ability to work independently and with detail information. Strong organizational, interpersonal, and communication skills. Medium typing. Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

Administrative Aide, GR20 (C1402)

Unions & Activities-Endowed

Minimum Biweekly Salary: \$575.30

Coordination of the night time Diner services; supervision and training of student employees; responsible for inventory purchasing; daily maintenance of the area; pricing of items for resale; monthly reports. Other duties as assigned. 10 months. Tues and Wed: 7:30pm - 1:30am, Thurs - Sat: 7:30pm - 3:30am

Requirements: Associate's or equivalent. 2 years related experience. Managerial skills. Experience in food handling, preparation and food retailing. Cornell employees send employee transfer applications to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Administrative Aide, GR20 (C8909)

University Development-Endowed

Minimum Biweekly Salary: \$575.30

Provide secretarial and administrative assistance to the Office of Major Gifts. Coordinate flow and oversee completion of work within office; assist in making arrangements for visitors to campus; conduct research for special projects; type, edit and proofread correspondence, reports, etc.; make appointments and coordinate travel arrangements.

Requirements: Associate's or equivalent. 2-3 years office experience. Excellent organizational, communications and interpersonal skills. Discretion in handling confidential information. Able to prioritize assignments and work under pressure. Knowledge of Cornell desirable. Medium typing.

Editorial Assistant, GR20 (C1305)

C.U. Press-Endowed

Minimum Biweekly Salary: \$575.30

Assist the Acquisitions Editor/Coordinator in acquiring manuscripts; draft letters and memos to Press advisers and authors; maintain some department records; assist in preparation of contracts and annual reports; major responsibilities for coordinating workflow in department and with other departments; some training of new assistants and temporary employees.

Requirements: Associate's or equivalent. Excellent typing. Strong communication skills. Some publishing experience desirable. Heavy typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall. Employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

Administrative Aide, GR21 (C1514)

Psychology-Endowed

Minimum Biweekly Salary: \$599.73

Responsible for grant preparation, administration, and personnel and budgetary supervision required by 2 professors for running of 3 laboratories at Cornell. Provide scientific and library assistance for research. Act as liaison for off-campus studies. Assist in manuscript preparation, data analysis and statistical work.

Requirements: Associate's or equivalent required. 2-3 years experience in administrative support work, preferably at Cornell. Excellent organizational and interpersonal skills. 2 or more years experience using word processing, and other computer programs. Ability to work independently. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

Administrative Aide, GR21 (C1502)

Philosophy-Endowed

Minimum Biweekly Salary: \$599.73

Maintain computerized circulation records for 3200 subscribers. Specific duties include processing subscriptions, writing to subscribers regarding queries and problems, and planning circulation procedures related to a quarterly scholarly journal. Proofreading and assisting managing editor are important aspects of the job.

Requirements: Associate's or equivalent. 2 years related experience demonstrated by strong attention to detail, strong organizational and writing skills. Familiar with publishing, circulation and with philosophical terms. Data processing skills for IBM PC desired. Light typing. Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Accounts/Personnel Coordinator, GR21 (C1311)

Modern Languages and Linguistics-Endowed

Minimum Biweekly Salary: \$599.73

Provide administrative support for Chair and Administrative Manager of large academic department. Under general supervision assist with fiscal and personnel management services; responsible for processing of academic and non-academic appointment forms and handling day-to-day financial activities including purchasing, inventory, preparation of payments and monitoring of departmental accounts; assist with word processing and general office duties.

Requirements: Associate's in business/accounting or equivalent; 2-3 years experience in office setting. Administrative experience and knowledge of bookkeeping/accounting, preferably at Cornell. Computer experience with use of database programs, spreadsheets and wordprocessing essential. Able to work independently in a busy work environment and to organize data and maintain confidentiality. Knowledge of foreign languages/cultures helpful. Medium typing. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Office Professionals Off-Campus

Utility Plant Operator, GR19 (C1412)

Safety Division/Genova-Statutory

Minimum Biweekly Salary: \$551.86

Secure and patrol buildings, farms, greenhouses and grounds; monitor controlled temperature chambers and building mechanical rooms; operate gas and oil fired, 150 lb. pressure steam boilers and related equipment.

Requirements: HS diploma or equivalent. Valid NYS driver's license. 2 years experience in security or related work. Able to operate high pressure steam boilers and related equipment. Considerable amount of lifting/standing. There is a 50 lb. lifting requirement. Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants, send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Program Aide, GR19 (C1415)

NYC Cooperative Extension-Statutory

Minimum Biweekly Salary: \$551.86

Recruit, teach, document and evaluate efforts to assist low income youth and/or pregnant teens to select a healthful diet and to seek appropriate health, educational and social services for themselves and their infant. 21 hours per week. Until January 31, 1991, continuation contingent on funding.

Requirements: HS diploma or equivalent. 2 years experience in outreach and teaching role. Ability to communicate effectively orally and in writing. Work independently and as a team member.

Office Professionals Part-Time

Office Assistant, GR15 (C1405)

Vet Medical Teaching Hospital-Statutory

Minimum full-time equivalent: \$486.92

Work with weekend hospital census package and other medical record computer programs; check in records from the Small Animal Clinic on a daily basis; file lab reports and records on a daily basis; pull medical charts for research; assist doctors in finding records and prepare records for microfilm. Some holiday work required. Mon-Fri, 2pm-6pm; Sat 8am-12 noon.

Requirements: HS diploma or equivalent. Some experience preferred. Must be dependable. Good organizational, interpersonal and communication skills desirable. Light typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Preparations Assistant, GR17 (C1309)

Conservation/CUL-Endowed

Minimum full-time equivalent: \$517.65

In accordance with conservation standards, applies various techniques and materials in the pre-binding of all unbound monographs. Prepare monographs and theses for commercial binding and other monographs for conservation rebinding; maintain power machinery, relevant records, and stock of materials; share responsibility for functioning of unit, including work flow, staff coverage, training and decision making. 20 hours per week.

Requirements: HS diploma or equivalent. Excellent workflow management skills. Able to dismantle and service power machinery. Strong communication and interpersonal skills. Able to train and monitor work of others. Previous library experience desirable. Knowledge of book binding structures desirable. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Information Assistant, GR18 (C1407)

Reference/Engineering Library/CUL-Endowed

Minimum full-time equivalent: \$529.35

Responsible for assisting library patrons in locating information using traditional and computerized reference tools, such as the online catalog, RLIN, compact disk and fee-based searches in Dialog; review and verify interlibrary loan requests; respond to requests from the Document Photocopy Service; assist with bibliographic collections, or instruction projects. Mon, Tues, Wed, Fri, 11am-3pm; Thurs, 6pm-10pm (negotiable).

Requirements: HS diploma or equivalent. 2 years college coursework successfully completed. 1-2 years experience with the research process. Able to work under pressure. Experience with microcomputers preferred. Strong interpersonal, organizational and communication skills. Experience in an academic library desirable. Light typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Entomology Assistant, GR18 (C1401)

Mann Library-Statutory

Minimum full-time equivalent: \$529.35

Under the direction of the Entomology Coordinator, responsible for staffing the Entomology Library. Provide information and general assistance; circulate library materials; shelve books; maintain supplies; handle mail; responsible for processing interlibrary lending requests and course reserve lists; work with binding coordinator to prepare materials for binding.

Requirements: Associate's or equivalent experience and education. Background in entomology, agriculture, or biological sciences preferred. Strong interpersonal and communication skills. Able to be self-directed, meet deadlines and pay attention to detail. Experience working in an academic research library is desirable. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Continued from page 1

minimum of a ten-percent salary increase or the minimum of the new grade whichever is greater. Factors such as the salary requirements of the applicant pool, internal pay relationships and funding should be considered prior to making a salary offer.

Policy #802 – Separating Employees from the Payroll

Discharge - In cases of discharge, an employee's last day of work should also be the last day of pay, with the exception of accrued vacation. Employee Relations must be consulted prior to making any exceptions to this procedure.

Exit interview questionnaire - Departments are encouraged to conduct their own exit interviews and should remind separating employees to complete the university's central interview questionnaire when they receive it.

Reminder: 1st Annual Spring Employee Day Saturday, April 21 Schoellkopf Field

Discounted Lacrosse tickets

on sale today and tomorrow at the Athletic Ticket Office, Grumman Hall

Tickets \$1.00 each

(limit six per family)

Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Bus Driver, SO06 (G9506)

CU Transit-Endowed

Hiring Rate: \$7.20

Drive bus on campus, TOMTRAN routes and charter trips. Check vehicle for proper operating condition; provide information and directions. Shift subject to change.

Requirements: HS diploma or equivalent. NYS Class 2 driver's license required. Pre-employment physical and other Department of Motor Vehicles requirements. 3-6 months current bus driving experience. Good communication (oral) skills. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850. Women and minorities are particularly encouraged to apply.

Maintenance Mechanic, SO08 (G1201)

Buildings' Care-Endowed

Hiring Rate: \$7.91

Responsible for general maintenance of assigned residence areas including physical plant facilities and department equipment. Mon-Fri, 7:30am-4:00pm

Requirements: HS diploma or equivalent. 3-5 years experience in maintenance mechanic or building and maintenance field required; 2 years experience in trade and general knowledge of others. Able to use tools and equipment for building maintenance and repairs. Able to work in student oriented environment. Good communication, interpersonal and organizational skills. Able to make immediate on-site decisions. NYS class 3 driver's license preferred. Must be in good physical condition and able to perform heavy lifting. Regular Cornell employees send employee transfer application to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall. Women and minorities encouraged to apply.

General Service Temporary

In addition to posted positions, temporary opportunities frequently occur in custodial, food service, dish machine operation, material handling and other service areas. All individuals are encouraged to apply. Call Karen Raponi at (607) 255-2192 or 255-7422 for more information.

Custodian

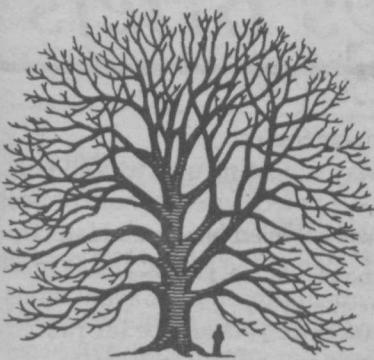
Building Care-Endowed/Statutory

Temporary Rate: \$5.00

Continuous recruitment will be done in the department of Building Care for temporary custodians. Provide general custodial care of buildings and grounds in immediate vicinity of assigned area. Mon-Thurs 6:00am-2:30pm; Fri 6:00am-1:30pm. Periodically 2nd and 3rd shift hours are available.

Requirements: Basic reading and writing skills. Able to operate a variety of heavy power equipment, lift 50 pounds and climb a 6 foot ladder. Contact Karen Raponi, Staffing Services, EHP, 255-2192 for an interview.

Drivers, Bartenders,& Waitstaff (S1502)



Cornell Plantations

the tree and me

On Sunday, April 22, the world will celebrate Earth Day 1990. One theme of Earthrise/EarthDay at Cornell is "for our children's children." A new generation is being introduced to this event on its twentieth anniversary. With this in mind, Cornell Plantations staff, friends, and volunteers—the Plantations community—will offer an afternoon of family fun and education.

The event, called "the tree and me," is a walking tour through the woods and meadow of F. R. Newman Arboretum. Going from stop to stop along the way, families will perform hands-on activities that will help them understand what a tree is, what it does for our lives, and what we can do to help a tree grow.

Friends from all over campus and town have pitched in to help make this event, one of many Global Releaf programs around the country on this day, a valuable experience for everyone involved. Each family will receive a workbook at the beginning of the tour. The activities in the book are designed to get the whole family involved. At the stops, they will see coordinated exhibits, talk to experts, and enjoy additional activities related to the focus of the stop.

Traditionally, Earth Day celebrates the importance of understanding and protecting our environment with educational programs on recycling, pollution prevention, and alternative technologies. Plantations' contribution is intended to have fun with these issues as they relate to our trees.

After they have drawn, hugged, and counted trees, families will get a tree of their own to take home and plant. Seedling serviceberry trees will be given to the first two hundred families that complete the tour, along with instructions for their planting and care. Master Gardeners from Tompkins County Cooperative Extension will also give a demonstration of planting techniques for larger trees.



Vol. 3 #1



Tree Frogs

Tree frogs live in trees.
They live there with the honey bees.
They eat the green leaves.
Pass the buggies if you please.

Krystal Roche
Grade 1



EarthDay 1990—The Next Generation

the tree and me

GLOBAL RELEAF F. R. Newman Arboretum Cornell Plantations

Sunday, April 22, 1 to 4 pm

Rain or Shine, Free—Information: 255-3020
Dress to Play in the Woods and Bring a Pencil



Top right: Woodsy Owl from the U. S. Forest Service will visit Plantations to help you give a hoot and stop polluting.

Above left: Children from the Kings and Queens Campfire Troop will become animals that live in trees for the day, complete with masks.

Left: Gardner Nancy Adams with Plantations volunteers potting seedling trees for Global Releaf at "the tree and me."

Above center: The Cornell Dairy's Joe Davidson with a seedling potted up in a very special milk carton, one of the first to come out of the dairy's new equipment, made to order for the young trees.



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Earthday Weekend

Saturday at Ithaca High School
11 am to 4 pm
Rain location in the cafeteria

Tour of Local Alternative Energy Homes
Edible Plant Walk
Inner Workings of a Land Fill
"4th World" From Dinosaur-Theatre
Creation of Garbage Sculpture

Environmental Exhibits Music
Ecology and Bike Safety Workshops

Sunday on the Cornell Arts Quad
12 noon to 6 pm

The Lorax
Dancers for Universal Peace
Children Sing for the Earth
Interpretive Nature Walks
New Games

Exhibits on Recycling, Ecology, Ethics,
Pollution, and Alternatives

Music Environmental Workshops

Both Days—Craft Fair of Local Artists
and Food Vendors

Spring in Miniature

Spring is a provocative time for devotees of bonsai, the ancient Japanese art of growing diminutive trees in containers. As the sun warms the air and the days grow longer, the tiny trees present the exhilarating advance of spring in miniature. They render the season tangible. Buds break on the bare twigs of the broad-leaved trees, and the delicate, wrinkled, shiny leaves begin to unfurl. Pines and junipers push out fresh new growth. Flower buds form on cherry and wisteria, forsythia and quince. For the student of bonsai, it's the time for assessing the effects of winter, for pruning and repotting, for changing your mind about a tree's appearance.

The word "bonsai" (bone-SIGH) means simply "a tree in a tray or dish." A bonsai is not a specific kind of tree: they can be created from innumerable species. What makes a tree a bonsai is the way it is grown. The ideal is to keep the tree small, lovely, and healthy, to take what nature has produced and bring out its essential character. Most successful bonsai have good strong roots gripping the soil, a thick, naturally tapered trunk, and beautiful proportions. Bonsai are usually grown in attractive shallow pots chosen to complement the tree's form and the color of leaves and flowers. In our area, most bonsai need protection during winter but spend the other seasons outside.

The techniques used in developing bonsai are essentially very simple. They combine elements of art and horticulture. First, you regularly prune the branches and roots to shape the tree and control its growth. To achieve an aesthetically pleasing structure, branches may be wired into shape during a training period. Knowing how to recognize a tree with potential, where and when to prune it, and which way to bend the branches takes considerable skill.

As you tend a tree through the seasons, coming to know each leaf and twig, your fondness for it grows. You may come to feel for it the affection you felt toward a favorite tree you played on through-

out your childhood—only this one grows in a saucer-sized pot you can easily cradle in one hand.

D. R. Otis

The Finger Lakes Bonsai Society will be holding their Spring exhibition at Cornell Plantations' Lewis Headquarters Building on Saturday, April 28, from 11 am to 3 pm. Members will be sharing their knowledge with the public, demonstrating how to create bonsai from ordinary nursery stock and tropical plants. They will also demonstrate the production of shohin, bonsai under six inches in height. Plants, soil, and pots will be on sale. Admission is \$2 for adults, \$1 for children (under 12 years, free).

Below: The art of bonsai as demonstrated by a member of the Finger Lakes Bonsai Society.



News Briefs

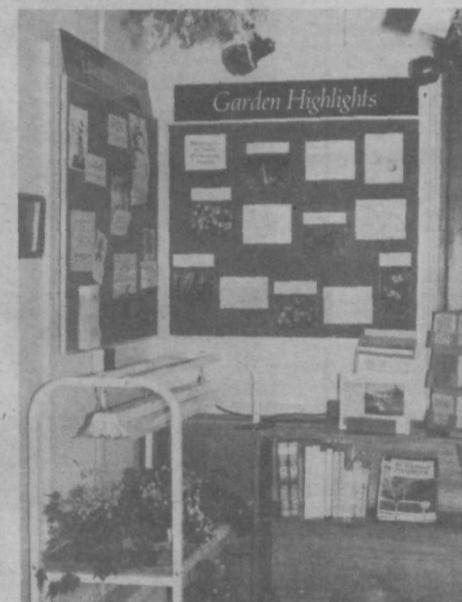
Class of 1940 Concert Series:

On Sunday, May 6, a string quartet will perform selected classical pieces on the shore of Beebe Lake in the area below Helen Newman Hall. This concert is free and open to the public and is funded through an endowment presented to Plantations by the Cornell Class of 1940. This will be the first in an annual concert series.

Summer Theme Walks begin in July:

One-hour walks begin at the Lewis Headquarters Building in front of the Garden Gift Shop. Walks start at 10:00 am on Saturdays and 1:00 pm on Sundays. No registration required. The fee for each walk is \$2 for adults, \$1 for children. Cornell Plantations members are free. For group tours, contact Plantations' Education Coordinator Raylene Gardner at 255-2407.

July 7	-Garden Tour
July 8	-Nature Discovery
Jul 14	-Groundcovers
July 15	-Evolution of Plants
July 21	-Plant Detective Walk
July 22	-Garden tour
July 28	-Perennials
July 29	-Wildlife Food Walk
August 4	-Geology of Beebe Lake
August 5	-Conifer walk
August 11	-Ornamental Grasses
August 12	-Herbs
August 18	-Garden Tour
August 19	-Summer Wildflowers
August 25	-International Crops
August 26	-Mushrooms



Noted Botanical Artist to Visit Cornell

Margaret Stones, noted botanical artist, will visit Cornell University this weekend. Determined to become an artist and botanist, she worked along side scientists and examined the minute details of plants by means of dissection and the microscope. At work in the above photo, Stones describes herself as a "wild card," since she never followed the traditional college studies. However, she has recently been awarded two honorary degrees: Doctor of Science from Louisiana State University and Doctor of Science from University of Melbourne, Australia.

This famous Australian-born artist relocated early on in her career to England and Kew Gardens. In England she worked independently for years as the principle contributing artist to Curtis's Botanical Magazine, produced at the Royal Botanical gardens at Kew, providing over 400 watercolor drawings and just about as many text drawings in pen and ink. In 1967 she was commissioned to draw 250 watercolors as illustrations for Winifred Curtis's monumental book, *The Endemic Flora of Tasmania*. And most recently, in 1978, Louisiana State University at Baton Rouge commissioned Margaret to draw 200 watercolors of the native

flora of Louisiana. The project lasted for over 10 years and the University has a collection of well over 200 watercolors. She has forth-coming exhibits of this work at the Fitzwilliam Museum at Cambridge, the Ashmolean Museum at Oxford, and the Royal Botanic Gardens at Edinburgh. To see a sampling of her work, visit Mann Library lobby from April 9 through April 20. To meet the artist herself, join us April 20 at 4 pm in first floor lobby of Mann Library.

Raylene Gardner

THE BOTANICAL ART OF MARGARET STONES

EXHIBITION of BOTANICAL WATERCOLORS

Mann Library Lobby, Cornell University

April 9, 1990 through April 20, 1990

Reception April 20 at 4 p.m.

Sponsored by L. H. Bailey Hortorium,
Department of Floriculture and Ornamental Horticulture,
Council of the Creative and
Performing Arts, and Cornell Plantations

Plants for Sale

The Garden Gift Shop has almost everything that you need to make a garden. A new plant stand, just inside the entrance, displays a selection of begonias, jasmines, and orchids. The green nursery cart will soon be parked each morning in front of the entrance, offering a choice of herbs and a changing selection of perennials, divisions from the nursery.

Inside, there is a new line of garden tools from Britain, including watering cans with brass sprinkler heads. The shop carries the widest range of gardening, design, and natural history books in the area. There are pots big enough for an herb garden and aprons, gloves, and knee pads to make gardening more pleasant. "The only things that we don't have," says manager Rod Beers, "are soil and mulch."

The Garden Gift Shop, located in the Lewis Headquarters Building at Plantations, has already begun celebrating spring by opening on weekends. Saturday hours are 10 am to 5 pm. The shop is open Sundays from 11 am to 5 pm. Beginning in June, shop hours will extend to 4:30 on weekdays.

Another new addition is the display corner. Visitors can find out what's blooming from the Garden Highlights board or select from current course offerings described in the Education Update display. The garden displays will be changed monthly by the horticulturists who write and design them. In mid-summer, featured plants may change more often. At the end of your visit, check this board to identify that unusual plant that you have never seen before.

Fifty Years of Commitment

In the beginning there was a committee.

In the beginning there was a committee. A committee of five, four faculty members and a landscape architect, was appointed to identify and define the needs of the university for an arboretum. This Arboretum Committee reported to the board of trustees in 1925. Planning to design and build the Cornell Arboretum began in earnest in 1935 when it became clear that the Civilian Conservation Corps would be coming to Ithaca. For five years all or part of this expanded and now "temporary" committee met as often as once a week to oversee this monumental effort. If it weren't for the energy and enthusiasm of this dedicated group, there would not be a Cornell Plantations as we know it.

For the past fifty years, Plantations has benefited from the advice and support of university faculty and administrators. Two committees, set up for administration and policy, ran Plantations from 1940 until the mid-1950's when a part-time director was appointed. The list of members reads like a Who's Who of natural history at Cornell, highlighted by names like Liberty Hyde Bailey and L. H. McDaniels. It was Bailey who coined the name Cornell Plantations. Today's roster will undoubtedly inspire the same esteem in years to come.

Also in the 1950's, the two committees merged into the Plantations Committee. In addition to making day to day and planning decisions for the arboretum, these members frequently submitted articles and illustrations to the Cornell Plantations quarterly magazine. They encouraged their students and fellow faculty members to share

interesting stories with the Plantations community, helping the magazine to represent the many facets

"The job of the advisory board is to advise and to make recommendations to the director..."

of Plantations' role in teaching and research.

Beginning with the appointment of Dr. Richard M. Lewis in 1962, the administration of Plantations was placed in the hands of a director. The Plantations Committee was renamed the Plantations Advisory Board in 1985. "The job of the advisory board is to advise and to make recommendations to the director," says the current chair, Dr. Kenneth Wing, Associate Dean of the College of Agriculture and Life Sciences.

Wing, whose job requires him to serve on many boards and committees, looks forward to meetings at Plantations. He finds them refreshing, both because of the vitality of the organization, and because of the enthusiasm and dedication of the board and committee members.

The Plantations Advisory Board has recently expanded to a roster of eighteen members, in 3 "classes" of 6 each, appointed by the president of Cornell University for three-year terms. With the addition of a community/alumni representative to each class, the board truly reflects a cross section of the Cornell community. Two of the new members are women. Dean Wing says that "It will be one of [his] priorities as chair to bring the representation

of women and minorities on the board up to an appropriate level."

Dean Wing describes himself and all board members as "wearing two hats." They inevitably bring with them the interests of their particular department or group, but, when they arrive at a meeting, they must sometimes put those interests aside in order to make a decision on behalf of Plantations.

"...the advisory board is an important link between Plantations and the audience it serves."

According to the new director of Plantations, Dr. James Affolter, "the advisory board is an important link between Plantations and the audience it serves. Our future effort to integrate Plantations' programs even more closely with the needs of the campus and the community and to enhance its role as an educational resource will be greatly facilitated by the participation of the board members and the expertise they bring to the task.

Problems may arise, for example when setting policy to balance the scenic, recreational, and teaching uses of Plantations' lands. Fallen trees along a forest trail may seem unsightly to hikers. However their removal would change the natural cycles taking place in these woods, perhaps degrading the habitat and changing its value as a teaching resource.

Much of the work done by today's Advisory Board is accomplished by its committees.

Much of the work done by today's Advisory Board is accomplished by its committees. Recently, the Natural Areas Committee has been the most active. Its members serve as advocates and advisors to protect and preserve the natural areas under Plantations management. These natural habitats are highly valued resources in the teaching and research mission of the University. According to committee chair Peter Marks, "now is the time for those of us who use these areas to come forward and let it be known which are important for teaching and research. Unfortunately, with plans for future development on and around campus, some of the areas that we have taken for granted in the past may disappear or be altered in such a way that their value as natural areas is reduced."

Plantations Natural Areas Coordinator, Nancy Ostman, works closely with the Committee, calling on individual members, as well as other Advisory Board members, for their expertise in some aspect of natural history. Recently Ostman and Marks, with the advice of the Natural Areas Committee, completed a report evaluating university lands as natural areas. According to Ostman, "The committee saw a need for a comprehensive description of the natural habitats near campus presented in a readily accessible format. We hope that a university-wide recognition of the importance of these areas will make their protection an integral part of future campus planning."

This role of Board and Committee members, supporting Plantations staff by providing scientific and professional expertise, is an important one. Dean Wing sees this interaction as having benefits for the individuals involved, and for the university as a whole. This is one way "to establish the mutual respect and understanding that is so important to communication within the university."

Margaret Corbit



Last fall Plantations Advisory Board members and staff participated in a program at Ringwood Preserve that focused on the teaching value of such areas. Natural Areas Committee Chair Peter Marks reconstructed the research experience of one of his students as a mystery of forest history with ecological clues.

Cornell Plantations Advisory Board

Kenneth E. Wing, associate dean, chair
Marvin I. Adleman, landscape architecture
J. Robert Cooke, biological engineering
Edward A. Cope, plant systematics
Madelyn Dallas, alumni and community
Maralyn Fleming, alumni and community
George L. Good, horticulture
George W. Hudler, plant pathology
Daniel E. Karig, geology
John W. Kelley, resource development
Peter L. Marks, ecology and systematics
Vincent Mulcahy, architecture
John F. Murphy, alumni and community
Karl J. Niklas, plant biology
Dennis Osika, grounds management
Donald A. Rakow, horticulture
Charles R. Smith, ornithology
John L. Ullberg, landscape architecture

Ex Officio

James M. Affolter, director
Carolyn Osborn, business manager

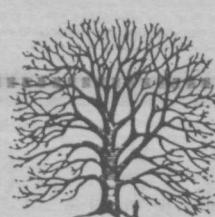
Consultants

Richard M. Lewis, *Elizabeth Newman Wilds* director emeritus
Harlan P. Banks
Richard B. Fischer
Carl F. Gortzig
William J. Hamilton, Jr.
John M. Kingsbury
Charles E. Palm
Kermit C. Parsons
W. Barlow Ware
James W. Yarnell



F.R. Newman Arboretum

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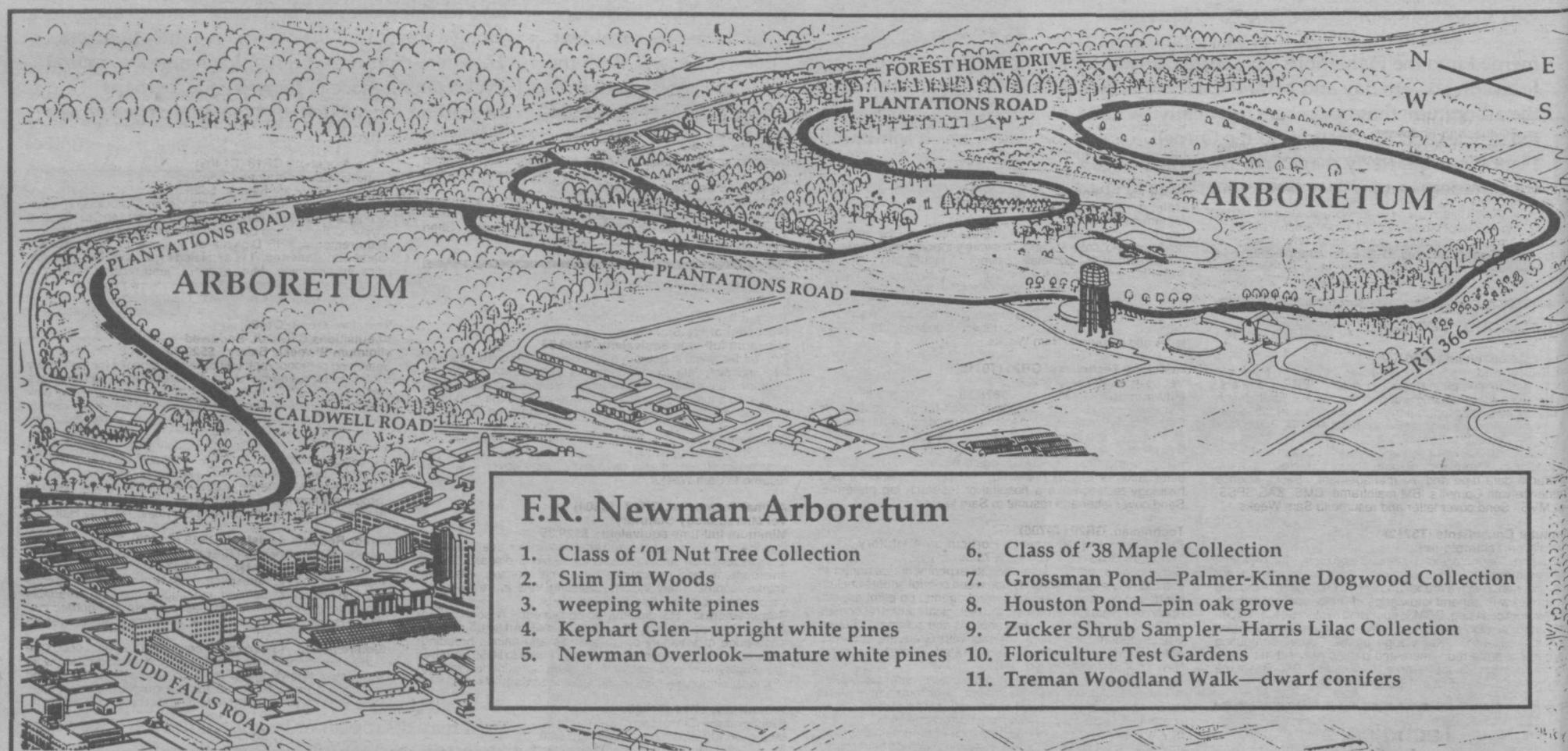
Native Diversity in a Naturalized Setting

An arboretum is a plot of land where trees and shrubs are grown for study and display. The artistry with which F. R. Newman Arboretum at Plantations has been designed seems to almost belie this mission to the general visitor. And yet that same visitor is treated to an ideal vision of trees, shrubs, and landscape. The collection policies for different areas in the arboretum have been meshed with the design and the result is a park-like setting. Yet, even though it is very popular with joggers, walkers, and frisbee chasers, this land is much more than a park.

When you view a specimen in an arboretum, you benefit from the planning and care that has gone into its siting and cultivation. In some cases, individuals are set far apart so that they may grow to display their ideal form without crowding. This is true for the Class of '01 Nut Tree Collection that visitors pass as they drive or walk along Plantations Road after entering the arboretum from Caldwell Road. These trees (mostly walnuts, hickories, and Chinese chestnuts) form a stately line along the road. Across the meadow from this collection,



The Palmer-Kinne Dogwood Collection, on the shore of Grossman Pond, provides inspiration for a Cornell art student. The collection displays the great variation of form, structure, and texture within the dogwood genus.



F.R. Newman Arboretum

- | | |
|---------------------------------------|--|
| 1. Class of '01 Nut Tree Collection | 6. Class of '38 Maple Collection |
| 2. Slim Jim Woods | 7. Grossman Pond—Palmer-Kinne Dogwood Collection |
| 3. weeping white pines | 8. Houston Pond—pin oak grove |
| 4. Kephart Glen—upright white pines | 9. Zucker Shrub Sampler—Harris Lilac Collection |
| 5. Newman Overlook—mature white pines | 10. Floriculture Test Gardens |
| | 11. Treman Woodland Walk—dwarf conifers |

spring-flowering trees and shrubs have been clustered on the edge of Slim Jim Woods. These will be allowed to blend into and complement the border of the natural forest.

Perhaps the most important aspect of F. R. Newman arboretum is the collections policy for the area enclosed by the loop road around the ponds. This area has been set aside for trees and shrubs native to New York State. The collection includes unusual cultivars (cultivated varieties) of these familiar trees.

Native white pine, for example, is used in a number of ways within the loop. Weeping specimens greet you at the top of Newman Meadow like the three muses, beckoning you to take the high road around the arboretum's great bowl. Later on the tour you can see upright, or fastigate, white pines standing as sentinels above Kephart Glen. Descending from Newman Overlook, you pass through a stand of mature white pines. These trees serve as an overstory for a planting of unusual hemlocks, native rhododendrons, and flowering dogwoods.

"Flowering dogwoods have traditionally been planted throughout Plantations," says landscape designer Rick Bogusch. "They are one of our most beautiful native trees." In addition to the native flowering dogwood, *Cornus florida*, Plantations' Palmer-Kinne Dogwood Collection displays trees

and shrubs selected for their interesting flowers, leaf color, bark color and texture, and/or fruit. The collection extends outside the loop boundary along the northern shoreline of Grossman Pond, the smaller of the two arboretum ponds. Here you will find several selections of the Japanese flowering dogwood, *Cornus kousa*. This tree is very hardy, has beautiful white flowers similar to our native in June, and large red fruit. "Plantations is experimenting with a pink-flowering form," says Bogusch, to see if it will prove hardy in this area.

Throughout the arboretum, collections blend and merge with each other so that they will resemble the natural local landscape when the plantings mature. The Class of '38 Maple Collection sweeps down the slope from Newman Overlook to Grossman Pond, interplanted with dogwoods from one collection and hemlock and birch from another. Striped maple, or moosewood, are growing under the white pines. Already, the vibrant tones of these maples are the focus of this hillside of fall color.

In another example of naturalistic landscape design, the pin oak grove on the shore of Houston Pond shelters a grove of understory trees including sassafras, paw paw, and hop hornbeam. Tupelo and sweet gum trees, which are rare in this area and have striking fall color, have been added to the canopy.

Visitors are often surprised to see the bayberry hedge at the western parking area for the ponds. Best

known for the scent of its grey fruit, bayberry normally grows along the coastline from Newfoundland to Maryland. But it is very adaptable, and succeeds well here in both gravelly soils and heavy clays.

The core of Plantations shrub collections lies at the base of the slope below the ponds area. It can be reached by turning right past the ponds and parking at the first lot. Across the road is the entrance to the Zucker Shrub Sampler which curves to the east along the base of the slope around the Test Gardens of the Department of Floriculture and Ornamental Horticulture. The Shrub Sampler features viburnums and a vast array of unusual flowering shrubs. Continuing through the sampler, visitors find the Harris Lilac Collection, displaying species and varieties of lilacs complemented by other ornamental shrubs that bloom during the lilac season.

A display of hedges, a collection of dwarf conifers, and the Treman Woodland Walk are found to the west of the Zucker Shrub Sampler parking area. Treman Woodland Walk is vibrant in late spring when its stream banks are carpeted with Japanese primroses. Before leaving the arboretum, stop to look at the fine specimens of paperbark maples and Sargent's weeping hemlock also located here. You will best appreciate the collections of F. R. Newman Arboretum by planning to return regularly to see the effect that the changes in season have upon the landscape and the individual trees and shrubs.