

# CORNELL Chronicle

Volume 24 Number 13 November 19, 1992

At the library

5

"The basic problem in the Library is how to maintain the traditional uses of the library and find resources for the new ones," says Alain Seznec, the Carl A. Kroch University Librarian.

Cornell history

9

What would a conversation between Andrew D. White and Leo Tolstoy have to do with Cornell rules concerning endowed professorships? The answer, by association, is a great deal.

## Guide dogs in training

### Learning to sit and stay before they go

By Roger Segelken

The most frequently asked question of volunteers who raise puppies to be guide dogs for the blind is: How can you bear to part with them?

Nancy Caveney, one of more than a dozen Cornellians who give their time, energy and love to raising a puppy for a year before its formal guide dog training begins, knows the answer now.

The technician in the College of Veterinary Medicine said she had considered volunteering as a puppy raiser for several years. She knew about the need for pre-training and socialization of prospective guide dogs in the kind of homes and communities where the highly trained animals will eventually serve as the eyes of blind men and women.

Then, in 1991, with one leg in a cast, Caveney said she learned first hand how even temporary reduced mobility can affect one's life. Reading a newspaper article about puppy raising prompted her to apply to Guiding Eyes for The Blind. The non-profit guide dog school in Yorktown, N.Y., breeds and formally trains dogs, then matches them with blind persons for a nominal fee. From that point on, the dog and owner function as one. "I was afraid that being a single person with a full-time job would disqualify me," Caveney said, "but it didn't."

Uriah was an 8-week-old black Labrador retriever when he arrived in Caveney's Ellis Hollow home. His blue coat read: "Puppy in Pre-training."

"As a first-time puppy raiser, I wasn't sure what to expect," Caveney recalled. "I tried to remind myself that Uriah was not my pet, that he was destined for greater things, and it was my responsibility to help him achieve his full potential."

Puppy raisers receive instruction in feeding, grooming and house-training, as well as support from a Guiding Eyes area coordinator. At monthly meetings, fellow puppy raisers share experiences and problems, and offer encouragement.

The young puppies are taught proper house manners and

*Continued on page 11*



*Peter Morenus/University Photography*

Prospective guide dogs (from left) Brenda, Lindsey and Omar are pre-trained by puppy-raisers (from left) Kathy Cleveland, technician in the Veterinary Diagnostic Laboratory; Lia Belanger, student in the College of Veterinary Medicine; and sisters Rhea and Becky Cleveland.

## Expert: NAFTA will halt U.S. plant construction

By William Holder

Approval of the North American Free Trade Agreement (NAFTA) as it now stands would sharply curtail construction of major new manufacturing facilities in the United States, according to a Cornell resource economist who testified Wednesday before the U.S. International Trade Commission.

Duane Chapman, professor of resource economics, said in his prepared remarks that his interviews with Mexican authorities and his personal observation of manufacturing facilities in Mexico have convinced him that the Mexican government will not willingly impose any pollution control measures that would hamper export industries.

As a result, "It's pretty clear that the combination of wage differentials and the absence of pollution control costs means that any investor in manufacturing is going to look to Mexico, rather than the United States," he said in an interview. "If this treaty is approved, manufacturing plants that have significant pollution control costs won't be built in this country."

Chapman has testified many times at U.S. Senate and House committee hearings on energy-related matters, and he has

served on numerous federal and state energy panels.

Emphasizing the harm done to U.S. interests by unrestrained industrial emissions in Mexico, he cited the copper trade between Mexico and Japan. Plants in Mexico produce copper without moderating emissions of sulfur-containing compounds into the atmosphere. Japan, in turn, uses the copper in electronics and autos, which are shipped to the United States.

### Copper and acid rain

"Japan gets cheaper copper, and we get acid rain in the Southwest," he said.

His research suggests that environmental costs in the United States account for up to 25 percent of the total cost of copper and 15 percent of the cost of automobiles.

"Don't approve the treaty until there is some mechanism for dealing with pollution," he added, "because we are giving a lot away and not getting anything back."

Chapman strongly supports creation of a bilateral commission that would monitor Mexican environmental practices and ensure that they conform to an agreed upon regional standard. The NAFTA accord in its current form guarantees industrial producers in Mexico that they won't face pollution control costs, he said.

## Sexual harassment reports increased by 55% last year

By Linda Grace-Kobas

Following national trends, Cornell saw an increase in reported cases of sexual harassment over the past year that university officials ascribe to increased awareness due to the Anita Hill-Clarence Thomas hearings nationally and intensified campus efforts to educate and advise people here about sexual harassment.

Some new trends also emerged, according to a report issued by the Office of Equal Opportunity (OEO): increases in reporting from undergraduates and in anonymous sexual harassment; two cases involving violence and battering beyond anything reported in previous years; new avenues of high-tech harassment being utilized; parents of students becoming more active in initiating reports; and cultural differences increasing as a contributing factor.

On the plus side, more women are empowering themselves by seeking advice on how to deal with sexual harassment themselves, according to Carolyn McPherson, coordinator of women's services in the Office of Equal Opportunity who compiled the report.

### 48 incidents

A total of 48 incidents were reported to OEO between July 1, 1991, and June 30, 1992, an increase of 17 cases, or almost 55 percent, from the preceding year, McPherson noted.

This year, she added, all the reports were

from women; typically, two or three reports a year are received from men. Individual men were named as perpetrators in 40 reports. A man and woman were accused in another case; a group of men in two cases; in five cases, the harassers could not be identified.

Of the reports, 15 were about staff as perpetrators. Reports also named 11 undergraduates, six graduate students, five faculty or academic staff, three non-Cornellians, one faculty and staff, two groups of undergraduates, and in five the harassers could not be identified.

### Serious behavior

"While the number of complaints about faculty and academic staff is the same as last year," McPherson added, "the types of behavior involved were more serious and far more disruptive to the students."

The main increase in reporting is from undergraduates, who made 29, or 60 percent, of this year's reports, McPherson said. Last year, undergraduates made seven reports. Staff members made 15 reports this year; two were made by graduate students, one by a professor and one by a group of staff.

There was also a doubling in the number of reports about behavior by undergraduates. This year, there were 11 such complaints, about 23 percent of the total; last year, there were five made about individual undergraduates, 16 percent of the total complaints.

*Continued on page 8*

## Energy award



Chris Hildreth/University Photography

New York State Energy Commissioner Francis J. Murray Jr. (left) presents an energy-saving award from the U.S. Department of Energy to William E. Wendt (center), director of Transportation Services, and Paul M. Griffen, associate vice president for facilities planning. The award is for the university's transit program that has reduced the number of staff and faculty vehicles coming to campus by more than 2,000 cars each day. Almost one-third of the university's employees are participating in the OmniRide, RideShare and related programs.

## BRIEFS

• **Employee Assembly:** The next meeting will be Dec. 2 at 12:15 p.m. in the Day Hall board room to review the inclement weather policy.

• **Faculty Fellows:** Proposals are being accepted for service projects. The Faculty Fellows program provides grants of up to \$2,000 each semester for a community service project involving faculty and undergraduate students. Additional grants of \$500 are available directly to a community service organization that participates in a project. The deadline for proposals is Dec. 10. For information, contact one of the following faculty members: Ruth Bonous (Human Ecology) at 255-2503; William Carlsen (Agriculture and Life Sciences) at 255-9257; Ann Hales (Hotel Administration) at 255-8220; Risa Lieberwitz (Industrial and Labor Relations) at 255-3289; David Lyons (Law) at 255-6475; or Stuart Stein (Architecture, Art and Planning) at 255-6852.

• **FCR meeting:** The next meeting is Wednesday, Dec. 9, at 4:30 p.m. in 110 Ives Hall.

• **Gift guidance:** Expert advice on birding gear – from binoculars and scopes to feeders and field guides – will be offered at the Labo-

ratory of Ornithology's "Holiday Extravaganza," Wednesday, Dec. 2, from 10 a.m. to 6:30 p.m. at the Crow's Nest Birding Shop. The annual event at the ornithology shop, at 159 Sapsucker Wood Road, features special prices on birding gear and holiday gifts, a free T-shirt with each new membership to the laboratory, free gift-wrapping and complimentary refreshments. For details, contact the Crow's Nest Birding Shop at 254-2400.

• **Tank removed:** As workers began permanently emptying a 2,000-gallon heating-oil tank at the Laboratory of Ornithology earlier this month, they noticed that the soil above the tank appeared to be stained with petroleum. Also, after oil and water were pumped from the tank, the liquids were leaking back into the tank from the surrounding soil. The tank was removed, and several holes were found on it. Approximately 40 to 50 yards of petroleum-contaminated soil also was removed and stockpiled and the excavation was backfilled with clean material. The state Department of Environmental Conservation was notified and has concurred with the actions taken.

• **Bloodmobile:** The Red Cross Bloodmobile

will be on campus Nov. 23 and 24 from 11 a.m. to 5 p.m. in the Hagen Room, Schurman Hall. Call the Red Cross at 273-1900 for an appointment, or walk in.

• **Safety shoes:** The Lehigh Safety Shoe Shoe-mobile will be at the Life Safety Building, 201 Palm Road, Nov. 20 from 7:30 a.m. to noon. Employees eligible to receive department reimbursement for safety shoes should use a local pick-up order form with the maximum amount allowed by the department and an authorized signature. Call 255-8200 for information.

• **Symposium:** A Chemistry Department MNR symposium will be held Wednesday, Dec. 2, at 1:30 p.m. in G10 Biotechnology Building. Speakers will be Gary Drobny, A.J. Shaka and Ad Bax.

• **Chimes concerts:** The exam week concert schedule will be in effect Dec. 10 through 18. Weekday concerts will begin at 8:45 and 11:45 a.m. and 6 p.m. The Saturday schedule will be 9:55 a.m. and 1:10 and 6 p.m. Not all concerts may be played due to chimesmasters' exam and travel schedules. Call 254-4636 or 255-5350 for daily concert times.

## NOTABLES

Cornell's Food Industry Management Program has elected 10 new Food Marketing Fellows for 1992-93. The fellowship program was designed and developed by Professor Edward McLaughlin to offer an in-depth exploration of the food industry to outstanding seniors by combining two semester seminar courses with special discussion sections with visiting food industry executives, field trips to food industry facilities and trade conventions and an international study tour during intersession break. The new fellows are Amy Bushey, Danny Hooker, Andrea Jeffers, James Leggiero, Kimberly Melchionda, Eric Peschke, Brad Schoenfeld, John Schultz, Ann Wang and Julie Wojcik.

The national popular culture magazine *Entertainment Weekly* recognized Cornell Cinema as one of the best university film programs in the United States, when it was named to the magazine's Honor Roll as one of the top eight college exhibition programs nationwide. "The renowned, ambitious film society at this Ithaca, N.Y., school shows two different, rare, foreign, art or commercial movies per day — usually in 16- or 35-mm format, with Dolby sound," the magazine wrote. Another honoree, Dartmouth, was compared with Cornell Cinema as "Another committed, ambitious film society at a school in the middle of nowhere."

Gary W. Fick, professor of soil, crop and atmospheric sciences, has been elected a Fellow of the Crop Science Society of America (CSSA) and was honored at the 1992 CSSA annual meeting in Minneapolis. Fick earned degrees from the University of Nebraska, Massey University (New Zealand) and the University of California, Davis. He has been a leader of multidisciplinary research in forages, helping to develop crop growth models for use in integrated pest management and the prediction of forage quality. Fick has served as an associate editor for both *Agronomy Journal* and *Journal of Production Agriculture*, and has received the American Forage and Grassland Council Merit Certificate.

Associate Professor of Music V. Kofi Agawu has won the Dent Medal, awarded annually in memory of Edward J. Dent by the Royal Musical Association of England in association with the International Musicological Society for outstanding contributions to musicology. In winning this honor, Agawu follows in the footsteps of Cornell Professors William Austin (1967) and Roger Parker (1991).

Michael Joseph Jr., executive director of the Rural Schools Program and former superintendent of the Marathon Central Schools, was presented the Distinguished Service Award from the New York State Council of School Superintendents at its annual meeting on Oct. 1. The award is the council's highest honor and is given annually to a recently retired superintendent in recognition of exemplary service to public education.

## CORNELL Chronicle

Henrik N. Dullea  
Vice President for University Relations  
Linda Grace-Kobas  
Director, Cornell News Service

Mark Eyerly, Editor  
Karen Walters, Editorial Assistant  
Joanne Hanavan, Circulation

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 actively to support 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, sexual orientation, 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 of Women's Services) at the Office of Equal Opportunity, Cornell University, 234 Day Hall, Ithaca, N.Y. 14853-2801 (telephone 607 255-3976).

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

## GRADUATE BULLETIN

**Thesis/Dissertation:** The thesis/dissertation submission deadline for a January 1993 degree is Jan 15. Students should see the Graduate School thesis adviser for approval of the format of their thesis/dissertation before submitting final copies.

**Registration** for the spring will be conducted from 8:30 a.m. to 4 p.m. Jan. 21 and 22 in the Sage Hall lounge.

**Fellowships:** Applications for 1993-94 foreign language and area studies fellowships will be available in the graduate field offices and the Graduate Fellowship Office. Application deadline is Jan. 29. Award includes nine-month stipend of \$8,000 plus full tuition for 1993-94 academic year; available to citizens or permanent residents of U.S.

**Javits Fellowship.** Available to U.S. citizens or permanent residents who are doctoral candidates in the arts, humanities or social sciences. Stipend up to \$10,000 plus \$6,000 for tuition; Cornell provides remainder of tuition. Deadline is early February.

## OBITUARY

Norma K. Regan, sculptor and Cornell benefactor, died Nov. 10 in West Hartford, Conn., at the age of 95.

A member of the original Cornell Club of New York City, Regan was a member of the University Council and its public relations committee and the Advisory Council in the College of Arts and Sciences. She was a long-time and active member of the Cornell Club of Greater Hartford. Among her many contributions to the university, she sponsored the production of films about the inauguration of President Frank H.T. Rhodes and about the Cornell Plantations, a 2,800-acre nature preserve on the campus.

She studied sculpture after World War II at Columbia, Cornell and the Hartford Art School. Her work was exhibited in group shows at the New Britain Museum of American Art, the New Haven Paint and Clay Club, the Silvermine Guild Center for the Arts in New Canaan, the Wadsworth Atheneum, the Yale Art Gallery and the Springfield Museum in Massachusetts.

## These flies are bad news for singing male crickets

By Roger Segelken

When some male crickets sing their mating song, more than female crickets tune in.

Biologists here and the University of Florida have found a new case of "evolutionary convergence" in which parasitoid flies developed a special ear for cricket music, enabling them to locate crickets from a distance and deposit fly larvae on their hosts.

Discovery by the airborne "talent scouts" is ultimately fatal for the chirping cricket, the biologists report in the Nov. 13 issue of the journal *Science*. After being deposited on the cricket by the female fly, larvae burrow in, feed, grow in size and emerge, leaving the cricket dead — all in 10 days' time.

"We already knew that many flies have specialized hearing organs for the acoustic signals of their own species," said Ronald R. Hoy, the Cornell professor of neurobiology and behavior who previously discovered the courtship song of a Hawaiian fruit fly. "Most flies and mosquitos produce low-frequency sounds — in the range of 100 to 500 Hertz — that are heard by others of their kind over short distances — a few millimeters or centimeters."

### High-frequency sound

Most flies cannot hear the higher-frequency sound (3 kilohertz or higher) used by a male cricket to attract potential mates, explained Hoy, whose co-workers are Daniel Robert, a Cornell postdoctoral fellow from Switzerland, and John Amoroso, a graduate student at the University of Florida in Gainesville. To hear other flies' signals, all a typical fly needs is a so-called Johnston's hearing organ, which is at the base of its feathery antennae, to sense nearby air movements.

**This is another example of convergent evolution, in which unrelated species evolve similar traits in response to similar problems.**

A cricket's hearing organ is very different — a combination of a tympanum (or drum-like membrane) on the forelegs, internal air sacs and sensory cells — allowing the cricket to detect minute changes in air pressure from distant sound sources. Similar tympanal ears occur in other acoustically-active insects, such as katydids, grasshoppers, moths, cicadas and mantises, the researchers noted in their report.

In order to find a suitable host to feed their offspring, the parasitoid flies had to evolve a tympanal ear for cricket song, which they did, and it is located below their "chin."

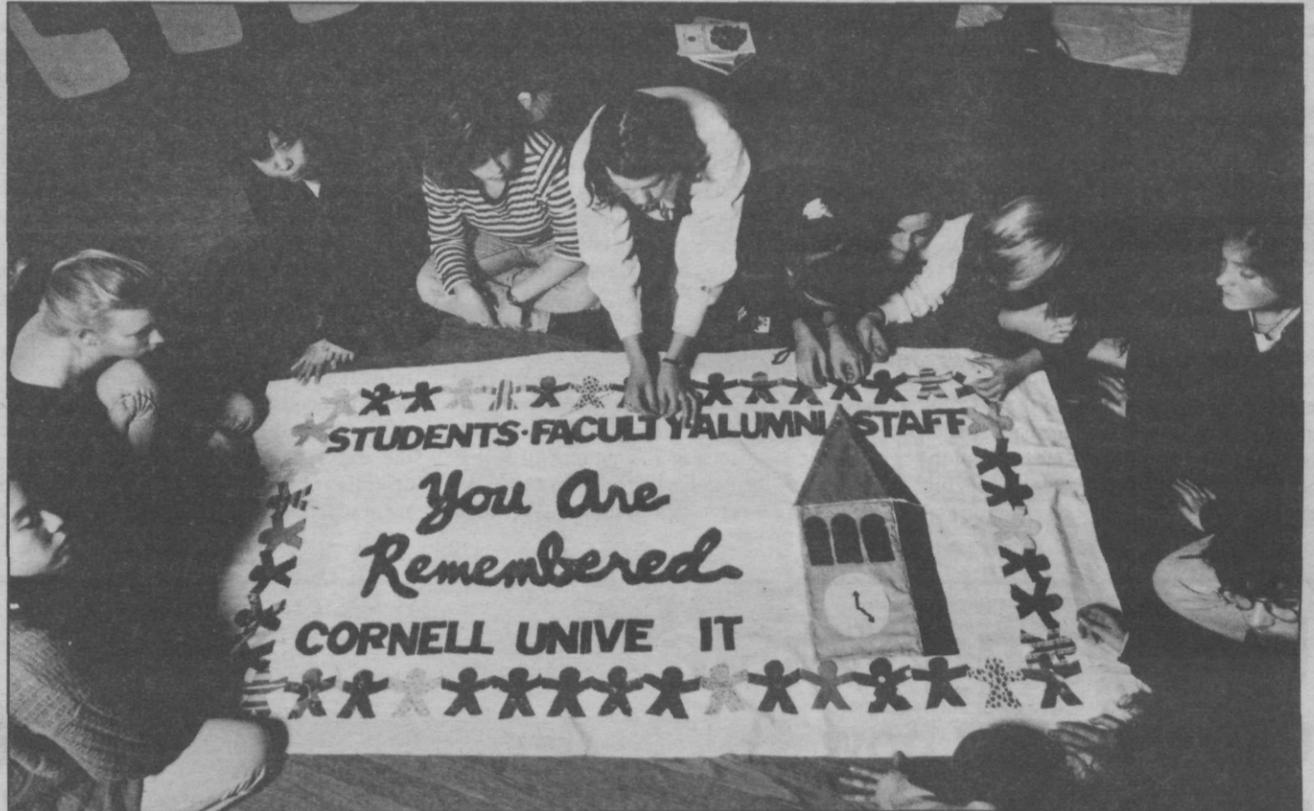
This is another example of convergent evolution, in which unrelated species evolve similar traits in response to similar problems, Hoy said. Bats, insects and birds obviously evolved separately — yet all achieved flight with wings. German scientists recently reported finding the tympanal ear in a fly similar to one studied by the Cornell-Florida team.

Hoy, Robert and Amoroso conducted the study with trilling field crickets (*Gryllus rubens*) and tachinid flies (*Ormia ochracea*), which are sometimes used in biological control of insect pests. The tachinid fly is called a "parasitoid" insect — in contrast to a "parasitic" insect — because it spends its adult life flying and feeding freely but requires an animal host in which to rear its larvae. The study was supported, in part, by the National Institutes of Health and the USDA Hatch Program.

Discovery by parasitoid flies is not always a total loss for the doomed cricket, the biologists observed. If the cricket's song also attracts a female of its species soon enough, it has a chance of mating and passing on its genes before it expires.

The researchers also found an element of "fatal attraction" in the host-parasite story: Besides depositing larvae on the body of the male cricket, the fly also leaves some on the ground nearby. If a female cricket responds to the male's mating calls, she too risks infestation and death — a kind of social disease of crickets.

## AIDS quilt



Charles Harrington/University Photography

A group of students works on a panel for the national AIDS quilt Saturday in Martha Van Rensselaer Hall as part of a nationwide "Into the Streets" community service effort by college students. Some 300 students performed several hours of public services in scores of Ithaca area agencies. A World AIDS Day Prayer Service will be held in Sage Chapel Dec. 4 at 4:30 p.m.

## Recalling when scientists had summers off

By Roger Segelken

An overflow crowd in Alumni Auditorium last Thursday night heard Nobel laureate James D. Watson deliver the first Ef Racker Lecture in Biology and Medicine. The 64-year-old director of Cold Spring Harbor Laboratory recalled a time, in the early 1950s, when levity sometimes permeated the serious business of science.

The lecture by Watson, who is credited (along with Rosalind Franklin, Maurice Wilkins and Francis Crick) for discovering the spiral staircase structure of the DNA molecule, honored Dr. Efraim Racker, the Albert Einstein Professor of Biochemistry and noted cancer researcher, who died last year. Before discussing the the subject of his lecture, "The RNA Tie Club," Watson showed slides of Racker, his peers, and the drawings Racker made during summers at Cold Spring Harbor.

### RNA Tie Club

The RNA Tie Club was the brainchild of George Gamow, a physicist who began writing to Watson at Cal Tech following the 1953 publication of the landmark paper on the struc-

ture of deoxyribonucleic acid. In scribbled letters filled with bizarre drawings, misspellings and muddled chemistry, Gamow told Watson his ideas about the structure of ribonucleic acid, the problem of greatest interest at that time.

Gamow's far-fetched number theory contributed nothing to solving the RNA puzzle (and probably owed more to the Scotch he drank while writing than to science, Watson said), but Watson played along. Gamow had a good reputation in the field of cosmology, and besides, Watson said, he enjoyed deciphering the silly correspondence and subsequently partying with the older scientist and others at summer sojourns.

### Distinctive tie tacks

When Gamow proposed a tie club with an invited membership of scientists limited to 20 — for the number of amino acids known to constitute protein at that time — Watson agreed. RNA Tie Club members would be identified by distinctive tie tacks, each bearing the abbreviation for his amino acid. Watson went so far as to commission a special tie from a Pasadena haberdashery. By the time the neck-

tie reached the design phase, the structure of RNA had been solved.

"That was a time when scientists still took summers off," Watson said. One who summertime at Cold Spring Harbor in the late 1940s and early '50s was the scientist-artist Efraim Racker, and he frequently asked co-workers to pose for sketches. Several of those framed drawings now decorate the Racker Reading Room at Cold Spring Harbor Laboratory, Watson said as he showed slides. Most of the portraits are remarkably accurate depictions except his, Watson said, adding that the bug-eyed Watson-by-Racker more closely resembles actor Jeff Goldblum.

A public sale of Racker's oil paintings helped finance the lectureship, according to Jeffrey W. Roberts, professor and chairman of biochemistry, molecular and cell biology. He thanked Racker's widow, Dr. Franziska Racker, who attended the first lecture, for donating the paintings.

Watson concluded his lecture with a picture of a vandalized road sign that depicted a running child. Someone had changed the sign to read: "Scientists at Play."

## Upcoming talks

### European Parliament official to lecture Friday on unity, crisis

By Albert E. Kaff

The future of unified but strife-torn Europe will be discussed by a representative of the European Parliament on Friday, Nov. 20, starting at 12:15 p.m. in Room 153 Uris Hall.

Geoffrey Harris, an official in the secretariat of the European Parliament, will speak on the question "Europe in Crisis?" He is responsible for relations between the European Parliament and national parliaments in Central and Eastern Europe.

Harris, who accompanied the president of the European Parliament to Cornell last year when he was senior political adviser to the president, is spending a week at the university as a Mellon Visiting Scholar in the European Studies Program.

Members of the European Parliament debate legislation proposed for the European Community, but they have no power to legislate.

Born in London, Harris, 42, received a degree in politics and modern history from Manchester University and studied European affairs at the College of Europe in Bruges, Belgium. Before becoming an official of the Socialist Group in the European Parliament in 1976, Harris worked in London as a parliamentary research assistant and later an official of the National Teachers' Union.

He is the author of *The Dark Side of Europe* (Edinburgh University Press 1990) that deals with the extreme right in Europe; *A Wider Europe* (Fabian Society 1976), a study of the accession of Spain and Portugal to the European Community; and co-author of a pamphlet, *A Socialist Policy for Europe* (Labour Movement in Europe 1985).

### Eleanor Roosevelt biographer will speak in series on women

By Lisa Bennett

Blanche Wiesen Cook, author of the new best-selling biography, *Eleanor Roosevelt: A Life*, will visit Cornell to talk about her subject on Thursday, Dec. 3, at 7:30 p.m. in Alumni Auditorium of Kennedy Hall.

Cook is a professor of history and women's studies at the City University of New York Graduate Center and of history at CUNY's John Jay College. Her biography of Roosevelt, the first of two volumes, was awarded the Los Angeles Book Prize.

This talk is the fifth and last in a series held at Cornell on "Notable American Women: Writing Feminist Biography." Other upcoming talks in the series are:

- Kathleen Babbit, a Ph.D. candidate in history at the State University of New York at Binghamton, will discuss Martha Van Rensselaer today, Nov. 19, at 4:30 p.m. in Hollis Cornell Auditorium of Goldwin Smith Hall.

- Winifred Wandersee, a professor of history at Hartwick College, will discuss Frances Perkins Nov. 30 at 4:30 p.m. in Room 120 of Ives Hall. Also, a panel of Cornellians who knew Perkins at Cornell will talk about their experience with her. They include Professors Emeriti of Industrial and Labor Relations Alice Cook and Maurice Neufeld, and *Ithaca Journal* columnist Bea MacLeod.

The series has aimed to both reveal the lives of remarkable women and to show what a uniquely feminist perspective can unearth by looking at issues of gender, sexuality and balancing family and careers, in addition to other traditional interests of biographers.

# Theory Center part of national supercomputing MetaCenter

In a joint statement, the directors of the National Science Foundation supercomputing centers – Cornell Theory Center, National Center for Supercomputing Applications at the University of Illinois, Pittsburgh Supercomputing Center and San Diego Supercomputer Center – announced Monday, Nov. 16, that they are forming the nucleus of a collaboration based on the concept of a national MetaCenter for computational science and engineering.

“Consolidating the centers’ diverse strengths and expertise while capitalizing on their differences will foster a computational science infrastructure that will provide the nation with a cost-effective path to leadership in the High Performance Computing and Communications Initiative,” said Cornell Theory Center Director Malvin H. Kalos. “Rapidly changing technologies are revolutionizing computation and require experimentation and

development much too large for a single center,” he added.

Already the centers are actively participating in projects with other federal agencies and industry, including upgrading network links among the centers, creating a national archival storage system and building the national file system. They plan joint research and development in almost every area of high performance computing and communications technology.

The centers are playing an increasingly vital role in testing new computer architectures to minimize the time it takes vendors to grow them into production computing platforms and to maximize opportunities for early scientific results in problems in academia and industry. Within the MetaCenter, many diverse platforms will be represented and knowledge about various architectures will be exchanged so the centers can recommend to the user community the most appropriate comput-

ing environment for algorithms and applications.

“Based on the concept of distributed heterogeneous computing, or metacomputing, the MetaCenter will give scientists and engineers the capability to move portions of their problems directly to appropriate computer architectures without regard for where the computers are located,” explained Michael Levine and Ralph Roskies, co-directors of the Pittsburgh Supercomputing Center.

The directors predicted that metacomputing will change the nature of the scientific process itself by enlarging the research base and by facilitating collaboration among researchers no matter where they are in the world. Through heterogeneous networking technology, interactive communication will be possible from the desktops of individuals and groups of scientists and engineers; the research environment will no longer be a single laboratory but

will invoke distributed intelligence and machinery, seamlessly networked together.

The cooperation will create an environment where not only academic users, but industrial scientists and engineers can evaluate a greater variety of systems. Of particular importance to industry will be the ability to assess the advantages and disadvantages of the combined high performance computing resources offered in the MetaCenter at a far lower risk and cost than a company would assume acquiring systems and building expertise on their own.

“Building such a national computational environment in these times of decreasing budgets and ‘belt-tightening’ is a responsible way to use our resources to help transform engineering and scientific methodologies to give American companies a technological edge in the global market,” stated San Diego Supercomputer Center Director Sid Karin.

## Reducing waste

### Cans, bottles now recycled on campus

By Roger Segelken

With the campus already diverting more paper and cardboard than ever before from landfill dumps, Cornell Recycles, the university’s resource-recovery program in academic buildings, offices and laboratories, is adding another category.

Glass beverage bottles and metal cans will now be collected from specially marked containers throughout the campus. Adding drink containers to the list of materials recycled on campus will bring the university into compliance with state and county recycling laws, according to Walt Smithers, solid waste manager in the Grounds Department.

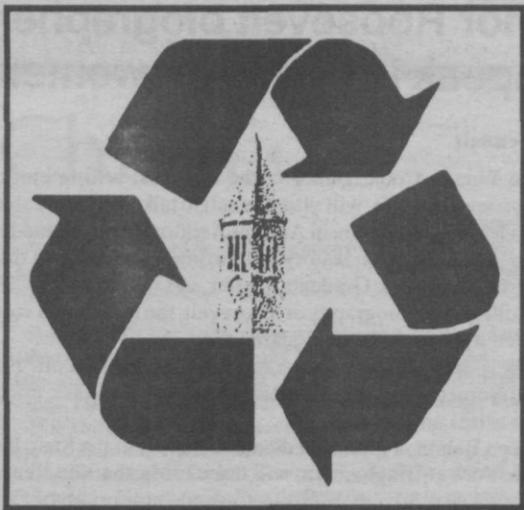
298 tons

Smithers credits the near total cooperation of students, faculty and staff for the recycling program’s success to date. In the first quarter of the 1992-93 fiscal year (July, August and September), Cornell Recycles collected 197 tons of mixed paper and 101 tons of corrugated cardboard. That compares to 156 tons of paper in the same period last year, when cardboard was not being recycled.

Part of the 1992 increase comes from including magazines and other glossy paper in the mix, Smithers noted. Mixed paper is made into products such as toilet tissue and paper towels, while corrugated cardboard is recycled into paper bags and more cardboard.

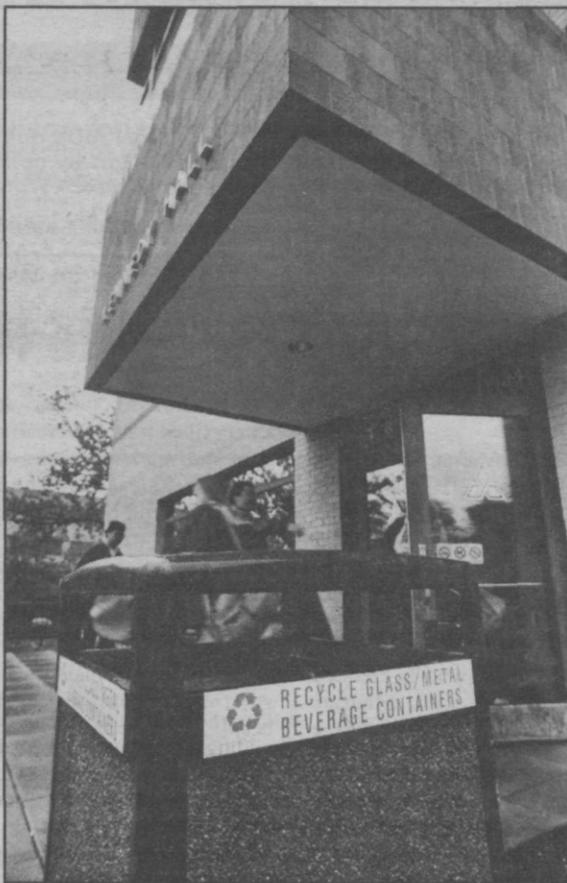
Glass bottles and cans already are being collected for recycling at Cornell Dining locations and at most department-run eateries, such as the Green Dragon and the Alfalfa Room. Vending machine companies are expected to install recycling containers near their machines in campus buildings. Cornell Recycles will install more than 40 outdoor recycling receptacles, beginning at sites with the most outdoor eating activity, such as the patio of Kennedy Hall’s Trillium cafeteria.

Smithers thinks that the beverage container recycling will be well received, because would-be recyclers have been leaving cans and bottles atop trash cans around campus. Every two dozen drink bottles that are recycled saves the



university 75 cents in trash-disposal costs, he figures.

“As is the case with paper and cardboard, the university isn’t making money on recycling,” Smithers said. “In fact, it costs \$30 a ton to have recyclables hauled away. But that is considerably less than the cost of trash disposal, which is currently \$145 a ton. It’s called cost avoidance. There are significant economic incentives to keeping these materials out of the waste stream.”



Peter Morenus/University Photography

This container outside Trillium is one of 40 designated for glass bottles and metal cans to be recycled.

## Please recycle these items

These items are currently accepted in the Cornell Recycles program:

- Office paper, including white and colored ledger paper, copier paper, junk mail, all envelopes, magazines, fax paper, glossy paper, computer printouts, catalogs, pamphlets, colored inserts and soft-covered books.

- Newspapers must be collected separately from office paper. Most buildings have collection at a central point, such as a mail room.

- Corrugated cardboard boxes must be broken down. Pizza boxes, cereal boxes, tissue boxes and waxed boxes are not acceptable.

- Glass bottles and metal cans are collected for recycling at Cornell Dining units with seating areas, at department-run food-service facilities, at some vending machine locations and at specially marked outdoor receptacles. Please remove bottle caps.

For more information on Cornell Recycles, call 255-9988 or 255-4215.

## National survey finds best ideas

By Roger Segelken

After surveying communities across the United States for waste-reduction programs that work, analysts at the Cornell Waste Management Institute have followed their own advice and recycled the best ideas into the *Waste Prevention Tool Kit for Municipalities*.

From a “household hazardous products” labeling program in Vermont and a waste-exchange broker in Michigan to model legislation from California’s Integrated Waste Management Act, the 170-page “tool kit” suggests dozens of ways to reduce the 4.2 pounds of trash generated, on average, each day by each person in the United States.

“Recycling is a partial answer to the solid-waste crisis, but it’s not enough. To stem the solid-waste crisis, we must work at the root of the problem and deal with garbage before it is generated,” said Ellen Z. Harrison, associate director of the Waste Management Institute.

The tool kit offers details of seven approaches to waste-reduction: government planning, financial incentives, bans and regulations, business and institutional planning, procurement, education, and publicity and public relations. It also suggests that local governments can lead by example, bringing their own wastes under control and making each intragovernmental agency accountable for its waste.

“We recommend that the first step in planning for waste reduction should be a waste-stream analysis, to identify the best targets for reduction in a particular community, and a survey of attitudes and behavior,” said Richard Angell, the researcher who led the national survey. “An attitudes survey can tell what value the community places on waste prevention and what barriers exist to effectively reducing wastes.”

### Who is responsible?

Included in the tool kit is a sample attitudes survey from Seattle with questions such as:

“Who do you feel is most responsible for reducing the amount of packaging that goes into your garbage can?” and “Have you bought or sold any used small appliances?”

To help municipalities compare local waste streams with the national average, the tool kit includes lists of materials discarded in the United States. Fliers about home composting and waste prevention in schools and offices are provided in the kit, which is funded, in part, by the U.S. Environmental Protection Agency.

Also in the tool kit are examples of model legislation, such as the Westchester County, N.Y., financial incentives program, which discounts costs of trash disposal to municipalities with approved compost facilities, and Tompkins County’s “pay-per-bag” trash tag resolution. Vermont’s 1991 Household Hazardous Product Shelf Labeling Program applies to such products as pool chemicals and butane lighters.

From New York City’s *Waste Reduction Handbook* the Cornell tool kit recycles ideas for the work place, including advice that caterers use reusable serving products rather than throw-aways, that leftover food be donated to charities, and that office workers spell-check documents on the computer screen before printing paper copies. In Michigan, one of at least eight states and one Canadian province with waste-exchange brokers, a program matches producers with markets for wastes such as solvents, batteries and cooking oils.

Some programs described in the tool kit save pounds, and others, tons. In Rochester, Minn., two businessmen reuse packaging in an effort that saves one of them, a handicrafts maker, \$661 a year in packing materials and the other, the owner of a photo studio, \$240 in disposal fees. New York City’s Harvest Program feeds the hungry with donated food; diverted from the Big Apple’s waste stream have been tons of extra pasta from the pre-race dinner at the New York City Marathon and Passover cookies that did not sell as expected.



# Ushering in the electronic era at the library

By Carole Stone

The lion's share of attention given to the Cornell Library this semester went to the new Carl A. Kroch Library for special collections, an underground vault for the Library's most precious books that embodies the most traditional functions of a library.

Meanwhile, in other parts of the Library, librarians and computer technicians have been inching gradually closer to the electronic library where the light-emitting-diode will replace paper and ink as the principal medium for words.

"The basic problem in the Library is how to maintain the traditional uses of the library and find resources for the new ones," 62-year-old Alain Seznec, the Carl A. Kroch University Librarian, said during a recent conversation in his office overlooking the Arts Quadrangle on the second floor of Olin Library.

As chief librarian, Seznec's job is to maintain the Library's 19 branches - 17 on the Ithaca campus plus the Agricultural Experiment Station at Geneva and the Medical College in Manhattan - while gradually ushering in the electronic era. One of the biggest challenges he faces comes from the number of books and journals published every year.

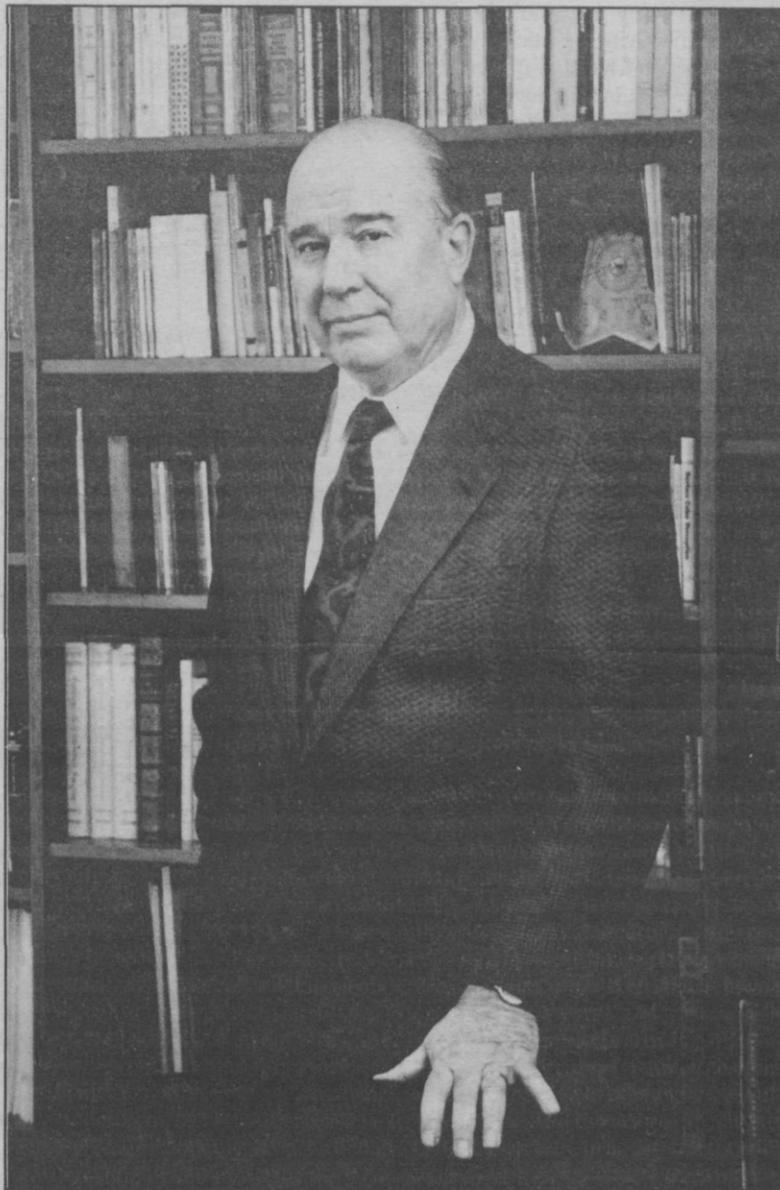
### Deciding what to buy

When Seznec first came to Cornell 34 years ago as an assistant professor of French, the Library had two people to select books; they bought whatever they wanted. Today, more than 40 people consider the more than 1,000 books published in the world each day; they reject more than 80 percent of them, even though the Library spends roughly \$7.8 million a year on books, journals, microforms, videotapes, CD-ROMs and some of its on-line databases.

There is little a library can do about costs except cancel subscriptions. After consulting with faculty, the Library has dropped 7,500 of its 65,000 journals in the last five years and expects to drop still more titles, Seznec said. In Seznec's estimation, this is not always a great loss. Many of the articles published in journals are routine and ephemeral anyway; they only get published for the sake of the author's tenure review, he said.

Seznec, a scholar of 17th-century French literature and the author of several articles and two books, both critical editions, said that "the principal journal in my field is the PMLA, the modern languages association journal, and if there were six articles of real value in that journal in a year - articles that I would want to keep and re-read - it would be a miracle."

In the meantime, the Library will continue to buy, check in, catalog, shelve and bind some 55,000 journals. And the Library will continue to expand to accommodate all the new materials. Currently, the Library's annex in the Cornell Orchards houses 10 percent of the total collection of 5 million books; by the turn of the century, an even larger off-campus storage facility will



Charles Harrington/University Photography

Alain Seznec, the Carl A. Kroch University Librarian.

hold close to 30 percent of the total, Seznec said.

By then, too, several other building projects will be completed or under way, according to John Hoffman, projects manager for the University Library. The following list is in order of priority.

- Flowers Library in the College of Veterinary Medicine is undergoing an addition and renovation to increase space by 50 percent.
- Catherwood Library in the School of Industrial and Labor Relations is in the final stages of design for addition and possible renovation.
- Mann Library, serving the colleges of Agriculture and Life Sciences and of Human Ecology, is in the initial design stage for an addition and renovation.
- Eastwick Library in the Johnson Graduate School of Management will be 25 percent larger than the one in Malott Hall, when the Johnson School moves into a new building.
- The Music Library in the College of Arts and Sciences is undergoing a feasibility study on an addition and renovation.

Fortunately, there is a long-term space solution: digital electronics. It will never replace the rare books recently given a place of honor in the Carl A. Kroch Library adjacent to Olin. But for most day-to-day publications, microbibliotelecommunication could solve many of the problems that now strain big libraries the world over.

Cornell Library is moving with deliberate speed in this direction, despite its late entry into the world of magnetic tape, optical disks and fiber optic cables.

In 1988, when the Library went "on-line" with most of its card catalog in a computer file accessible from terminals on campus, Cornell was at least five years behind most other research university libraries. It is now one of the leading experimenters among research universities in the area of biblioelectronics, according to Lynne Personius, assistant director of Scholarly Infor-

mation Systems at Cornell Information Technologies and director of library technologies for the Library system.

The Library has a number of standard electronic services: the Dow Jones News/Retrieval System at the Management Library, the LEXIS database for legal cases in the Law Library, MEDLINE journal literature, and the CINAHL nursing and allied health literature on compact disk in the Medical College. The plan is to offer additional databases that give citations - like the Reader's Guide to Periodical Literature and the Wilson Index.

In Mann Library, chemists have had computer access for two years to articles and graphics in chemistry journals. Using an optical storage medium known as a WORM (Write Once Read Many) and software developed at Bellcore, the research division of the regional phone companies, chemists can access 20 journals published by the American Chemical Society over the last 10 years. The new system for reading chemistry journals lets users search the entire database of 100,000 articles for key words, such as ethanol - the way the LEXIS system lets lawyers search for cases of drunken driving.

Material scientists are next: One of the leading publishers of science journals, the Dutch firm Elsevier, soon will begin making its texts available on the Internet, a worldwide computer network. Depending on copyright restrictions, American material scientists may even be able to print themselves paper copies.

### Technology experiments

Cornell Library is involved in a couple of experiments on the edge of new technology in the library science field - both under the aegis of book conservation.

The Library is, for example, putting the images of 1,500 birds painted by Louis Agassiz Fuyes on compact disk, together with bird sounds from the Laboratory of Ornithology, Fuyes' field notes and personal correspondence. This project, which

received funding from the Commission on Preservation and Access, a private, non-profit organization, and equipment from Eastman Kodak, aims to achieve a higher-quality product than is now available. (The technology

*'I have moments of panic, and the same goes for all the people who work for me. . . . I thought this would be an interesting job, but I never thought it would be as fascinating as it is in this moment in time.'*

that converts a photo or painting to a series of 1s and 0s and drastically reduces them for storage through a series of algorithms is not new. The Kodak-Cornell project, however, is experimenting with software that will let scholars search the disks for images.)

Cornell's other book scanning project has yielded the first digitally produced library of books in the country: 1,000 volumes created by scanning the texts of old books beyond salvage or repair and then printing them on fresh paper.

So, how is Seznec dealing with all this?

"I'll tell you a little story," he said.

"When I left the deanship of the College of Arts and Sciences [six years ago], I had planned to return to teaching. I didn't know a thing about libraries. But they asked me, and eventually I accepted.

"And I'll never forget, my mother wrote to me and she said, 'My dear boy, after eight years and all the turmoil as dean now you will have a nice quiet place.'

"Well, it is nothing like that!" Seznec said, chuckling.

"I would not want it otherwise, but it is not quiet. It is exciting. It is disconcerting. None of us can really keep on top of it. I am fortunate in having excellent colleagues who have a real vision of what to do in terms of solutions. But I have moments of panic, and the same goes for all the people who work for me," he said.

And then, as an afterthought, he added, "I thought this would be an interesting job, but I never thought it would be as fascinating as it is in this moment in time."

### Cornell University Library

## FACT FILE

- ✓ Total volumes - 5,468,870
- ✓ Other materials
  - Maps - 203,337
  - Motion pictures - 3,223
  - Filmstrips and slides - 30,814
  - Videotapes - 4,717
  - Microforms - 5,833,564
  - Serials - 59,889 titles
  - Newspapers - 548 titles
- ✓ Total employees - 350
  - 200 librarians
  - 150 part-time student employees
- ✓ Outstanding collections - Asian Collection, Icelandic Collection
- ✓ Annual circulation - 1,903,334
- ✓ Total budget - \$28,098,267

## Women who volunteer age most successfully

By Susan Lang

Women who participate in clubs, organizations or volunteer work are significantly more likely to enjoy greater psychological and physical well-being in older age and live longer than other women, according to a Cornell study.

Phyllis Moen, the Ferris Family Professor of Life Course Studies, believes that such women benefit by the enhanced social contact that multiple role involvements add to their lives and by the choice that they exert in fulfilling those roles.

"We found paid work, on the other hand, unrelated to either psychological or physical health in our studies," says Moen, possibly because many of the women in the Cornell study worked out of necessity, not choice, during the 1950s and 1960s.

Moen, director of the recently established Life Course Institute here, and collaborator Donna Dempster-McClain, a research associate in the College of Human Ecology, spearhead the Cornell Women's Roles and Well-Being Project, which has collected detailed life histories of 313 women, all of whom were wives and mothers in 1956 when they were first interviewed; a follow-up interview was conducted 30 years later in 1986.

### Participation is key

In their interviews, researchers asked about women's education, socioeconomic status,

health, number of children, types of role involvement (such as clubs or volunteer work), their feelings of self-esteem and their satisfaction with their lives. In many cases, the researchers controlled for factors such as education, health and socioeconomic status. While those with more education or higher economic status were more likely to participate in a greater number of activities, participation in clubs and volunteer work had the same beneficial effects for women in all education and economic groups. And, participation in activities was a stronger predictor of aging successfully than were education or economic status.

Among the findings:

- About one-third of the women who were actively engaged in only one or two roles (beyond marriage and motherhood) in 1956 had died by 1986, compared with 18 percent of the women involved in three or four roles and 16 percent of women engaged in five or six roles. The six roles identified were: clubs/organizations member, worker, churchgoer, active relative, active neighbor, close friend.

- Belonging to clubs or organizations emerged as an especially strong influence on health and longevity. For example, 52 percent of the women who did not belong to clubs or organizations in 1956 had experienced a major illness by 1986, compared with only 36 percent of women who had been active in their communities.

- Women who were active in 1956 showed significantly higher self-esteem 30 years later than did women who had not been active.

- Religious attendance was the strongest predictor of satisfaction with one's life in older age.

Although the number of roles women held in 1986 was very strongly linked to the number of roles they had 30 years earlier, the researchers found that the duration and timing

CORNELL  
Research

of club and organization membership or volunteer work was not significant in predicting health or well-being.

"We believe that it's not the number, timing or duration of roles but women's satisfaction with their role involvements, themselves and their lives that most influence their health," Moen points out.

Moen and McClain have published a series of papers on their research, including articles in the *American Sociological Review*, the *American Journal of Sociology*, *Gender & Society*, and *Sociological Forum*.

## Finding best strategy for water cleanup

By Larry Bernard

Petroleum-contaminated ground water could take decades to clean, as pumps in deep wells work to pull the oily water out of the ground.

Engineers would like to know the optimum pumping rates, which pumps should be working when, and where they should be placed.

Using supercomputers at the National Supercomputing Facility at the Theory Center, a Cornell civil engineer and mathematician has optimized the system to determine those factors, and has produced a supercomputer simulation to visualize the process.

Christine Shoemaker, professor of civil and environmental engineering, worked on the problem of optimization for five years, using an IBM 3090 supercomputer at the Theory Center. The visualization was done on RISC 6000s working in parallel.

"The traditional method of ground water decontamination is to pump and treat. That could take 60 years at a large site and cost hundreds of millions of dollars," Shoemaker said. "The question is, how do you do it the least expensive way, where do you place the wells, and what is the best pump rate over time?"

The problem is especially acute because after 10 years, the contamination shifts with the movement of ground water, and some wells no longer would be correctly positioned.

To calculate pumping rates and locations, Shoemaker devised optimal control algorithms that compute time-varying rates that minimize the cost of reducing contamination concentrations to levels considered pure. Traditional pump-and-treat methods are time-invariant, that is, all the pumps work at once.

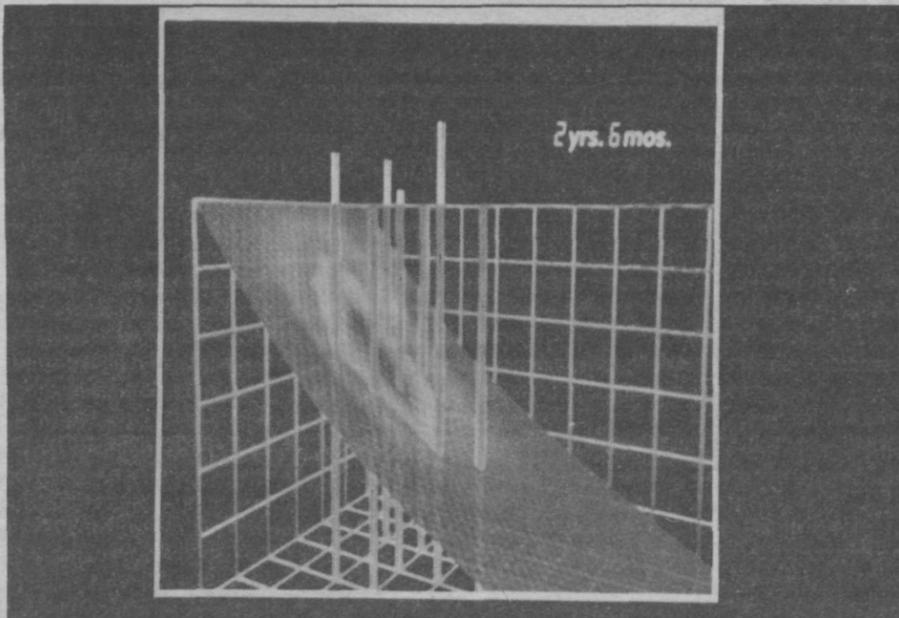


Photo courtesy of Christine Shoemaker

This still-frame from a simulation done at the Theory Center by Professor Christine Shoemaker shows how to optimize pumping rates for cleaning contaminated ground water. The diagonal plane represents the underground water table; the vertical bars are pumping wells. The contamination levels are depicted by color-graded circular areas, with the heaviest concentration in the darker area in the center. The simulation, based on optimization algorithms devised by Shoemaker, depicts how long it would take to clean the water table using a particular pumping strategy.

Her research also improved computation times for large-scale problems by developing numerical techniques for parallel processing, verifying the algorithm and incorporating constraints into the system. These improvements make the optimal control algorithm useful for a wide class of control problems, including those in environmental engineering, robotics and chemical reactors.

The animation is a representation of the effects of different policies on detoxification. Shoemaker shows the optimal policy, given changes in concentration and hydraulic pressure over 15 years. After three months, a large

amount of contamination remains, but after seven years, it is significantly reduced.

The simulation shows that in order to achieve cost-effective cleanup, the pumping rates at each well should vary over time. Shoemaker's calculations show that the optimal pumping policy would cost 50 percent less than standard pumping, which is time-invariant. "It's better to pump a lot early on," she said.

"This methodology could be used to fit a particular site, or to clean a particular aquifer," Shoemaker said. "Once you have the technique, you can apply it to a wide set of circumstances."

## Putting calves in hutches can eliminate lice

By Susan Lang

Cattle lice infest almost all herds in New York state to some extent, and dairy farmers have accepted the pest as a fact of farm life, according to a Cornell survey.

Research here, however, shows that the simple act of housing calves in individual hutches, combined with systematic pest monitoring, can almost eliminate lice on calves.

The findings are consistent with the recommendations by a growing number of professionals that calves be placed in hutches soon after birth to prevent the spread of disease.

Hutches are individual structures made of plywood, fiberglass or plastic. A fenced enclosure is usually constructed around the door of the hutch, allowing the animal to move freely inside and out while preventing direct

contact with animals in adjacent hutches.

Many farmers still house their animals inside barns in tie-stalls, box-stalls or small pens. Although this type of housing allows farmers to house more calves in a smaller space, the close contact among the animals allows the spread of infectious disease and external parasites such as lice.

Lice are not only a severe annoyance to animals, said Donald Rutz, a veterinary entomologist and professor of entomology in the College of Agriculture and Life Sciences, but they also contribute to anemia and diminished productivity, to preventing weight gain, to reducing feed conversion efficiency and to delaying the time to first lactation.

In grown cows, heavy infestations can adversely affect milk production, induce hair loss due to constant rubbing by the animal and

contribute to irritability that makes the animals difficult to work with.

Farm losses due to arthropods (insects and mites), of which lice are among the most economically important, can cut farm production anywhere from 5 to 25 percent, said Chris Geden, a research associate at Cornell. To the average dairy farmer with 70 animals, that could mean a loss of up to \$7,000 a year.

To assess the impact of an Integrated Pest Management (IPM) program for lice on dairy farms, Rutz and Geden monitored six farms for an entire year. In the peak infestation months of May and June, calves on the control farms were more than 10 times more likely to be infested than animals on the IPM farms. Few animals on the IPM farms needed insecticides for lice, while the other animals had to be treated several times.

## Farming can flourish in warmer world

By William Holder

Farmers in some U.S. locations can continue to make a profit even if the greenhouse effect warms the climate, although they may have to change crop mix and techniques, according to a Cornell study.

Harry Kaiser, an associate professor of agricultural economics, said his study differs from much of the previous work in this area in that his computer models track a gradual, decade-by-decade change in climate and give farmers the opportunity to respond with later-maturing crop varieties.

A number of previous studies have looked at a one-time doubling of greenhouse gas levels.

"Farm adaptability is crucial in determining the agronomic implications of climate change," he said.

"Models that don't allow for such adaptability show corn yields declining substantially after the year 2000. Our results show that corn yields can be as high as 90 to 95 percent of current levels if farmers can choose later-maturing, higher-yielding varieties."

Additionally, agricultural scientists may develop new varieties with enhanced yield, he pointed out. Kaiser presented his results Oct. 8 at a conference, Agricultural Dimensions of Global Climate Change, at Cornell.

His study of a Minnesota farm also will be published in the *American Journal of Agricultural Economics* (May 1993).

### Climate-change scenarios

He examined two climate-change scenarios, both of which have some likelihood, according to widely used models.

One is warmer by 2.2 degrees Celsius in the year 2070 and 10 percent wetter. A more

*'Relying on carbon dioxide from industrialization to fertilize the world's agriculture is analogous to relying on your car's exhaust to fertilize your home garden.'*

severe scenario increases temperature by 4.2 degrees and diminishes precipitation by 20 percent.

A warmer and wetter climate does not harm farmers in southern Minnesota, which has some of the country's best farmland. Corn yields decline by 10 percent from current levels, while yields of soybean and sorghum increase.

Even under the hotter and drier scenario, corn yields fall just slightly more to 86 percent. "Farmers are not worse off," Kaiser said. "They can maintain profitability by adjusting their crop mix."

The mild scenario also is kind to Nebraska farmers. Winter wheat yields could increase by as much as 25 percent, while corn declines slightly to 95 percent of current levels. Under the more severe scenario, yields of corn, soybeans and wheat drop substantially, but Kaiser pointed out that Nebraska farmers could offset those predicted effects by expanding their use of irrigation.

Kaiser, who plans to extend his studies to farms in Illinois, Ohio and the Southeast, discounted any fertilizer effect from high levels of atmospheric carbon dioxide. Some studies have proposed that plants would benefit by exposure to more carbon dioxide, but recent research has cast doubt on this view.

Jon Erickson, a Cornell graduate student in resource economics, argued in a recent Cornell staff paper that, "Relying on carbon dioxide from industrialization to fertilize the world's agriculture is analogous to relying on your car's exhaust to fertilize your home garden."

Water supply, along with limited nutrients and atmospheric pollution, are widely recognized as the chief limiting factors in crop production worldwide, he said.

Some climate change scenarios predict drier climates or suggest higher variability, with frequent swings between droughts and floods. Under such conditions, more carbon dioxide in the atmosphere would not increase plant yields.

# Lepidoptera

## Monarch butterfly colony under study at Boyce Thompson

By William Holder

Scarce everywhere else along the East Coast, monarch butterflies are plentiful this fall at the Boyce Thompson Institute for Plant Research, where investigators are maintaining a year-round captive colony.

Researchers at the institute believe that they are the only ones to have successfully bred large numbers of the colorful butterflies year-round. The immediate goal of their studies is to determine why monarch larvae feed exclusively on milkweed plants. But their work also may lead to the first artificial diet for these finicky eaters and may provide a source of tagged butterflies for studies of the monarch's extraordinary and unique migratory behavior.

The reddish-brown and black monarchs fly southwards every fall across the United States to fir forests in Mexico, where they spend the winter. This fall, however, the number of butterflies in the eastern United States has declined by 90 percent, according to some estimates.

The shortage has led numerous public school teachers who normally collect the butterflies in the wild to call the institute, said Alan Renwick, a Boyce Thompson scientist. His colleagues, Celia Radke and Patrick Hughes, staff scientists at the institute, have contracted with the Canadian Museum of Nature in Ottawa to provide monarchs for a traveling exhibit. They also are exploring the possibility of developing a kit of live insects that could be sold to educational institutions and others desiring to observe the development of the butterfly.

"Part of the secret to successful rearing is having the right food for the butterflies,"



Photographs by Peter Morenus/University Photography

Monarch butterflies, including the ones being held by Celia Radke (above), are plentiful at Boyce Thompson Institute, where researchers have achieved a world's first by maintaining a sizeable year-round colony of breeding insects. The trick for these finicky eaters (bottom right), researchers say, is in the diet. Elsewhere on the East Coast, the colorful butterflies are scarce this year, possibly due to destruction of habitat in their overwintering sites in Mexico. At lower left is a caterpillar who will join BTI's butterfly colony.

Renwick said.

In the nearly five years since the researchers began this project, they have perfected the conditions under which larvae will feed on species of milkweed plants. For more than four years they have been able to maintain a reliable, continuous supply of the insects. The researchers normally have dozens of adults on hand, plus hundreds of larvae at various stages of development.

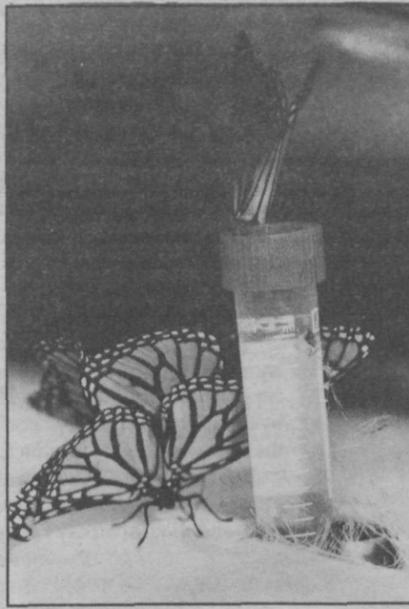
Renwick previously isolated chemicals in plants that stimulate cabbage butterflies to lay eggs. The researchers hope to isolate the chemical signals in milkweed that produce behaviors in the monarch (*Danaus plexippus*), such as feeding and egg laying.

Radke and Hughes say that isolating the chemicals that stimulate feeding might lead to the first successful artificial diet for butterflies. They envision adding this unknown chemical to commercial preparations of wheat germ and vitamins, which would be much easier to administer to the insects and would facilitate their rearing in captivity.

Milkweed contains a class of compounds known as cardiac glycosides, similar to the heart drug digitoxin, and monarchs use the glycosides to give themselves a taste that predators find unpalatable. These glycosides apparently play no role, however, in initiating feeding and egg laying behavior. In the

cabbage butterfly, Renwick pointed out, no more than billionths of a gram of stimulant chemicals will induce specific behaviors.

A generation of monarchs begins when females lay eggs on milkweed. After hatching and molting five times, the caterpillars grow to a length of 2 inches and are distin-



guished by yellow, black and white bands. The metamorphosis to butterfly takes place during the resting stage, in which the insects attach themselves to their food plants inside a glossy, lime-green chrysalis.

Butterflies emerge about six weeks after the eggs were first laid. With their 4-inch wingspan, they fly and feed on the nectar of milkweed and other flowers commonly found in open fields and marshes.

In August adults store fat for their migratory journey — one that carries them 1,800 miles or more at altitudes up to 3,000 feet, where they take advantage of tail winds as they head south. This phenomenon is unique in the insect world, according to the Entomological Society of America.

Overwintering sites in coastal California and Mexico provide high humidity and protection from the elements. Numbering in the millions, the butterflies wait out the winter in an inactive state, resting on trees to preserve food reserves.

A scant 1 percent survive this ordeal to begin a northward journey in March. Scientists believe that none of the butterflies makes it back to its origin. Instead, females lay eggs and die along the way.

The Entomological Society has proposed that the monarch be adopted as the national insect of the United States.

## Approval sought for test of genetically altered gypsy moth virus

By William Holder

A team of university and federal researchers has applied to the Environmental Protection Agency for permission to conduct the first field test of a genetically engineered gypsy moth virus.

H. Alan Wood, a virologist at the Boyce Thompson Institute for Plant Research, said the virus has been genetically transformed so that it will not persist in the environment. Also, it does not infect humans or other vertebrate animals. Pending approval, release is scheduled for spring 1993 at a National Guard facility in Cataunet, Mass., on Cape Cod.

If approved, the test will be the second field trial in the United States of a genetically altered insect virus. Wood conducted the first test in 1989, demonstrating that the genetic code of a virus could be altered so that it would not persist in the environment.

The gypsy moth was accidentally introduced in 1869 by an amateur entomologist in Massachusetts. It currently infests 13 million acres throughout the Northeast and has spread south to North Carolina and west to Michigan, with pocket infestations occurring in a number of western states. It has caused untold timber loss and called forth millions of dollars in control efforts, none fully successful.

The current project is a collaboration headed by Wood. The other scientists participating in the project are James Slavicek

of the Biotechnology Laboratory of the Forest Service in Delaware, Ohio, Joseph Elkington and John Burand of the University of Massachusetts, and Michael McManus and John Podgwaite of the U.S. Forest Service in Hamden, Conn.

The unaltered virus (*Lymantria dispar* nuclear polyhedrosis virus), a registered pesticide developed by Forest Service researchers, has caused no detectable disturbances to the environment or health problems, according to Wood. Since 1978 it has been sprayed on thousands of acres of forests in the northeastern United States to reduce damage to hardwood forests. Gypsy moths are its sole target in this region.

Naturally occurring, the virus becomes most active when gypsy moth populations soar. Typically, an outbreak of the virus will kill more than 90 percent of gypsy moth larvae, leading to a crash in the gypsy moth population. "Since we have had outbreaks of this virus in the Northeast for more than 100 years, its safety is well-established," Wood said.

Safety is one purpose of the proposed experiment, which is designed to demonstrate further Wood's experience that disabled genetically engineered viruses will not persist in the environment. This trait is desirable because it enables researchers to guarantee that altered organisms will not live and spread indefinitely. Wood's 1989 field test, which first used a disabled virus to limit survival, involved a virus released in an environ-

ment of agricultural row crops. The test, performed at the Agricultural Experiment Station in Geneva, used a virus that attacks the cabbage looper, a pale green worm that feeds on vegetables. None of the altered virus has survived until now.

The proposed experiment is similar in that Boyce Thompson researchers have removed a gene from the naturally occurring gypsy moth virus that provides it with a protective covering. Without the covering, the virus cannot persist.

The researchers chose the Cape Cod site, according to Wood, because it contains large stands of scrub oak, one of the gypsy moth's preferred hosts. The scrub oak also is low enough to facilitate sample collection. The release site will be located at least a mile from any dwellings or fresh water sources.

Researchers will measure the rate of disappearance of the virus in the environment — this time a wooded landscape instead of an agricultural field. They also have added a genetic tag to the virus so that gypsy moths infected by the engineered virus can be identified in the field; they turn blue with an easy-to-perform test.

"This tag will provide foresters with a rare opportunity to learn more about the ecology of the gypsy moth virus," Wood said. "Normally, it's impossible to distinguish between gypsy moths that have been infected by the naturally occurring virus versus one that has been introduced for test purposes."

## ACSW honors



Chris Hildreth/University Photography

Persons who supported women's issues on campus were honored by the Advisory Committee on the Status of Women Nov. 10. The awards were named in honor of Constance Cook (seated, left), Cornell's first and only woman vice president, and Professor Emeritus Alice Cook (seated, right). Award winners were (standing from left): Engineering Dean William B. Streett, Professors Jean Frantz Blackall, Joan Brumberg and Jennie Farley, and Rosalind Kenworthy, counselor at Gannett Health Center.

## Professor writes vitamin text

By Susan Lang

Using concept-based learning principles developed by Cornell educators, a nutritional biochemist has written what he believes is the first textbook on vitamins.

*The Vitamins: Fundamental Aspects in Nutrition and Health* by Gerald F. Combs Jr. (Academic Press, 1992) is a concept-based approach to the vitamins. Although developed as a college-level text, the book also is a desk reference for dietitians, nutritionists, physicians and other health professionals as well as practitioners in food science, veterinary science and animal science research.

"In writing the book, I paid attention to the way in which people learn," said Combs, a professor in the Division of Nutritional Sciences. Although he has been teaching the vitamins graduate course for 15 years, Combs did not realize he needed a new approach until he read about how people learn, in publications written by Cornell educational psychologists Joe Novak and Bob Gowin.

"Rather than a formal presentation of the facts regarding the chemistry and structure of the vitamins, the concept-based approach presents information in ways that it is more likely to be used," Combs said.

The 528-page text provides background with explanations on what vitamins are, their

history, general characteristics and how their deficiencies contribute to medical conditions; specifics of each vitamin individually, with discussions of the vitamin's absorption, transport, metabolism, function, relationship to health and relevant case studies; and application of that knowledge with discussions of vitamin sources in foods and supplements, requirements, safety, toxicities and ways to assess status and needs.

Each chapter begins with three shaded boxes: "Anchoring Concepts," which highlight the conceptual background needed to understand the forthcoming chapter; "Learning Objectives," which spell out the aim of the chapter; and technical vocabulary. Major points are demonstrated throughout with the generous use of examples, case studies, diagrams and tables. Each chapter ends with study questions, exercises and recommended reading. Guidelines for instructors are included as well.

The book has wide margins so the reader has room for notes and to highlight words and phrases to serve as "road signs" to the text. Extensively footnoted with ancillary but interesting tidbits, the book provides a comprehensive, easy-to-access view of the world of vitamins.

Combs is an expert on the biological roles of vitamin E and selenium, and the nutritional interactions of vitamins and minerals.

## Statement by President Rhodes

"A university community cannot flourish in the absence of an understood and accepted code of conduct which ensures a basic civility and respect for the dignity of every individual. We must make it unmistakably clear to every member of the faculty and academic staff, to every employee, and to every student that sexual harassment will not be tolerated. Sexual harassment is a violation of the Campus Code of Conduct, the President's Statement of Affirmative Action and Equal Employment Opportunity, the Board of Trustees' Policy of Equal Educational and Employment Opportunity, and federal, state, and local laws prohibiting discrimination and harassment based upon sex.

"The basic integrity of this university community is threatened whenever any individual in a position of authority intimidates another by making unwelcome sexual advances or by demanding sexual favors as a term or condition of employment or academic excellence. This principle holds true for faculty associations with junior colleagues, any teacher's interactions with students, and all supervisory and administrative relationships. Sexual harassment in these situations is just as intolerable and unacceptable as is sexual harassment among peers.

"According to Equal Employment Opportunity Commission guidelines, sexual harassment is an act of discrimination on the basis of sex within the meaning of Title VII of the Civil Rights Act of 1964, as amended. Sexual harassment is similarly construed within the meaning of Title IX of the Education Amendments pertaining to academic life. In accordance with Title VII and Title IX, the university defines sexual harassment as follows:

"Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic status, (2) submission to, or rejection of, such conduct by an individual is used as the basis for an employment decision or academic decision affecting that person, or (3) such conduct has the purpose or effect of substantially interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or learning environment.

"We cannot ignore the problem or pretend that such conduct does not happen at Cornell. Accordingly, everyone at the university is expected to give this subject the serious attention it requires. Students, faculty members, and other academic staff should be encouraged to bring complaints to an appropriate university office, which may include the Office of Equal Opportunity, the Judicial Administrator, the Ombudsman, or an appropriate faculty adviser, sexual harassment adviser within the college, department chairperson or dean. Employees should be directed to the Office of Equal Opportunity, the Ombudsman, or the Office of Human Resources. Complainants should be assured that their concerns will be treated with appropriate confidentiality and that they are protected from retaliation for having reported the incident.

"As part of Cornell's efforts to continue improving its program of affirmative action and equal opportunity, the Office of Equal Opportunity is directed to assume a special monitoring role. Therefore I ask that all incidents of sexual harassment be reported to that office.

"Deans, directors and vice presidents should use their authority to take appropriate action when cases of this kind come to their attention. There must be no mistake about our determination to do everything possible to eradicate sexual harassment from our campus."

Frank H.T. Rhodes, President  
Revised Dec. 10, 1990

## Sexual harassment *continued from page 1*

The harassing behavior most frequently reported included offensive sexual comments and jokes, offensive touching, unwanted personal attention, pressure for sexual relationships, repeated requests for dates, harassing telephone calls and obscene or offensive written notes.

High-tech harassment increased, with four reports of harassment via computer in the form of offensive electronic mail messages, screen savers, computer graphics and sexual sounds being sent to terminals.

There were also reports of offensive pictures and graffiti, kissing, repeated following, and offensive gestures.

Seven complaints involving possible criminal charges of harassment, assault, sexual abuse, sodomy and rape were referred to Public Safety, the Ithaca Police Department and the Judicial Administrator.

Nine complaints were resolved through formal complaint processes, McPherson explained. In OEO's complaint process, a staff member, who acts as an impartial fact finder, typically investigates the complaint by interviewing the complainant, the alleged perpetrator, any witnesses named by either party, any other persons said to have experienced sexual harassment from the alleged perpetrator, and relevant supervisors; examines any written or visual materials relevant to the case; and comes to a determination as to whether sexual harassment occurred. A letter of finding is sent to the complainant, the alleged perpetrator and the departments involved in the case.

The formal complaint process used by the Judicial Administrator can involve a formal resolution by the Judicial Administrator or by the University Hearing Board. The process used by the Judicial Administrator's Office is explained in detail in the *Campus Code of Conduct*, which is available on CUINFO, in the *Policy Notebook*, in the libraries, college registrar's offices, Judicial Administrator's Office, Office of the Assemblies and the University Counsel Office.

### Formal complaints

In one of nine formal complaints handled by OEO and the Judicial Administrator's Office, an organization was placed on a 12-month probation and an individual received alcohol evaluation and counseling by a Tompkins County agency. The organization also conducted three educational programs and participated in a three-hour community service project.

In two cases, defendants were given probation for the duration of their stays at Cornell as well as cease-and-desist and no-contact orders and counseling. Another defendant was put

on probation for his stay at Cornell; he was given a warning and apologized to the complainant.

Written warnings were given to two defendants after investigations resulted in findings of probable cause that sexual harassment occurred. Sexual harassment prevention workshops were given for all staff in the department.

Of the remaining three formal complaints, one was withdrawn before the investigation was completed; one defendant left the university prior to formal action (that complaint remains open in the event he returns to Cornell); and in one case there was insufficient evidence to substantiate the allegation of sexual harassment. In the last case, both parties were moved to different work sites.

OEO and the Ombudsman's Office were involved in resolving the 11 informal complaints. In seven cases warnings were given; the university's policy, federal and state laws were reviewed; and the person complained about agreed to stop the offensive behavior. One teaching assistant was dismissed and a letter about sexual harassment was sent from the department chair to all TAs in the department; the complainant was transferred to a different class section at her request. In one case, a letter from a department was sent to a non-Cornell perpetrator warning that the offensive behavior must stop and reviewing the university's policy on sexual harassment. One person was assisted in writing a letter to a harasser, and one offensive computer screen saver was removed from a network server.

Four reports from departments were resolved through the issuing of written and oral warnings. One complainant was released from her residence hall contract to move off campus at her request. One department sent a letter of explanation to a complainant.

### Getting advice

In 17 other reports, women were advised by sexual harassment advisers, department staff, faculty and OEO staff on ways to deal with specific situations they considered to be sexual harassment and advised about university procedures for handling complaints.

There were both external and internal factors contributing to the large increase in complaints and awareness of sexual harassment, McPherson said. The most influential person was Anita Hill.

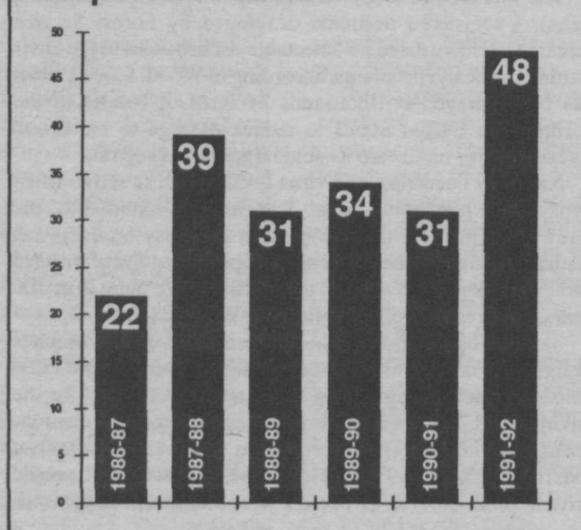
"Several women who reported incidents of sexual harassment said Anita Hill's example and the national attention on sexual harassment encouraged them to come forward with their complaints," she reported.

On campus, the network of more than 100 sexual harassment advisers in academic and administrative units "seems to be serving its purpose," McPherson said. "Students in particular seem to be more comfortable going to someone they already know for help in handling sexual harassment," she said, noting that the advisers were involved in at least 12 of this year's reports.

This year also provided a "teaching moment" on the issue, McPherson said, crediting campus awareness to OEO's 37 workshops and educational programs; the newly created Cornell Interactive Theatre Ensemble, a joint venture of the Theatre Department and Office of Human Relations that includes scenes of sexual harassment in presentations around campus; the Nov. 14, 1991, *Cornell Chronicle* Special Report on Sexual Harassment; and articles in the *Cornell Daily Sun*.

To illustrate the long-term harm done by sexual harassment, McPherson related that in addition to the 48 reports, one woman reported that she was sexually harassed by a man in a position of power at Cornell 22 years ago. Though she had never told anyone, she felt it was "important for her to do so now even though he is retired, because the incident has been deeply troubling to her all these years and has complicated her attempts to deal with other problems," McPherson said.

## Reports of Sexual Harassment



## The rules for endowed faculty posts

By Martin B. Stiles

What on Earth would a conversation between Cornell's founding president, Andrew D. White, and Leo Tolstoy in the Moscow winter of 1894 have to do with Cornell rules concerning endowed professorships? The answer, by association, is a great deal.

In his autobiography, White writes that he asked Tolstoy during a conversation about literature in general, "What part of American literature pleased him most?" White reports that Tolstoy said "that he had read some publications of the New York and Brooklyn Society for Ethical Culture, and that he knew and liked the writings of Felix Adler." White goes on to another question, saying nothing more about Adler. He could

### CORNELL History

have told Tolstoy, and perhaps he did, that Adler initiated the Ethical Culture movement in the United States in 1876, the same year he left a teaching position at Cornell under somewhat controversial circumstances.

The upshot of the controversy over Adler, who taught Hebrew and Oriental literature with his salary paid by New York financier Joseph Seligman, was that "the trustees adopted the principle that they would accept endowed professorships only if the choice of the incumbent was left to the trustees."

In his *A History of Cornell*, Morris Bishop explains that Adler was dropped because "he would not stick to his subject and discussed his own code of belief" and "delighted in airing strong and startling judgments on reason, faith and philosophy."

#### Letter of complaint

A letter from Vice President William C. Russel to President White complains that Adler "described the immaculate conception of Buddha the other day and gave the reason for people favoring such an illusion, i.e., they considered certain acts as sinful which we do not."

The son of a rabbi, Adler broke with Judaism because he "felt that what was of real value in Jewish or any other religion needed to be restated and fitted into a larger synthesis," according to Encyclopaedia Britannica.

Adler, who died in 1933, taught that "devotion to the ethical ideal is central and quite apart from any theological, metaphysical or ceremonial consideration."

The particular humanist movement that he launched is based on "three tacit assumptions," he said, "sex purity, the principle of devoting the surplus of one's income beyond that required for one's genuine needs to the elevation of the working classes, and, finally, continued intellectual development."

Its aim, he said, is to assert the supreme importance of the moral factor in all relations of life.

Today there are 22 Adlerian ethical culture societies nationwide, with headquarters at the corner of Central Park West and West 64th Street in New York City. Also, there are offshoots of Adler's movement worldwide.

Many have wondered through the years at Adler's dismissal, because he seemed to fulfill in so many ways White's vision for higher education. White said, "The great and leading principle is the absolute and essential importance of human development in its richest diversity."

## Gardening advice: apply mulch now

By William Holder

Before retiring for the winter season, home gardeners can do their plants a big favor by applying mulch — nature's insulation, according to a Cornell researcher.

A 3- to 6-inch layer of mulch not only insulates plants from the coldest of winter temperatures, it also prevents damage from frost heave and helps ensure timely growth in the spring, says Don Rakow, assistant professor of landscape horticulture.

"Mulching prevents rapid change in soil temperature," he said. "This is especially important for recently transplanted plants. If the plant roots are not well knit into the soil, they can be heaved out of the ground as the soil is raised in sudden temperature changes."

Plants that are marginally adapted to deep cold also will benefit from the insulating effect of mulch.

All plants, moreover, stand to gain from mulching, he added. In the spring, root growth normally precedes the top vegetative growth, and mulching can delay root growth an average of five to seven days by locking in cooler temperatures. This delay is desirable because it may spare tender young shoots damage from late frosts.

#### Use 3 to 6 inches

November and December are the ideal months to apply mulch. Recent research under Rakow's direction shows that a 3- to 6-inch layer is the optimum amount. More won't necessarily hurt, but adding above 6 inches does not significantly increase the insulating effect, he said.

Rakow warned gardeners not to apply more than 3 or 4 inches of mulch to the base of trees. A higher layer will increase the possibility that the tree will develop cankers. Avoid burying portions of shrubs, he added, in order to minimize the possibility of rot.

"You can choose from a variety of mulching materials, some of which you may already have in your own backyard," he said.



Peter Morenus/University Photography

Krissy Faust, a gardener who maintains the rhododendron collection at Cornell Plantations, spreads mulch to provide the plants with protection against winter weather.

"Any of the coarse materials that are available make the ideal winter mulches. That would include woodchips, bark nuggets, shredded bark, coarse leaves that have been run once through a mower, anything like that."

Synthetic mulches, such as black plastic, and mineral mulches, including gravel and stones, do not have sufficient insulating power for the winter, he said. Shredded carpets or anything else that does not allow for adequate water penetration and oxygen diffusion also should be avoided. Grass clippings are fine in the summer when they dry out quickly, but

they are unsuitable as a winter mulch. A thick layer will degrade anaerobically (without oxygen) and turn into a smelly, slimy mess.

Winter mulches can be left in place in the spring, he said. As the weather warms to the 50- or 60-degree range, ambitious gardeners may want to pull back the mulch and expose the soil to the sun's warmth. Mulch should be reapplied later in the season to keep the soil moist and prevent weeds from growing.

"Few of us," he acknowledged, "have the time or inclination to actually do all that. Alternatively, just leave the mulch in place."

## M.B.A. students and scientists do business

By Sam Segal

Two business professors are collaborating to help their M.B.A. students find real business opportunities in the work of Cornell researchers.

The alliance is an outgrowth of an effort last spring by David BenDaniel, who teaches "Enterprise and Entrepreneurship" at the Johnson Graduate School of Management.

Convinced that there were many high-tech businesses latent in Cornell research — especially in engineering, the biological and physical sciences and computer science — BenDaniel organized a series of seminars where M.B.A. students could meet scientists who thought their work might have business applications.

"My students had already been principals in two businesses successfully spun off from campus research, and they discovered them just by prowling around labs," says BenDaniel, the Don and Margi Berens Professor of Entrepreneurship. "Our idea was to improve the odds by bringing in to the Johnson School the graduate students and faculty who are doing so much advanced research."

Last spring's four seminars haven't produced ventures yet, but they attracted about 35 people to each session and sparked discussions, some of which continue today.

#### Identifying an idea

This year, BenDaniel has teamed with another Johnson School faculty member, Philip Anderson, who teaches "Management of Innovation and Technological Change." Forty-five first-year M.B.A. students agreed to try their collaboration.

The students are invited to identify a business idea — preferably from the continuing seminars where current research is discussed — and to develop a business plan that can be examined during the spring in both BenDaniel's course and in Anderson's. BenDaniel's focus will be on how to make the business itself sound; Anderson's on how to analyze the strategic position of new technologies and bring them to market.

In their second and last M.B.A. year, the students should have time to begin realizing their plan, including the raising of capital, so that, by graduation, they can actually launch the business.

"For a long time," says Anderson, "Cornell

has had the potential to bring together a critical mass of people with interest in the commercial potential of their work."

"We still have 15 more seminars planned," BenDaniel says, "and we've sent invitations to 300 scientists and graduate students."

"Some scientists couldn't care less about the business potential of their work, and I'm not determined to reform them," says BenDaniel, who knows both sides of the fence:

He holds a Ph.D. in engineering from MIT and has been a scientist and venture developer for corporations, and he was a visiting fellow at Harvard Business School before coming to Cornell eight years ago.

"But I do hope to find those scientists who are amenable to business development but had no idea how to proceed. Matching them with young entrepreneurs will be good for both of them, and good for the country."

### Girls and science



Peter Morenus/University Photography

Graduate student Ralph Marcucio (left) helps Cortland seventh-grader Katie Kizer study 3-day-old chicken embryos on Saturday as part of the sixth annual Expanding Your Horizons program, in which faculty and graduate students help middle school girls become enthusiastic about science, mathematics and engineering. This workshop was one of 20 held on campus.

# CALENDAR

continued from page 12

## RELIGION

### Sage Chapel

R. Maurice Boyd of the United Church of Canada, London, Ontario, will deliver the sermon Nov. 22 at 11 a.m. Music by the Sage Chapel choir, under the direction of William Cowdery, acting university organist.

There will be no service Nov. 29.

Sage is a non-sectarian chapel that fosters dialogue and exploration with and among the major faith traditions.

### Afro-American

Sundays, 6:30 p.m., Robert Purcell Union.

### Catholic

Weekend Masses: Saturday, 5 p.m.; Sunday, 9:30 a.m., 11 a.m. and 5 p.m., Anabel Taylor Auditorium. Daily Masses at 12:20 p.m. in Anabel Taylor Chapel. Sacrament of Reconciliation, Saturday, 3:30 p.m., G-22 Anabel Taylor Hall.

Thanksgiving Day Mass: Nov. 26, 10 a.m., Anabel Taylor Chapel.

Thanksgiving weekend Mass schedule: Nov. 28 at 5 p.m. and Nov. 29 at 10 a.m., Anabel Taylor Auditorium.

### Christian Science

Testimony and discussion meeting every Thursday, 7 p.m., Founders Room, Anabel Taylor Hall.

### Episcopal (Anglican)

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

### Friends (Quakers)

Sundays, 9:45 a.m., adult discussion; 11 a.m., meeting for worship, Edwards Room, Anabel Taylor Hall.

### Jewish

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

Reform: Fridays 5:30 p.m., chapel, Anabel Taylor Hall; Conservative/Egalitarian: Fridays, 5:30 p.m., Founders Room, and Saturdays 9:45 a.m., Founders Room, Anabel Taylor Hall; Orthodox: Friday, call 272-5810 for time, and Saturday, 9:15 a.m., Edwards Room, Anabel Taylor Hall.

Meetings: Nov. 19, IAEC table, Willard Straight Hall; Nov. 21, Koach lunch, 12:30 p.m.

### Korean Church

Sundays, 1 p.m., chapel, Anabel Taylor Hall.

### Muslim

Friday prayers, Founders Room at 1 p.m.; Edwards Room at 1:25 p.m. Daily prayer, 1 p.m., 218 Anabel Taylor Hall.

### Protestant Cooperative Ministry

Sundays, 11 a.m., chapel, Anabel Taylor Hall.

### Zen Buddhist

Thursdays, 5 p.m., chapel, Anabel Taylor Hall.

## SEMINARS

### Advisory Committee on the Status of Women

"The Pay Equity Review in Tompkins County," Beverly Livesay, Tompkins County Board of Representatives, Nov. 24, noon, G-01 Biotechnology Building.

### Agricultural Economics

Two panels of agricultural economists will debate the pros and cons of NAFTA, the proposed North American Free Trade Agreement. Canadian, Mexican and U.S. perspectives will be represented, Nov. 30, 3:30 p.m., 401 Warren Hall.

### Applied Mathematics

"Methods for Fast Computation of Integral Transforms," Shay Gueron, applied mathematics, Nov. 20, 4 p.m., 456 Theory Center.

### Archaeology

"Twentieth Century Material Culture, or Thoughts on the Meaning of Melmac," Jane Bush, Cooperstown Graduate Program in History Museum Studies, Nov. 19, 4:30 p.m., 215 McGraw Hall.

### Astronomy & Space Sciences

"Cosmic Structure Theory in the Post-Cobe Era," J. Richard Bond, University of Toronto, Nov. 19, 4:30 p.m., 105 Space Sciences.

### Biochemistry, Molecular & Cell Biology

"Crystal Structure of Interleukin 4," Alex Wlodawer, National Cancer Institute, Nov. 20, 4 p.m., Large Conference Room, Biotechnology Building.

### Chemical Engineering

"Material Science and Engineering Applications in Membrane-Based Gas Separations," William Koros, University of Texas, Austin, Nov. 24, 3:30 p.m., 165 Olin Hall.

### Chemistry

"Intramolecular Dynamics for the Organic Chemist," Barry Carpenter, chemistry, Nov. 23, 4:40 p.m., 119 Baker.

"The Chemical-Enzymatic Synthesis of Glycoconjugates: Molecules that Control the Immune Response," Mark Bednarski, University of California, Berkeley, Nov. 30, 4:40 p.m., 119 Baker.

"Recent Advances in the Theory of Condensed Phase Chemical Reaction Dynamics," Gregory Voth, University of Pennsylvania, Dec. 3, 4:40 p.m., 119 Baker.

### Cognitive Studies

"Psychology as a Biological Science," Ruth Milliken, University of Connecticut, Nov. 20, 3:30 p.m., 202 Uris Hall.

### Cornell Women in Agriculture & Life Sciences

"One Tongue, Two Languages," a discussion on gender differences in communication, moderated by Jane Crawford, Career Center, Nov. 19, 12:15 p.m., 200 Savage Hall.

### Ecology & Systematics

"Mechanisms of Growth Rate Reduction in Acid-Exposed Larval Salamanders," Marion Preest, ecology & systematics, Dec. 2, 4 p.m., Morison Seminar Room, Corson Hall.

### Education

"The AIDS Education Project," Jennifer Tiffany, project director, Dec. 1, 12:20 p.m., 101 Kennedy Hall.

### Electrical Engineering

"Microelectromechanical Systems: Devices, Modeling and Materials," Mehran Mehregany, Case Western Reserve University, Nov. 24, 4:30 p.m., 219 Phillips Hall.

"Registration of Electrical Signals From Fetal Muscles and the Fetal Brain to Assess Fetal Behavioral State: Analysis of Fetal Maturation and Fetal Well-Being," Peter Nathanielsz, veterinary medicine, Dec. 1, 4:30 p.m., 219 Phillips Hall.

### Entomology Jugatae

"Biogeography and Host Relationships of Leafhoppers in Grasslands of Western North America," Robert Whitcomb, Insect Biological Control Laboratory, USDA, Nov. 19, 4 p.m., Morison Seminar Room, Corson Hall.

"The Soil Environment, Insect Pathogens and Scarab Grub Behavior," Michael Villani, NYSAES, Geneva, Dec. 3, 4 p.m., Morison Seminar Room, Corson Hall.

### Environmental Toxicology

"Of Mice and Men: The Role of Toxicology in Pharmaceutical Drug Development," John Andrews, Procter & Gamble Pharmaceuticals, Nov. 20, 12:20 p.m., 135 Emerson Hall.

### European Studies

"Europe in Crisis?" Geoffrey Harris, secretariat of European Parliament and Mellon Visiting Scholar, Nov. 20, 12:15 p.m., 153 Uris Hall.

"Truth and the Obscene Word in 18th Century Pornography," Lucienne Frappier-Mazur, University of Pennsylvania, co-sponsored with Romance studies, Nov. 20, 4:30 p.m., 281 Goldwin Smith Hall.

"Democratization in Eastern Europe: The Polish Case," Barbara Wejnert, visiting fellow, Nov. 23, 12:15 p.m., 153 Uris Hall.

"Language Planning in the Yugoslav Lands," Olga Miseska Tomic, University of Novi Sad, Yugoslavia, Dec. 2, 4:30 p.m., G-08A Uris Hall.

### Food Science & Technology

"NMR Studies of Lysozyme," Kristin Bartik, Free University of Bruxelles, Nov. 24, 4:30 p.m., 204 Stocking Hall.

"A Stereoisomeric Approach to the Molecular Basis of Sweetness: Synthesis, Spectroscopy and Computer Simulation," Murray Goodman, University of California at San Diego, co-sponsored with Biotechnology Program, Dec. 1, 4:30 p.m., 204 Stocking Hall.

### Fruit & Vegetable Science

"The Heritage of Hudson Valley Fruit Growing," Elizabeth Ryan, Nov. 19, 4:30 p.m., 404 Plant Science.

"Studies of the 'Tree Factor' that Inhibits Ripening of Attached Apples," David Blanpied, fruit & vegetable science, Dec. 3, 4:30 p.m., 404 Plant Science.

### Geological Sciences

Title TBA, Timothy Lowenstein, SUNY

Binghamton, Nov. 24, 4:30 p.m., 1120 Snee Hall.

"Hydrothermal Studies at High Pressure and Temperature," William Bassett, geological sciences, Nov. 22, 4:30 p.m., first floor seminar room, Snee Hall.

"The Cretaceous Through Cenozoic History of the Atolls and Guyots of the West Central Pacific," Janet Haggerty, Dec. 1, 4:30 p.m., 1120 Snee Hall.

"Origin and Evolution of the Lower Continental Crust," Robert Kay, geological sciences, Dec. 3, 4:30 p.m., first floor seminar room, Snee Hall.

### Hotel Administration

"Corporate Travel Trends: Opportunities and Threats," Russell Bell, hotel administration, Nov. 30, 4 p.m., 165 Stadler Hall.

### Immunology

"Schistosomiasis: A Neuropeptide Perspective," George Stefano, SUNY Old Westbury, Nov. 20, 12:15 p.m., Boyce Thompson Auditorium.

### Integrated Pest Management

"Indigenous Crop Protection Practices in Sub-Saharan East Africa, Their Status and Significance Relative to Small Farmer IPM Programs,"

sciences, Nov. 23, 3:30 p.m., 100 Savage Hall.

### Ornithology

"Do Chickadees Come From China?" Frank Gill, Academy of Natural Sciences, Philadelphia, Nov. 23, 7:45 p.m., Fuertes Room, 159 Sapsucker Woods Road.

"The Library of Natural Sounds Recording Workshop (Or, How I Spent My Summer Vacation)," Cindy Berger, laboratory of ornithology, Nov. 30, 7:45 p.m., Fuertes Room, 159 Sapsucker Woods Road.

### Peace Studies

"Women in the Armed Forces: Lessons From History and Cross-National Comparisons," Mady Segal, University of Maryland, Nov. 19, 12:15 p.m., G-08 Uris Hall.

"Feud and Peace-Making: Medieval and Modern," Paul Hyams, Dec. 3, 12:15 p.m., G-08 Uris Hall.

### Pharmacology

"Pharmacological Disruption of Signal Transduction by Anesthetic Alcohols," Robert Aronstam, Gut Research Institute, Nov. 23, 4:30 p.m., G-3 Veterinary Research Tower.

"Regulation of Cl Conductances in Normal- and Cystic Fibrosis-Derived Epithelial Cells,"



A scene from "The Royal Family," a comedy by George S. Kaufman and Edna Ferber, to be performed by the Department of Theatre Arts Nov. 19-Dec. 5 at the Center for Theatre Arts. From left are Frank Farrell, Kelly Pierce Macmanus, Brent Harris and Kathleen Mary Mulligan. Check the Theater listing for more information.

George Schaeffers, entomology, Nov. 30, 4 p.m., 135 Emerson Hall.

### International Nutrition

"The Influence on Food-for-Work on Food, Health Care and Nutrition," Joachim von Braun, IFPRI, Washington, D.C., Nov. 19, 2:30 p.m., 100 Savage Hall.

"Impact of Vitamin A Supplementation on Morbidity and Growth in South Indian Children," Usha Ramakrishnan, nutritional sciences, Nov. 30, 4 p.m., 100 Savage Hall.

### Latin American Studies

"The Legal Situations of Central American Refugees in Belize," Pablo Fernandez, visiting scholar, Law School, Nov. 24, 12:15 p.m., 153 Uris Hall.

### Microbiology

"Growth Strategy of Bacilli," R.J. Doyle, University of Louisville, Kentucky, Nov. 19, 4 p.m., Large Conference Room, Biotechnology Building.

### Natural Resources

"'Jungle' versus 'Forest': Can Agroforestry Bridge the Gap," Mir Javed Hussain, natural resources, Nov. 24, 4 p.m., 304 Fernow Hall.

"Suburban White-tailed Deer Management: Issues and Approaches for Resolving Conflicts," Paul Curtis, natural resources, Dec. 1, 4 p.m., 304 Fernow Hall.

### Neurobiology & Behavior

"Guns and Butter: Trade-offs in Plant Chemical Defenses," Ian Baldwin, SUNY Buffalo, Nov. 19, 12:30 p.m., Morison Seminar Room, Corson Hall.

"Delay Lines Form Maps of Interaural Time Difference in Barn Owls," Catherine Carr, University of Maryland, Dec. 3, 12:30 p.m., Morison Seminar Room, Corson Hall.

### Nutrition

"Food Supplementation to Undernourished Lactating Women Increases Infant Breast Milk Intake and the Proportion of Exclusive Breast Feeding," Teresa Gonzalez-Cossio, nutritional

Phyllis Gardner, Stanford University School of Medicine, Nov. 30, 4:30 p.m., G-3 Veterinary Research Tower.

### Physics

"Physics and the Future of Music," Neil Gershenfeld, Massachusetts Institute of Technology, Nov. 23, 4:30 p.m., Schwartz Auditorium, Rockefeller Hall.

"Atomic and Molecular Manipulation With the Scanning Tunneling Microscope," Don Eigler, IBM, Almaden, Dec. 2, 4:30 p.m., Schwartz Auditorium, Rockefeller Hall.

### Physiology & Anatomy

Title TBA, Roy Levine, pathology, Nov. 19, 4:30 p.m., Boyce Thompson Auditorium.

"Sexual Behavior in Sheep and Goats," Dr. Katz, Nov. 24, 4:30 p.m., G-3 Veterinary Research Tower.

Title TBA, Robin Gleed, clinical sciences, Dec. 1, 4:30 p.m., G-3 Veterinary Research Tower.

### Plant Biology

"Induction, Modification and Reception of the Salicylic Acid Signal in Disease Resistance Responses in Plants," Daniel Klessig, Rutgers University, Nov. 20, 11:15 a.m., 404 Plant Science.

### Plant Breeding

Title TBA, Susan McCouch, plant breeding, Nov. 24, 12:20 p.m., 135 Emerson Hall.

"Tagging Disease Resistant Genes of Wheat Using RFLP," Enrique Autrique, plant breeding, Dec. 1, 12:20 p.m., 135 Emerson Hall.

### Plant Pathology

"Pocket and Root Rot of Table Beets Caused by *Rhizoctonia solani*," Gilberto Olaya, plant pathology, NYSAES, Geneva, Nov. 19, 3 p.m., A133 Barton Laboratory, NYSAES, Geneva.

"Host Recognition in *Striga asiatica*," Tom Rutledge, plant pathology, Nov. 24, 4:30 p.m., 404 Plant Science.

"Epidemiology and Control of Grape Black Rot (*Guidnardia bidwellii*)," Chris Becker, plant

Continued on page 11

# CALENDAR

continued from page 10

pathology, Dec. 1, 4:30 p.m., 404 Plant Science.  
 "Classification and Detection of *Peronosclerospora* species: DNA Southern Hybridization and PCR," Chenglin Yao, plant pathology, Dec. 3, 3 p.m., A133 Barton Laboratory, NYSAES, Geneva.

## Science & Technology Studies

"Darwin's Search for a Theory of the Earth," Frank Rhodes, Cornell president, Nov. 30, 4:30 p.m., 700 Clark Hall.

## Soil, Crop & Atmospheric Sciences

"The Involvement of a Membrane Phenomenon in the Mechanism of Action and Resistance to the Graminicides," Joseph DiTomaso, soil, crop & atmospheric sciences, Nov. 24, 3:30 p.m., 135 Emerson Hall.  
 "Development of Soybean Production in New York," Madison Wright, soil, crop & atmospheric sciences, Dec. 1, 3:30 p.m., 135 Emerson Hall.

## Southeast Asia Program

"Thinking Comparatively About the Philippines and Latin America: The Challenge of Rural Democratization," Jonathan Fox, Massachusetts Institute of Technology, co-sponsored with Latin American studies, Nov. 19, 12:20 p.m., Kahin Center, 640 Stewart Ave.  
 "The Netherlands and Indonesia," Jan-Paul Dirkse, Ministry of Foreign Affairs, The Hague, Netherlands, and visiting fellow in Southeast Asia Program, Dec. 3, 12:20 p.m., Kahin Center, 640 Stewart Ave.

## Stability, Transition & Turbulence

Title TBA, Shankar Subramaniam, mechanical & aerospace engineering, Dec. 1, 12:30 p.m., 178 Theory Center.

## Textiles & Apparel

"Metallized Textiles - New Technology/New Applications," Robert Peoples, Monsanto Chemical Group, Nov. 19, 12:20 p.m., 317 Martha Van Rensselaer Hall.

## Women's Studies

"Anti-Essentialism and Feminist Legal Theory," Kathryn Abrams, law, ethics & public

life and women's studies, Nov. 20, 3:30 p.m., ILR Faculty Lounge, Ives Hall.

"Feminism, Foucault and the Politics of the Body," Susan Bordo, LeMoyne College, part of "Feminist Politics: Theory & Practice" series, Dec. 2, 4:30 p.m., Goldwin Smith "D."

# THEATER

## Department of Theatre Arts

"The Royal Family," by George Kaufmann and Edna Ferber, will be performed in the Proscenium Theatre of the Center for Theatre Arts Nov. 19, 20, 21 and Dec. 3, 4 and 5 at 8 p.m. and Nov. 22 at 2 p.m. A story of three generations of the Cavendish family. Inspired by the exploits of great American acting families like the Barrymores, this play is written by two of America's legendary comic geniuses. Tickets are \$5 and \$7. Call 254-ARTS for more information.

# MISC.

## Advisory Committee on the Status of Women

The ACSW regularly holds brown-bag luncheons open to the entire community on the fourth Tuesday of each month. For more information, call ACSW chairwoman Ruth Sabean, director of Cornell Information Technologies, at 255-3299, or associate chairwoman Risa Lieberwitz, associate professor of industrial and labor relations, at 255-3289.

## Alcoholics Anonymous

Meetings are open to the public and will be held Monday through Friday at 12:15 p.m. and Saturday evenings 7 p.m. in Anabel Taylor Hall. For more information call 273-1541.

## Cornell AIDS Action

World AIDS day prayer service, Dec. 1, noon, Sage Chapel; candlelight vigil, Dec. 1, 5:30 p.m., Ithaca Commons (please bring a candle).

## Latin American Studies Program

Latin American coffee hour will be held on Tuesdays at 5 p.m. in G-08 Uris Hall.

## Noontime Yoga

Classes for faculty and staff will be held Tuesdays and Thursdays, Teagle Wrestling Room. Sign-up at physical education office or call Lewis Freedman, 539-6777.

## Writing Workshop

Writing workshop walk-in service: free tutorial instruction in writing. Sunday, 2 to 8 p.m., 178 Rockefeller Hall; Monday through Thursday, 3:30 to 5:30 p.m. and 7 to 10 p.m., 178 Rockefeller Hall; Sunday through Thursday, 8 to 11 p.m., Clara Dickson Macintosh Computer Room; Sunday through Thursday, 8 to 11 p.m., 112 Noyes Center.

# Two musical events featured this weekend

The Music Department will present two major events this weekend: Mahler's Symphony No. 2 ("Resurrection") and Henry Purcell's opera "Dido and Aeneas."

Mahler's symphony will be performed on Saturday, Nov. 21, at 8:15 p.m. in Bailey Hall by the Cornell Symphony Orchestra, plus an additional 10 horns, six trumpets and enlarged percussion section, the Cornell Glee Club, plus local singers, and soprano Judith Kellock, assistant professor of music at Cornell, and Boston-based guest mezzo-soprano D'Anna Fortunato with Edward Murray conducting.

Fortunato, who is known for her lustrous voice, has performed with the St. Paul Chamber Orchestra, the National Symphony Orchestra and the Dallas Symphony, among others.

"Dido and Aeneas," an hour-long opera, will be performed on Sunday, Nov. 22, at 4 p.m. in Barnes Hall. Andrew Walking, a Ph.D. candidate, will give a pre-concert lecture about the 17th-century opera at 3:15 p.m.

The performance brings together faculty, students, invited guests and local artists in the following roles: Dido, the queen of Carthage (mezzo-soprano D'Anna Fortunato); her maid Belinda (soprano Judith Kellock); Aeneas, a Trojan prince (Steven Stull); the second woman (Michelle Pasek); sorcerer (John Rowehl); witches (Marion Hanson and Andrea Johnson); spirit (Lynn Laufenberg); and sailor (Adam Juran). The chorus will feature the Gerald Wolf Singers, directed by Dan Stowe.

# SPORTS

Home contests in ALL CAPS.  
 Win-loss records as of Sunday.

## Varsity Football (7-2)

Nov. 21, PENNSYLVANIA, 12:30 p.m.

## Men's Varsity Basketball

Nov. 23, CENTRAL N.Y. FELLOWSHIP OF CHRISTIAN ATHLETES (exhib.), 7:30 p.m.  
 Dec. 1, at Syracuse, 8 p.m.

## Women's Basketball

Dec. 1, COLGATE, 7:30 p.m.

## Men's Fencing

Nov. 21, CORNELL INVITATIONAL

## Women's Fencing

Nov. 21, CORNELL INVITATIONAL

## Men's Varsity Hockey (1-1)

Nov. 20, at St. Lawrence, 7:30 p.m.  
 Nov. 21, at Clarkson, 7 p.m.  
 Nov. 28, PROVIDENCE, 2 p.m.

## Women's Hockey

Nov. 20, at St. Lawrence, 2:30 p.m.

## Men's Polo

Nov. 18-22, JOHN BEN SNOW/CORNELL POLO CLASSIC

## Women's Polo

Nov. 18-22, JOHN BEN SNOW/CORNELL POLO CLASSIC

## Men's Squash

Nov. 21, at Pennsylvania, noon  
 Nov. 22, at Princeton, noon

## Men's Swimming

Nov. 21, at Pennsylvania, 3:30 p.m.  
 Nov. 28, ARMY, noon

## Women's Swimming

Nov. 21, at Pennsylvania, noon

## Wrestling

Nov. 22, EASTERN CHALLENGE DUALS, 11 a.m.

## Chronicle schedule

The publication dates of the *Cornell Chronicle* for the remainder of the fall semester are as follows: Dec. 3, Dec. 10 and Dec. 17.

The first issue of the spring semester will be Jan. 21.

Items to be included in the calendar need to arrive 10 days prior to the publication date.

Send notices through campus mail to *Cornell Chronicle*, Village Green, 840 Hanshaw Road.

## Intramural Cross Country Standings

<b>Fraternity</b>		<b>NROTC B</b>	36
Phi Kappa Psi	10	Pi Kappa Phi	39
Kappa Delta Rho	28		
Seal and Serpent	30	<b>Residence Halls</b>	
Pi Kappa Alpha	52	McFaddin Warriors	7
		McLLU	18
<b>Graduate</b>		<b>Women</b>	
High Noon	6	JGSM	10
JGSM	22	Delta Gamma	22
Cornell Educ. Soc. I	33	Kappa Delta	24
		AOPi	31
<b>Independent</b>		Cornell Educ. Soc. II	45
NROTC A	8		
Legion of Doom	16		

# How to avoid winter weight gain

By Myrna Manners

The winter months cause us to slow down our activity and indulge in the wrong foods. However, "fighting winter weight gain is not as difficult as you think," says Martha McKittrick, a registered dietician at The New York Hospital-Cornell Medical Center. "A simple tip such as broiling foods instead of frying can help to prevent adding those unwanted pounds." She offers this advice:

- Eat slowly and savor every bite. Remember that it takes 20 minutes for the stomach to signal to your brain that you are full.
- Try to make vegetables the main focus of your meal, adding small portions of protein.
- Watch out for fat calories found in butter, oil, cream sauces, gravies and pastries.
- Bypass cake, cookies and ice cream and opt for fresh fruit, which is fat-free.
- If you know you have a celebration scheduled, save calories the week before to give yourself more calories to eat at these occasions.
- Never go to a party or celebration hungry!
- Drink alcohol in moderation as it contains many empty calories and may stimulate your appetite.
- One final and important tip! Don't let the winter months slow down your exercise program. Exercise can burn off calories and will make you feel good about yourself.

## Guide dogs *continued from page 1*

basic obedience commands, such as "Sit," "Stay" and "Come." Socialization, which is exposure to a wide variety of situations, people, sounds and smells, is the most important part of pre-training, Caveney said. Socialization helps the puppy develop the skills and confidence it will need to function as a guide dog.

Sporting his collar, leash and puppy coat, Uriah explored Cornell and the Ithaca area. With special permission of her department,

*'I was worried, for his sake, that he wouldn't measure up, that he wouldn't get the chance to serve someone. He always seemed so eager to please.'*

Caveney was able to take the puppy to work, where she trained Uriah to lie quietly at her feet, under the desk. She and Uriah went everywhere - to restaurants, food stores, seminars, exams.

"The crowds at the Ithaca Farmers Market and the open displays of bread at the Ithaca Bakery were particularly challenging," she reported. "He became a regular on the campus buses, the Barnes Hall concerts and the Veterinary College cafeteria. The maze of Ag Quad

sidewalks was a perfect place to practice," she said. The Veterinary Research Tower provided experience with elevators, revolving doors and a busy construction site, complete with concrete trucks and jackhammers.

"The toughest part of training was 'puppy puberty,'" Caveney said, when a "very trying Uriah behaved like a typical teen-ager. But then he settled down. He seemed to decide: 'I'm not a puppy anymore. I have a serious job to do.' I had such a feeling of pride. He knew his stuff. He was so well behaved, and he made friends wherever we went."

### Play and work

Caveney wished she could have taken time to answer all the questions from interested passersby. But Uriah was busy learning the difference between play and work, and his trainer's full attention was focused on that mission. The months of practice seemed to pay off during a week-long course in landscape design, she said. "He handled the daily routine of lectures and studio work with ease, and of course he thoroughly enjoyed the field trips to Cornell Plantations."

All too soon it was time to return the 15-month-old Uriah to Guiding Eyes for the Blind, where he would be evaluated for suitability for guide work.

Dogs that do not meet the school's exacting standards are released from the program, and there is a waiting list of people ready to adopt

the dogs if the puppy raiser cannot do so.

Caveney packed Uriah in the car, along with a couple of his favorite toys, and drove to the Guiding Eyes headquarters.

There she saw that dogs-in-training are paired with a canine "buddy" and that they are allowed to romp with the others or walk with volunteers, when they are not occupied in the rigorous training.

Missing Uriah was not her main concern, Caveney said. "I was worried, for his sake, that he wouldn't measure up, that he wouldn't get the chance to serve someone. He always seemed so eager to please."

Driving back to Ithaca, without Uriah, "was not too hard," Caveney said. "Then I got to the empty house." For the next week, she said, she didn't want to go to work, to the store, to any of the places where she had trained Uriah.

Then she got the call. "They said he had passed! He had performed well, and he was starting the next phase of his training. I was ecstatic. And very proud - of him."

She will see Uriah one more time, at his graduation. The guide dog will be in harness with his new owner. The ability to lead will be his. Parting with a friend and constant companion of more than a year had not been easy, Caveney said.

"Knowing that someone needs him - far more than I do - helped me say goodbye."

# CALENDAR

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

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

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

## DANCE

### Cornell International Folkdancers

All events are open to the Cornell Community and general public. Admission is free, unless stated otherwise. For further information, call 539-7335 or 277-3638.

Nov. 22: Ballroom and international couple dance with "Casablanca" as its theme, 7:30 to 11:30 p.m., Memorial Room, Willard Straight Hall. Partners are not necessary.

Nov. 29: Club favorites, taught by Kate Stuart, 6:30 p.m.; teaching, 7:30 p.m.; request dancing, 8:30 p.m., North Room, Willard Straight Hall.

Global Dancing, Tuesdays, teaching at 8:30 p.m.; open dancing from 9:45 to 10:30 p.m. in Helen Newman Hall Dance Studio.

European and Scandinavian Couple Dancing, Thursdays, 8:30 p.m., Helen Newman Dance Studio. For information call Dick at 273-0707 or Marie at 844-8783.

### Israeli Folkdancing

Thursdays, 8 p.m., Edwards Room, Anabel Taylor Hall.

### Theatre Arts

"Dance Theatre Concert," new works by faculty and students, Dec. 3-5, 7:30 p.m., Class of '56 Dance Theatre, Center for Theatre Arts, \$3 admission.

## 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. Telephone: 255-6464.

"In Medusa's Gaze: Still Life Paintings from Upstate New York Museums," through Nov. 29.

"Our Land/Ourselves: American Indian Contemporary Artists," through Dec. 16.

The Department of Art Faculty Exhibition, through Dec. 20.

"The Voice of the Print: Photographs by Paul Caponigro," through Dec. 20.

The final program in the November Artbreak series will be today, Nov. 19, at noon. Professor Barry Perlus will conduct a tour of the exhibition "The Voice of the Print: Photographs by Paul Caponigro."

On Nov. 21 at 2 p.m., there will be a concert by Noyeh-Ongeh and conversations with artists/composers Joan Henry and Dennis Yerry.

And, on Sunday, Nov. 22, at 3:30 p.m., the Circle of Seven student jazz group will perform; seating is limited.

### Hartell Gallery

Recent monotypes and paintings by Nancy Friese, through Nov. 21.

Furniture by George Hascup, Nov. 22 through 25.

The gallery is located in Sibley Dome and is open Monday through Friday, from 8 a.m. to 5 p.m.

### Martha Van Rensselaer Hall

Dresses and other items worn by Martha Van Rensselaer are on display in the showcase outside G19AMVR Hall through January 1993. Included are a 1930 purple silk satin gown worn at the White House and a 1924 gown and shoes worn during presentation to the queen of Belgium. All items are from the Cornell Costume Collection housed in MVR Hall.

### Olive Tjaden Gallery

Paintings by Julie Schulweis, through Nov. 21. Sculpture by Josh Owen, Nov. 22 through 28. Photographs by Eve Ogden, Nov. 29 through Dec. 5.

The gallery is located in Tjaden Hall and is open Monday through Friday, 9 a.m. to 5 p.m.

### Willard Straight Hall

Paintings by Cuba Ann Ray, through Nov. 27, art gallery.

American Indian Program arts and crafts show and sale, Nov. 21.

Willard Straight Hall Potshop Fall Show and Sale, Nov. 30 through Dec. 4.

## FILMS

Films listed are sponsored by Cornell Cinema unless otherwise noted and are open to the public. All films are \$4.50 (\$4 for students) EXCEPT Monday Night Film Club (9:30 p.m.), \$3 for all; Thursdays, \$3.50 for all; Saturday Ithakid Film Festival, \$2 and \$1.50 under 12; and Sunday Matinees, \$3.50. All films are held in Willard Straight Theatre except where noted.

### Thursday, 11/19

"Who's Who" (1978), directed by Mike Leigh.



Cornell Cinema will show Mike Leigh's "Nuts in May" Nov. 21 at 7:25 p.m. in Uris Hall as part of the series, "Mike Leigh: The Cost of Living."

with Richard Kane, Simon Chandler and Adam Norton, 4:30 p.m., free.

"Unlawful Entry" (1992), directed by Jonathan Kaplan, with Kurt Russell, Ray Liotta and Madeleine Stowe, 7:30 p.m.

"Buffy the Vampire Slayer" (1992), directed by Fran Rubel Kuzui, with Kristy Swanson, Luke Perry and Donald Sutherland, 10 p.m.

### Friday, 11/20

"Unlawful Entry," 7:25 p.m., Uris.

"Framing Lesbian Fashion" (1992), directed by Karen Everett, shown with "It Wasn't Love" (1992), directed by Sadie Benning, 7:30 p.m.

"Howard's End" (1992), directed by James Ivory, with Emma Thompson, Helena Carter and Anthony Hopkins, 9:40 p.m.

"Buffy the Vampire Slayer," 9:50 p.m., Uris.

"Akira" (1989), directed by Katsuhiro Otomoto, subtitled version, midnight, Uris.

### Saturday, 11/21

Ithakid Film Festival, Super Duper Super 8 Films, with guest film maker John Porter, recommended for ages 5 and up, 2 p.m.

"Howard's End," 7 p.m.

"Nuts in May" (1976), directed by Mike Leigh, with Roger Sloman, Alison Steadman and Anthony O'Donnell, 7:25 p.m., Uris.

"Unlawful Entry," 9:30 p.m., Uris.

"8-1/2" (1963), directed by Federico Fellini, with Marcello Mastroianni, Claudia Cardinale and Anouk Aimee, 9:55 p.m.

"Buffy the Vampire Slayer," midnight, Uris.

### Sunday, 11/22

Films of Len Lye, 2 p.m., Johnson Museum, free.

"Akira," 4:30 p.m.

"Enthusiasm," 7:30 p.m., Uris, free.

"8-1/2," 8 p.m.

### Monday, 11/23

"Life, Death and Revolution," Southeast Asia Film Series, 4:30 p.m., Kahin Center, 640 Stewart Ave., free.

"Howard's End," 6:35 p.m.

"Prospero's Books" (1991), directed by Peter Greenaway, with John Gielgud, 9:30 p.m.

### Tuesday, 11/24

"Howard's End," 7 p.m.

"Unlawful Entry," 10 p.m.

### Sunday, 11/29

"Tight Little Island (Whiskey Galore)" (1948), directed by Alexander Mackendrick, with Basil Radford, Catherine Lacey and Joan Greenwood, 7:30 p.m., Uris, free.

"The Birds" (1963), directed by Alfred Hitchcock, with Suzanne Pleshette, Jessica Tandy and Rod Taylor, 8 p.m.

### Monday, 11/30

"Ma'bugi, Trance of Toraja," 21 minutes, and "Ahazari Ali," 23 minutes, 4:30 p.m., Kahin Center, 640 Stewart Ave., free.

"The Birds," 6:55 p.m.

"Midsummer Night's Dream" (1935), directed by Max Reinhardt, with Olivia de Havilland, James Cagney and Mickey Rooney, 9:30 p.m.

### Tuesday, 12/1

"9-1/2 Weeks" (1986), directed by Adrian Lyne, with Kim Basinger and Mickey Rourke, 7:30 p.m.

"Death Becomes Her" (1992), directed by Robert Zemeckis, with Meryl Streep, Goldie Hawn and Bruce Willis, 10 p.m.

### Wednesday, 12/2

"Raise the Red Lantern" (1991), directed by

of Chicago, Nov. 23, 4:15 p.m., 102 Lincoln Hall.

### Science & Technology Studies

"An Awkward Embrace: Science, Law and Politics," Peter Schuck, Nordlander Lecturer in Science and Public Policy, Nov. 19, 4:30 p.m., Hollis Cornell Auditorium, Goldwin Smith Hall.

### University Lectures

"The Limits of Religious Criticism in the Middle East," Talal Asad, New School for Social Research, Nov. 20, 4:30 p.m., 165 McGraw Hall.

### Women's Studies

"Martha Van Rensselaer (1864-1932), Founder, College of Home Economics at Cornell; Director of Home Conservation Division of U.S. Food Administration in WWI," Kathleen Babbitt, SUNY, Binghamton, Nov. 19, 4:30 p.m., Martha Van Rensselaer amphitheater.

"Frances Perkins (1880-1965), Reformer and First Woman to Serve in the Cabinet, as Secretary of Labor," Winifred Wandersee, Hartwick College, Nov. 30, 4:30 p.m., 120 Ives Hall.

"Eleanor Roosevelt (1884-1962), Reformer, Activist, Columnist, Wife of Franklin Delano Roosevelt, Delegate to the United Nations," Blanche Wiesen Cook, City University of New York, Dec. 3, 7:30 p.m., Alumni Auditorium, Kennedy Hall.

## MUSIC

### Department of Music

Mahler's "Symphony No. 2" ("Resurrection") will be performed by the Cornell Symphony Orchestra, with additional 10 horns, six trumpets and a large percussion group; the Cornell Glee Club and Chorus plus local singers (150 voices directed by Ron Schiller); also soprano Judith Kellock and guest mezzo-soprano D'Anna Fortunato, an eminent singer with a wide experience in concert and opera performances. Conductor Edward Murray directs this free performance Nov. 21 at 8:15 in Bailey Hall. Call 255-4760 for more information.

The opera "Dido and Aeneas" by Henry Purcell will be performed Nov. 22 at 4 p.m. in Barnes Hall. A pre-concert lecture about the opera will be given by Andrew Walking at 3:15 p.m. The opera also will be preceded by Haydn's "Concerto in G Major for Fortepiano, Hob. XVIII:4." Andrew Willis will be the featured soloist with the Cornell Chamber Orchestra, conducted by Sonya Monosoff, the musical director of the afternoon's free event.

Note the following cancellation: DMA recital by Brian Robison, Nov. 23, 8:15 p.m.

### Cornell Folk Song Club

Singer/songwriter Greg Brown will present his often humorous, sometimes angry view of small-town America Nov. 21 at 8 p.m. in Statler Auditorium. Brown achieved his first fame as a regular on Garrison Keillor's "A Prairie Home Companion" on National Public Radio. Advance tickets for the concert are \$8 and are available at Borealis Books, Rebop Records and the Commons Coffeehouse in Anabel Taylor Hall.

### Cornell Jazz Ensembles

The Cornell Jazz Ensembles will give a free concert Nov. 20 at 8:15 p.m. in Barnes Hall.

### Johnson Museum of Art

Nov. 21 at 2 p.m., Noyeh-Ongeh, meaning Mother Earth, will present a performance/discussion of Native American music at the museum. The event has been planned in conjunction with the museum exhibition "Our Land/Ourselves: American Indian Contemporary Artists."

The Circle of Seven student jazz group will perform in the museum Nov. 22 at 3:30 p.m.

### Bound for Glory

Steve Gillette and Cindy Mangsen will harmonize Nov. 22 in three live sets at 8:30, 9:30 and 10:30 p.m. in the Commons Coffeehouse, Anabel Taylor Hall.

Albums from the studio on Nov. 29. Call Phil at 273-2121.

Bound for Glory can be heard every Sunday night from 8 to 11 p.m. on WVBR, 93.5 FM.

## READINGS

### Creative Writing Program

Roberta Silman, fiction writer and Cornell alumna, will read from her work Nov. 19 at 4:30 p.m. in the A.D. White House.

### Medieval Studies

Professors and students will read poems in more than 14 medieval languages Nov. 19 at 4:45 p.m. in the Temple of Zeus, Goldwin Smith Hall.

Continued on page 10

## LECTURES

### Africana Studies & Research Center

"Hunter's Songs of the Manden (Mali): Institutionalizing an Institution," Karim Traore, Bayreuth, Germany, Dec. 3, noon, Hoyt Fuller Room, 310 Triphammer Road.

### Communication

"Communicating to Lead: The Challenge," Steven Warland, communication, Nov. 20, 2:30 p.m., 213 Kennedy Hall.

### East Asia Program

"Impressions of New Writing, Literature, Music, Popular Culture and So Forth During a Period of Transition," Liu Suola, University of Iowa, Nov. 19, 4:30 p.m., 374 Rockefeller Hall.

### Life Course Institute

"Nature-Nurture Reconceptualized: Toward a New Theoretical and Operational Model," Urie Bronfenbrenner, Mark Lenzenweger and Steve Ceci, human development and family studies, Dec. 2, 3:30 p.m., Faculty Commons, Martha Van Rensselaer Hall.

### Music

"Common Tones, Third Relations and Hexatonic Systems," Richard Cohn, University

# WorkPlace

*Sharing human resource perspectives*

Produced by University Human Resource Services

## Addressing the Work and Family Interface

—Nancy Doolittle, editor

Last Thursday Beth I. Warren, associate vice president for human resources, held a brown bag lunch discussion with Cornell faculty and staff. At that discussion she was asked a number of questions addressing workplace issues—from the definition of family to the status of the Classification Review Study; from the benefits Cornell offers or might consider offering, to the roles of senior administrators, supervisors, and managers in promoting some of the initiatives University Human Resource Services is advocating.

As I listened to the discussion, I was struck by one concern in particular: that staff are skeptical about real change taking place unless those in power at the central levels dictate it.

I think this skepticism is, on some level, a natural one. When Beth Warren first arrived on campus, she suggested that University Human Resource Services adopt as its central mission, "advancing the practice of human resource management in the workplace," and noted the ways in which Cornell was becoming a more team-based, less hierarchical organization. Therefore, she suggested, our office should move from a policing role that enforced univer-

sity policy to a consultative role that would work in partnership with senior administration, staff and faculty, and the colleges and units. On the one hand, we were excited about this change in our mission and our roles; on the other, we were skeptical that the broad implications of this mission could be realized throughout the university. Yes, we had known for some time that "business as usual" could no longer keep pace with the changes in society, the nation, and Cornell the organization. But, no, we were not convinced that fundamental changes could occur, either in the way our own office did business, or in how work was done across this complex and decentralized university.

But, as those who have been reading *The Cornell Workplace* these past three months know, changes have been happening. This paper itself has changed; Benefits Services has been restructured as a team-based organization to better serve the Cornell community; Work and Family Services has been integrated into University Human Resource Services in order to enhance the coordination of the many human resource management endeavors that

address the work and family interface. These changes and many others, though initially suggested by Beth Warren, were developed and amplified by the directors and staff involved; none of them would have been realizable without the commitment and efforts of us all working together.

It seems to me that the same principle holds true at the organizational level as well. Especially now, the directions in which Cornell is moving need the support and leadership of senior administrators, faculty and staff, supervisors and managers alike. If Cornell as an organization is to move toward a flatter, less hierarchical model, if continuous quality improvement through the formation of teams and the commitment of individuals is to be one of our goals, and if we are to move toward a decentralized model where University Human Resource Services provides primarily consulting rather than dictating services, then, by definition, these changes cannot be dictated from "on top."

Instead, to go back to Kenneth Blanchard's organizational model of the inverted pyramid, the leaders in an organization need to set the

organizational "tone"—its vision, its directions, and its goals, and then support, guide, and empower their departments and their staff to realize those visions, directions, and goals. In this model, education of both staff and supervisors becomes the primary way of affecting change: education takes longer, perhaps, but the changes it brings can be more intrinsic and more fundamental than those imposed from the outside.

The Work and Family Matrix of Policies, Programs and Practices<sup>1</sup> at Cornell University, printed on page three, is one example of how an organizational tone can be set and how individual policies can be seen in the broad context of work and family issues. In developing this matrix, Marilee Bell, director of Work and Family Services, gathered together the family-friendly policies, procedures, and programs that currently exist at Cornell. Some of these are governed by specific guidelines; some of these have conditions that are mandated by federal or state law; but many of them can be broadly interpreted to cover a wide range of situations, depending on the particular needs of the department, supervisor, or staff member at the time.

(continued on p. 2)

## Over 1,900 Attend Benefair '92

—Susan Boedicker, senior consultant and assistant director, Benefit Services

Benefair '92, sponsored by University Human Resource Services and the Statutory Benefits Office, was held on November 11th and 12th at the Statler Hotel Ballroom. Almost 2,000 faculty, staff and family members took advantage of the opportunity to visit the Benefair exhibits, talk with vendors and ask questions about the university's benefits programs during the two-day event.

Faculty and staff visited Benefair '92 for a variety of reasons. Some wanted to meet staff members from Benefit Services and the Statutory Benefits Offices, who were available to review insurance coverages, answer questions, and assist employees in the annual enrollment process for Select Benefits and health coverage. Others came to meet representatives from various insurance carriers such as Aetna, CIGNA, NYSERS, Metropolitan, TIAA-CREF, UNUM, Fidelity, and Seabury & Smith. (The retirement and health insurance tables

were particularly busy throughout the Benefair) Still others attended the event to get information from Gannett Health Center, Media Services, Public Safety, Cornell Information Technologies, the Cornell Wellness Program, and the Cornell Recreation Club.

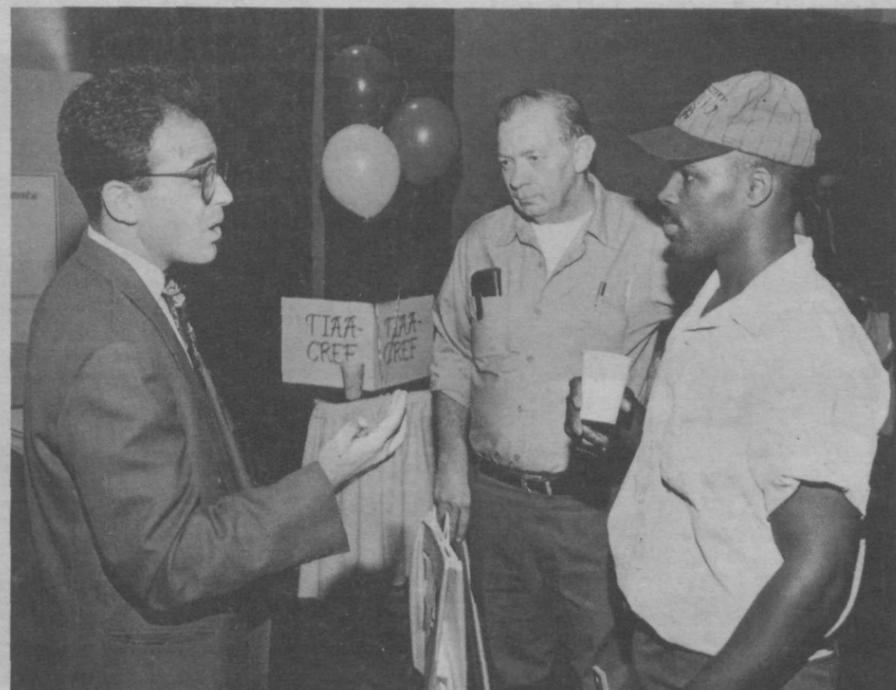
Representatives from University Human Resource Services' Records Administration unit were also on hand, and many faculty and staff took the opportunity to update their home address or check their current status. The Tompkins County Health Department's free blood pressure clinic was also a popular choice, and over 200 faculty and staff attended retirement seminars presented by representatives of Fidelity Investments and TIAA-CREF.

All faculty and staff who attended Benefair had the opportunity to register for one of the many doorprizes given away at the conclusion of Benefair. These doorprizes were

made possible by donations from the insurance vendors, and over

1,750 faculty and staff registered to win.

(continued on p. 2)



Donald J. Mastin (middle), custodian and housekeeper, and Tyrone Dean (right), dishmachine operator, meet with one of the Fidelity representatives.

## Work and Family

(continued from p. 1)

Last week we provided an overview of the many benefits that Cornell offers that are spelled out in very specific terms. These include:

1. The Endowed Health Care Program (80/20 Plan)
2. Statutory Health Coverage
3. The Select Benefits Program for Endowed and Statutory Faculty and Staff
4. Group Life Insurance for Endowed and Statutory Faculty and Staff
5. Accidental Death and Dismemberment Plan (AD&D) for Endowed and Statutory Faculty and Staff
6. Cornell Children's Tuition Scholarship Plan (CCTS) for Endowed Faculty and Staff
7. Cornell University Retirement Plan

(CURP) for Endowed Faculty and Staff (offered through TIAA/CREF)

8. Statutory Retirement Plans (NYSERS and ORP) for Statutory Faculty and Staff
9. Tax Deferred Retirement Savings Plans for Endowed and Statutory Faculty and Staff
10. Workers' Compensation, Short and Long Term Disability
11. Homeowners and Auto Insurance.

But not all of Cornell's family-friendly programs and practices delineate in detail what must and what must not be done. Many of them are services that are directed toward personal and family well-being, and these generally require individuals to take personal initiative and responsibility. They include programs and services such as: the fitness center; the Cornell Recreation Club; family relocation and job search assistance; elder, child, and school-age care;

parenting classes; and support groups. Many of these are available during evening, early morning, or weekend hours as well as during the work week. Others are specific programs that Cornell offers whose link to the work environment is more traditional: the Employee Assistance Program (EAP); the Community Learning and Service Partnership (CLASP); disability management service; crisis intervention; benefits and retirement consultation services; and career development opportunities. For some of these programs, staff need to find time in their non-work hours to participate; for others the university provides release time or notes that participation be counted as "time worked." In most cases it is up to the supervisor and staff members together to negotiate how work and scheduling needs are to be met.

Here, then, is where education in the sound practice of human resource management becomes paramount (this educative role, incidentally, is

one of the purposes of this paper). A learning organization, Beth Warren noted in last Thursday's discussion, "continually expands its capacity to create the results it truly desires." In simple terms, this means examining anew the ways we do work at Cornell, asking not only, "how do we do this better?" but also, "why are we doing this anyway?" It is only after the second question is answered that innovative solutions to the first question are found.

So the Work and Family Matrix includes a broad array of work scheduling arrangements that supervisors, managers, and staff can consider when determining how to best meet both the needs of the department or unit and the needs of the individual: flextime; part time work; alternative work schedules and job arrangements; vacations; sick, personal, and family leaves; disability leaves, leaves of absence and funeral leave.

(continued on p. 3)

## Benefair '92 (continued from p. 1)

Congratulations go to the following doorprize winners:

- |                                    |                   |
|------------------------------------|-------------------|
| \$500 Pyramid Mall Shopping Spree  | Ruth Cain         |
| \$500 Pyramid Mall Shopping Spree  | G. S. Hayward     |
| Bellhurst Castle Weekend for Two   | Debbi Barley      |
| \$200 Wegmans' Gift Certificate    | Renee Cornelius   |
| \$200 Wegmans' Gift Certificate    | Genny Sanford     |
| Fisher Stereo System w/CD Player   | Ken Yourstone     |
| RCA 9" Color TV                    | Vashti Peagler    |
| Pioneer CD Player                  | William Mather    |
| Panasonic Phone/Answering Machine  | Micaela Grill     |
| JVC Walkman                        | Pete Tufford      |
| \$50 Campus Store Gift Certificate | Christine Parks   |
| \$50 Campus Store Gift Certificate | Lori Beyea        |
| \$50 Campus Store Gift Certificate | Donna Green       |
| \$50 Campus Store Gift Certificate | Joel Brock        |
| \$50 Campus Store Gift Certificate | Brenda Creeley    |
| \$50 Campus Store Gift Certificate | Joan Bartlet-Peck |
| \$50 Campus Store Gift Certificate | Bonnie Coffin     |
| \$50 Campus Store Gift Certificate | Thomas Volpicelli |
| Cornell Sweatshirt                 | Charley Pearson   |
| Cornell Sweatshirt                 | Anne Brodie       |
| Banfi's Lunch for Two              | William Anderson  |
| Leather Assignment Book            | Cornell Stinson   |

All in all, whether it was to receive more information on Select Benefits or inquire about retirement, Benefair '92 was definitely a success. If you were unable to attend Benefair '92

and you have questions regarding your benefits or the annual enrollment period now in process, please contact your benefits office (endowed, 255-3936; statutory, 255-4455).



Tammy Kroboth (right), analyst for the finance and data team of Benefit Services, pulls up the individual benefits of three staff members as they look on. From left to right: Kim Swartz, Penny Givin, Wendy Turner

June Franklin, senior benefits consultant and assistant director of Benefit Services, invites staff and faculty to sign up for doorprizes.



(Benefair photos by Doug Hicks)

## Hiring Freeze Guidelines

Endowed and statutory units of the university will initiate a freeze on all external hiring for regular positions, beginning on November 26, 1992 and continuing through January 6, 1993. This action is normally instituted annually prior to the Thanksgiving holiday through New Year's Day, due to the large number of employee holidays during this period.

Since, for many positions, the recruitment process is lengthy, departments may continue to post regular positions during this period. Current regular employees (not including temporary employees) may transfer to other positions, and persons on layoff status may be hired. Deans and vice presidents may approve exceptions to the prohibition of external hires. Departments may continue to hire temporary employees without additional approvals.



A representative from Unum (left) talks to Harold P. Barden, steamfitter and welder. Harold is holding his daughter Sara; his wife Karen is at his left.

## Work and Family

(continued from p. 2)

These give both supervisors and staff considerable latitude to traverse the web of work and family interconnections—for inevitably different workplaces will have different needs, just as different staff members have different needs—and all these needs may vary, depending on the stage in one's life or in a department's history of development.

Over the next year, Marilee Bell will continue to work closely with Benefits Services and the other sections of University Human Resource Services, the three subcommittees of the Work and Family Task Force, and other campus administrators, staff and organizations to refine the matrix printed today. Her focus in this area will be three-fold:

1. to further identify the family-friendly policies, programs, and practices that currently exist, and to

compile a family-friendly index to the *Personnel Manual*;

2. to modify some policies to better address the changing needs of the organization and the workforce;

3. to create policies as needed, in recognition of the strong and complex interconnections between individual and organizational wellbeing, to further promote a family-friendly work environment.

In all these endeavors, Work and

Family Services will strive to set an organizational "tone" that recognizes the inherent worth of all individuals and advances the sound practice of human resource management in the workplace.

P.S. — In recognition of National Family Week and the upcoming Thanksgiving holiday, the staff of University Human Resource Services join me in extending to you, your family and friends best wishes and safe travel.

### Work and Family Matrix of Policies, Programs, and Practices at Cornell University

#### Life Course Needs and Cornell Responses

Financial assistance	Services	Counseling and Information	Time
<b>Individual worker is hired</b> <ul style="list-style-type: none"> <li>Health insurance</li> <li>Disability insurance – short &amp; long term</li> <li>Life insurance</li> <li>Pension and/or other retirement programs</li> <li>Other benefits               <ul style="list-style-type: none"> <li>AD&amp;D</li> <li>Tax-deferred plan</li> </ul> </li> <li>Dental insurance (statutory)</li> <li>Home owners insurance</li> <li>Auto insurance</li> <li>Medical Reimbursement Account</li> <li>Workers' Compensation</li> </ul>	<ul style="list-style-type: none"> <li>Fitness center</li> <li>Employee assistance programs (EAPs)</li> <li>Health risk appraisals</li> <li>Career development opportunities               <ul style="list-style-type: none"> <li>Workshops and seminars</li> <li>Extramural program</li> <li>Employee degree program</li> <li>Tuition aid program</li> </ul> </li> <li>Work &amp; family services</li> <li>Employee health program</li> <li>Cornell Recreation Club</li> <li>Elder care services</li> <li>Child care services</li> </ul>	<ul style="list-style-type: none"> <li>Wellness and health promotion programs</li> <li>EAP</li> <li>Disability management services</li> <li>Benefits consultation</li> <li>Literacy training (CLASP)</li> </ul>	<ul style="list-style-type: none"> <li>Flextime</li> <li>Part time</li> <li>Holidays</li> <li>Vacations</li> <li>Sick time</li> <li>Disability leave</li> <li>Leave of absence</li> <li>Death in family –Funeral leave</li> <li>Other               <ul style="list-style-type: none"> <li>Personal leave</li> <li>Health care leave</li> <li>Jury duty</li> <li>Release time</li> </ul> </li> </ul>
<b>Marriage</b> <ul style="list-style-type: none"> <li>Life insurance</li> <li>Spouse benefits</li> <li>Flexible benefits (Select)</li> <li>Spouse becomes joint annuitant in pension plan</li> <li>AD&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>Family relocation services</li> <li>Job search assistance for spouse (dual career)</li> <li>Work &amp; family services</li> <li>Cornell Recreation Club</li> <li>Elder care services</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive health program</li> <li>EAP</li> <li>Disability management services</li> <li>Literacy training (CLASP)</li> </ul>	<ul style="list-style-type: none"> <li>Vacation</li> <li>Flextime</li> <li>Sick leave</li> <li>Health care leave</li> <li>Personal leave</li> <li>Funeral leave</li> <li>Holidays</li> </ul>
<b>Pregnancy and adoption</b> <ul style="list-style-type: none"> <li>Medical coverage for pre- and postnatal care</li> <li>Coverage for delivery at hospital or birthing center</li> <li>Change in beneficiary coverage for employee benefits</li> </ul>	<ul style="list-style-type: none"> <li>Work &amp; family services</li> </ul>	<ul style="list-style-type: none"> <li>Prenatal courses</li> <li>Information from benefits</li> <li>Benefits consultation</li> <li>EAP</li> </ul>	<ul style="list-style-type: none"> <li>Leave of absence</li> <li>Disability leave</li> <li>Use of accumulated sick leave</li> <li>Vacation</li> <li>Alternative work schedules and job arrangements</li> </ul>
<b>Family care</b> <ul style="list-style-type: none"> <li>Medical coverage for dependents</li> <li>Well-baby care</li> <li>Dependent care assistance plans (DCAPs)</li> <li>Life insurance for dependents</li> <li>CCTS</li> <li>AD&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>Child care</li> <li>Family day care</li> <li>School-age care</li> <li>Breast-feeding on-site</li> <li>Family relocation services</li> <li>Work &amp; family services</li> <li>Cornell Recreation Club</li> <li>Elder care services</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive health program</li> <li>Referrals</li> <li>seminars</li> <li>Support groups</li> <li>Handbooks</li> <li>EAP</li> <li>Parenting classes</li> <li>CLASP</li> <li>Benefits consultation</li> </ul>	<ul style="list-style-type: none"> <li>Leave of absence</li> <li>Flexible work hours</li> <li>Use of accumulated sick leave</li> <li>Vacation</li> <li>Flextime</li> <li>Health care leave</li> </ul>
<b>Divorce</b> <ul style="list-style-type: none"> <li>Step-children coverage in medical plans</li> <li>Divorced spouse and dependents can continue medical coverage for up to 36 months (COBRA)</li> </ul>	<ul style="list-style-type: none"> <li>Work &amp; family services</li> </ul>	<ul style="list-style-type: none"> <li>EAP</li> <li>Benefits consultation</li> </ul>	<ul style="list-style-type: none"> <li>Leave of absence</li> <li>Personal leave</li> </ul>
<b>Retirement</b> <ul style="list-style-type: none"> <li>Pensions</li> <li>Retiree health care; life insurance</li> <li>403b plans and other before-tax savings plans</li> </ul>	<ul style="list-style-type: none"> <li>Post-retirement job opportunities</li> <li>Work &amp; family services</li> <li>Cornell Recreation Club</li> <li>Elder care services</li> </ul>	<ul style="list-style-type: none"> <li>Pre-retirement counseling</li> <li>Newsletters for retirees</li> <li>Benefits consultation</li> <li>EAP</li> </ul>	<ul style="list-style-type: none"> <li>Part-time employment for retirees</li> <li>Sick leave conversion program</li> </ul>
<b>Death</b> <ul style="list-style-type: none"> <li>Spouse and eligible dependents can continue medical coverage</li> <li>Beneficiaries receive life insurance and other benefits</li> <li>Spouse receives at least 50% of remaining benefits</li> </ul>	<ul style="list-style-type: none"> <li>Work &amp; family services</li> </ul>	<ul style="list-style-type: none"> <li>Grief counseling through EAP</li> <li>Benefits consultation</li> <li>Crisis intervention services</li> </ul>	<ul style="list-style-type: none"> <li>Funeral leave</li> <li>Leave of absence</li> <li>Personal leave</li> </ul>



## THE Bulletin Board

### Spelling Error Contest

Two spelling errors were overlooked in the recent re-printing of "STRAIGHT TALK ABOUT ALCOHOL AND OTHER DRUGS" that you received with a recent pay check. Students won prizes for identifying one ("rythms"). Now employees can win prizes for spotting the other. Submit entries with the correct spelling and your name and address and phone, by U.S. mail, to Contest/Health Education, Gannett Health Center, 10 Central Avenue, Ithaca, for a drawing to be held on Dec. 18. Prizes include 1)

Large pizza and salad for two at Souvlaki House 2) 2 free passes to Cornell Cinema; 3) 2 free video rentals from Cornell Video 4) 2 tickets to one of the Ivy basketball games. Read, win and enjoy!

### Presenting Beverly Livesay

Beverly Livesay, Tompkins County Board of Representatives, will be speaking on "The Pay Equity Review in Tompkins County" at a brown bag luncheon, Tuesday, November 24, 1992, in G01 Biotechnology Building, from noon to 1:00 p.m. This presentation is part of the Brown

Bag Luncheon Series sponsored by the Advisory Committee on the Status of Women.

### Calendar of Workshops and Seminars

Another section of Cornell Children's Tuition Scholarship (CCTS) Program has been scheduled for November

19 from 2:00-3:30 p.m. Please refer to the Fall/Winter 1992 *Calendar of Workshops & Seminars* for the course description.

For additional information or to request a registration form, please contact Human Resource Relations & Development at 5-7170.

### November and December Payroll Schedule

	Covered Pay Period	Scheduled Payday	Scheduled Direct Deposit
Nonexempt	10/29-11/11	Thur. 11/19	Fri. 11/20
Exempt	11/12-11/25	Wed. 11/25	Fri. 11/27
Nonexempt	11/12-11/25	Thur. 12/03	Fri. 12/04
Exempt	11/26-12/09	Thur. 12/10	Fri. 12/11
Nonexempt	11/26-12/09	Thur. 12/17	Fri. 12/18
Exempt	12/10-12/23	Tues. 12/22	Wed. 12/23
Nonexempt	12/10-12/23	Wed. 12/23	Thur. 12/24

# CAREER Opportunities

Employment 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 resumé and cover letter, specifying the job title, department and job number, are 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.
- Employment 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 equal-opportunity, affirmative-action educator and employer.
- Career Opportunities can be found on CUINFO

#### Please note the following different procedures for each category of positions:

- **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 Employment Services 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. Employees should include an Employee Transfer Application.
- **As a prominent research institution, Cornell has a diverse need for laboratory, electro/mechanical and computer support.** Individuals with backgrounds in computer science, biology, microbiology, chemistry, animal husbandry, plant science and medical laboratory 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 Employment Services before they can be interviewed for a position. Send a cover letter and resume 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 laboratory related positions.
- **Approximately half of all university openings are for Office Professionals.** Individuals with secretarial, word processing (IBM PC, Macintosh, Wang, Micom), data entry, technical typing, or medium to heavy typing (45-60+ wpm) are encouraged to apply. Employee candidates should submit an employee transfer application and cover letter, if requested, for each position in which they are interested. All external candidates must have a completed signed employment application on file with Employment Services before they can be interviewed for a position. The submitted application and resume will remain active for a period of four months. During this time, you will be considered for any appropriate openings for which you are competitively qualified. Requests for referral and/or cover letters are not accepted from external candidates unless specified in the ad. Qualified applicants will be invited for a preliminary interview at our EHP office. If you are currently available for employment, you may want to consider temporary opportunities at the University. Please contact Karen Raponi at 255-2192 for details.
- **All external candidates should submit a signed employment application which will remain active for a period of four months.** During this time, you will be considered for any appropriate openings for which you are competitively qualified. Requests for referral and/or cover letters are not accepted from external candidates unless specified in the ad. Qualified applicants will be invited for a preliminary interview at our EHP office. If you are currently available for employment, you may want to consider temporary opportunities at the university. Please contact Karen Raponi at 255-2192 for details.

### Professional

**Hotel Programmer/Analyst (PT4504) Level 34**  
**Statler Hotel-Endowed**  
**Posting Date: 11/12/92**

Design, develop, modify, maintain, analyze, and document application software in support of the major hotel systems. Serve as primary programming consultant. Coordinate hotel's networking with IBM project members. Investigate and evaluate outside hardware. Flexible nights and weekends.

**Requirements:** Bachelor's degree or equivalent combination of education and experience. 3-5yrs. computer system and programming experience. Extensive micro through mainframe knowledge including experience in the design of major systems. Knowledge of commonly used programming languages such as Cobol, P1/1, and Natural as well as more technical languages such

as Basic and Assembler; Knowledge of hotel systems highly desirable. Send cover letter and resume to Sam Weeks.

**Systems Programmer/Analyst III (PT3803) Level 34**  
**Computer Science-Endowed**  
**Posting Date: 9/24/92**

Maintain, install, integrate and create computer programs in the computing facility of the design research institute. Install new systems and applications from commercial and public domain sources on sun workstations. Design, implement and document user interfaces using x-window systems. Provide consulting and support.

**Requirements:** BS or equivalent in computer science, mathematics, or equivalent combination of education and experience. 2-3yrs. experience with common LISP, writing C programs on UNIX and X-window system. Familiarity with Emacs text editor; GNU Emacs LISP; and user interface design and

modification. Send cover letter and resume to Sam Weeks.

**Programmer/Analyst II (PT4507) Level 33**  
**Human Resource Information Systems/Records-Endowed**  
**Posting Date: 11/12/92**

Under general supervision, design, develop, and maintain software in support of University Human Resource Services. Position will be for approximately 18 months.

**Requirements:** Bachelor's degree or equivalent with computer related coursework required. Minimum of 1-2yrs. of related experience. Knowledge of applications for interactive administrative systems, database management systems, and desktop and department level hardware systems required. Experience with microcomputer systems (specifically Macintosh) essential. Experience with IBM mainframe systems, databases (specifically ADABAS), and microcomputer interfaces preferred. Knowledge of at least two lan-

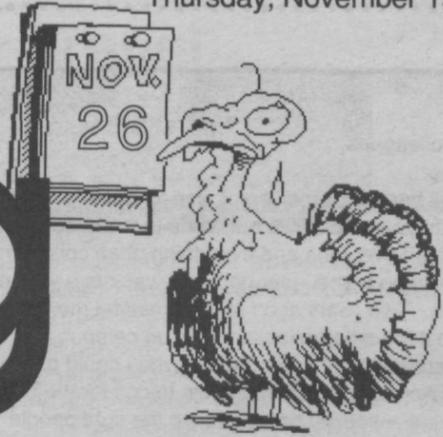
guages or applications development systems-ADABAS/Natural, SAS, 4th Dimension. Demonstrated working knowledge of word processing, spreadsheets, database packages and other microcomputer software tools (Macintosh). Familiarity with human resources and benefits administration systems desirable. Send cover letter and resume to Sam Weeks.

**Systems Programmer/Analyst II (PT4501) Level 33**  
**Computer Science-Endowed**  
**Posting Date: 11/12/92**

Provide critical technical support to 300 faculty, grad students, researchers and staff using a large, complex and rapidly changing research facility. Assist in maintaining, installing, integrating and programming computer systems. Provide systems programming support for UNIX-based workstation and server systems. Assist in the installation and upgrade of operating systems and commercial software. Respond to

# Networking

AN EMPLOYEE NEWSPAPER BY EMPLOYEE VOLUNTEERS FOR THE CORNELL COMMUNITY WORLD WIDE.



## DEDICATED SERVICE AWARD

### Jim Allen, MVR/Human Ecology

He has the respect and admiration of his coworkers at Martha Van Rensselaer Hall. Jim Allen is the Head Custodian, supervising a staff of just over a dozen, providing the invaluable daily support that keeps the workplace clean, tidy, attractive, and functional. Jim has spent the past six years at Van Rensselaer; he has been working for Cornell since 1976.

"Jim, over the years has been more than exemplary in his efforts to assist Faculty and Staff in the College of Human Ecology" according to Maureen Beardsley, a Statistician who nominated Jim Allen for the Dedicated Employee Service Award.

"His willingness to lend a helping hand in situations far beyond the call of duty has endeared him to all of us in the College," she added. "He is continually cheerful—even under pressure—with ingenuity and professional creativity [that] has rescued many of us from more than one potential disaster," she continued.

Others in the College echo Maureen's sentiments about Jim Allen.

"When we have College 'events' it is Jim who puts in overtime to prepare facilities to make us look good," according to Patti Papapietro. "He has a good sense of what will work, and is often helpful to us in the planning stages as well as in execution."

Lucy Brown of Student Services adds, "I have known Jim Allen for quite a few years. Many times while working on an event together, we have found ourselves in some difficult situations. He has remained the ever even-tempered, helpful individual. Never once have I known him to step back and allow headstrong people to drown in their own pit of errors. He

would step into the uncomfortable situation and do everything possible to avoid the oncoming catastrophe. He is a rare person. Cornell University is very fortunate to have Jim Allen as an employee."

Kathy Mayes, the Assistant Registrar notes: "Jim Allen is the 'behind the scenes' person that anyone would love to have available for support in time of need." She continued: "When it is time to set up for college registration or add/drop (both events involve the whole student body and more), Jim is always very helpful, concerned and does an excellent job to see that details are taken care of and deadlines are met.

"Human Ecology, the faculty and staff in MVR are indeed fortunate to have Jim Allen, an exceptional example of a 'dedicated' employee," she said.

"Jim Allen and his ever-faithful staff make crucial contributions to the welfare and success of this college," according to Registrar Mary Rhodes. "Because they work early and late hours, many people do not realize the contributions that Jim makes through his leadership and hard work. Nonetheless, it is frequently the case that Jim makes the decisive contribution to our facilities and support to assure that our events are successfully and professionally presented. Jim is a professional of a high order, and we very much appreciate his contributions to our college," she continued.

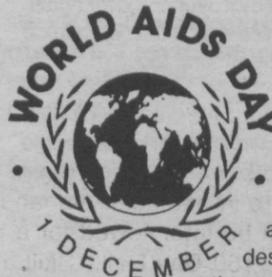
Maureen Beardsley sums up the acclaim Jim Allen has from his coworkers: "Seldom heard to say 'no,' he more than earns the nomination of Dedicated Employee."



Jim Allen

photo by Doug Hicks

## World AIDS Day 1992



On Tuesday, December 1, Cornell University will join millions of people around the globe in marking World AIDS Day. World AIDS Day is an annual day of observance designed to expand and strengthen the worldwide effort to stop AIDS. Its goal

is to open channels of communication, promote the exchange of information and experience, and forge a spirit of social tolerance. World AIDS Day provides an opportunity for talking about HIV infection, caring for people with HIV infection and AIDS, and learning more about AIDS. The only international day of coordinated action against AIDS, it is now a yearly event in most countries.

During the week of December 1, Cornell AIDS Action is asking every Cornell staff and faculty member and every student to do *something* to let people know that *you* are a part of the struggle against AIDS. Only through our joint effort can we make the changes that are necessary to support and protect our friends, our loved ones, our co-workers, and ourselves.

### WHAT CAN YOU DO?

- Make sure you understand the facts about AIDS, and help others to do the same.
  - Schedule an HIV/AIDS workshop for your office or group, or order brochures from Cornell AIDS Action (Gannett Health Center, 255-4782).
  - Tear out this article and post it on a bulletin board, in the hallway, on a bathroom door; show it to your co-workers, to your family.
  - Join the "Ask Me About AIDS" Network, an informal network of hundreds of people in all kinds of jobs at Cornell who are willing to let others know that, though you're not an expert, you are *open* to talking about AIDS. (Call Cornell AIDS Action for more information.)
  - Join people all over the country who are wearing red ribbons for AIDS awareness. Make some for your friends. (5" piece of ribbon with safety pin)
  - **Attend World AIDS Day events:**
    - Tuesday, December 1, 12 noon, Sage Chapel—Interfaith Service of Prayer and Remembrance for World AIDS Day
    - Tuesday, December 1, 5:30, Ithaca Commons—Candlelight Vigil for World AIDS Day
    - Saturday, December 5, 8 p.m., Memorial Room, Willard Straight Hall—"Positively Aware," AIDS Benefit Concert
- This World AIDS Day—and every day—join the worldwide effort to stop AIDS.

## LEADERSHIP LEADS

### Involvement

by George Peter

"The same handful of individuals do all the work for every project or program." "I try to get help but always end up doing it myself." How often have you heard these laments and other similar complaints? You can rest assured that they come from one who needs training in leadership.

A major element of leadership is learning how to motivate others. It happens best by applying basic skills and concepts. To dictate assignments is a least effective technique. Much better is to **involve** the group in arriving at who best is qualified, has the time and is willing to take on specific assignments. It helps if you have done your homework and researched the talents, time and potential of each group member.

The next step is to **involve** the group in agreeing to a fair distribution of the work. When people are involved in the planning process, there is much greater likelihood that they will carry out their fair share of

the work. To borrow a modern over-worked phrase, they have been empowered.

All of this, or any kind of leadership skill, is much easier to define than to do. But the results are worth the effort to involve as many people as possible in outlining a project. Not only should people be involved in the assignment process but equally as well in the planning of the project itself.

At the new General Motors, subsidiary Saturn plant in Tenn., each work team is responsible for its own budget and hiring. And the system is working well.

These new concepts of management are healthy for all organizations but especially for any volunteer group. They are ideas that are in harmony with the basic nature of human beings. These techniques generate cooperation instead of the "it's us vs. them" atmosphere.



## EMPLOYEE SPOTLIGHT: GAIL KOLBE

by Jodi Zajac

Say Hello to Gail Kolbe. Gail's position at Cornell is Development Assistant with the Public Affairs office in the College of



Architecture, Art and Planning. As a Development Assistant, Gail coordinates things such as reunion and homecoming events for the college and assists in the university's campaign efforts. You will find Gail in the west end of Sibley, and always with a bright smile.

Gail recently moved from Cape Cod in search of a stable job market. Prompted by the advice of an Ithacan relative to pursue Cornell, Gail packed up her belongings to seek a new direction. With some luck and perseverance, a position came through. Gail has built an interesting resume prior to Ithaca: she has been a junior high physical education teacher,

swim coach, ski and tennis instructor, marketing coordinator for a real estate and construction company, and a project manager for a marketing and sales firm which converted seasonal boat slips into dockminiums.

Although Gail has only resided in Ithaca since January, she has been involved extensively with the community. When the new Sciencenter was organized and constructed, Gail served as a volunteer. She also was involved behind the scenes of the build: because of her marketing background, Gail helped with the marketing plans and assisted in organizing events such as the Egg Drop. You may have seen Gail on either of the two build days, in the skilled workers tent using a router, skill saw, and table saw. In addition to lending her skillful hand, Gail also volunteered at the build site First Aid station.

In continuing her efforts in being an active member of the community, Gail is currently serving on the Board of Directors of the American Lung Association. Gail also has been recently active with Habitat for Humanity, with the hope of having her own home built as a fundraiser for the organization. By working at the College of Architecture, Art and Planning, Gail became familiar with the in-house talents available there, and decided to recruit several architectural students to help her design the dream house.

The university is very fortunate to have such a dedicated and caring person as Gail Kolbe. Gail, the *Networking Board* salutes you and your efforts as a volunteer to the community. Please congratulate Gail Kolbe as this week's *Networking Employee Spotlight!*

## Safe Winter Travel

by Crime Prevention Officer, George Sutfin

Again, it is the time of the year for rain, snow, ice and frigid temperatures, which will make walking and driving treacherous. Public Safety would like to help you prepare for the winter travel by offering the following tips.

For safe, comfortable walking during the severe weather, a person should wear warm, comfortable, loose fitting clothes, to include a hat and gloves. Boots should be insulated with flat, treaded soles.

Both the driver and vehicle must be prepared for winter driving. Prior to the foul weather, the vehicle should be checked to make sure the following are in working order: Electrical system, brake system, tires (good snow tires or all season), exhaust, heating and cooling systems, and windshield wipers and washers. The vehicle should contain a winter driving kit consisting of:

<b>Tire Chains</b>	<b>Flares</b>
<b>Snow Shovel</b>	<b>Bag of Abrasive Material</b>
<b>Extra Clothing</b>	<b>Flashlight</b>
<b>Traction Mats</b>	<b>Blanket</b>
<b>Ice Scraper</b>	<b>Cloth or</b>
<b>/Snow Brush</b>	<b>Paper Towel</b>
<b>Booster Cables</b>	

Drivers must prepare themselves both mentally and physically. Mentally, they should be prepared to leave early for their destinations, and be alert at all times. The driver must dress comfortably and avoid bulky or tight clothing that will restrict movement.

The most important driving technique is to slow down and be cautious. Acceleration and braking should be slow and smooth.

For more information, you may attend one of Public Safety's Safe Winter Driving Seminars or contact the Crime Prevention Unit at Public Safety. Any group interested in scheduling a seminar should also contact this unit at 5-7404.

## COST SAVINGS COLUMN

### Correction Notice about Computers

*Editor's Note: Unfortunately, the article called "Computers" that was printed in Networking's "Cost Savings Column" on Thursday, September 24, 1992, contained some erroneous and incomplete information. Working with the Outreach Services staff of Cornell Information Technologies (CIT), we have put together a follow-up story to provide you with a corrected, more complete version of this information.*

In the following correction notice, each error that appeared in the "Computers" story in the Cost Savings Column is italicized and the corrected information appears below it. We've even added some more ideas about how you can save money when you use computers. If you have any questions about the information in this article, please contact the CIT Service HelpDesk by visiting room 121 in the Computing and Communications Center, calling 255-8990 or sending electronic mail to help\_desk@cornell.edu.

*Use PostScript programs for all Apple laser printers and distribute to departments. This cancels wasting a sheet of paper for each printer to print the logon each time the printer is turned on.*

It is not necessary to use PostScript programs to prevent your Apple laser printer from printing a test page when you turn it on. To stop the printing of a test page, check the LaserWriter utility program that comes with your Apple laser printer for an easy option that allows you to disable the test page when you turn on your printer (this utility comes with most Apple laser printers).

*Refill laser cartridges either in-house or through local services.*

Many laser printer manufacturers—including Apple and Hewlett Packard—make statements in their product literature and warranty information that discourage the use of re-filled toner cartridges in their printers. Use of refilled cartridges can jeopardize your printer's warranty and lead to costly repair bills should the cartridge be determined as the cause of malfunctioning. In fact, Apple Computer does not recommend refilled toner cartridges under any circumstances for use in the newer Apple LaserWriter IIx and IIg printers. The printer product information and manuals specifically state that their use will compromise the quality these printers' shade-of-grey printing capability.

CIT Repair (formerly MOS Repair) main-

tains that your laser printer will perform better, last longer, and present you with fewer maintenance problems if you use only factory original toner cartridges and follow the care and maintenance requirements outlined by its manufacturer. *Install autosave on all computers.*

This is probably a reference to the Autosave utility that was once bundled with WriteNow, a word processing program for the Macintosh sold through Cornell's Campus Store. Using Autosave, you could set up a time interval for your Macintosh to automatically issue the Save command, regardless of the application you were using (e.g. you might set it up so that it saved your word processing file every ten minutes). The concept of using a utility that automatically saves changes at regular intervals is a good one. If you forget to save your changes or your computer crashes, a utility like Autosave may save you countless hours of retyping.

Autosave is no longer bundled with WriteNow, but similar utility programs are available on the computer software market. In addition, CIT's Software Lending Library (SLL) has public domain and shareware utilities that automatically save changes in your files. The SLL, a resource for all members of the Cornell community, is open from 9:30 am to 4:30 pm, M-F, and is located in room 124 of the Computing and Communication Center (phone 255-8991).

CIT currently recommends using Microsoft Word 5.0 for word processing on the Macintosh. And fortunately—Word 5.0 has a feature you can set to automatically save changes you've made to a file. Microsoft Word 5.0 is available with an educational discount at Cornell's Campus Store.

*Purchase toner cartridges, refilled locally at a saving above MOS cartridges of \$40 each.*

People buy refilled cartridges in an attempt to reduce their expenses; this motivation can backfire if subsequent laser printer repairs—both during and after the expiration of the manufacturer's warranty—can be traced to the use of a refilled cartridge. CIT Repair (formerly MOS Repair), an authorized repair center for many manufacturers' laser printers, actively discourages the use of refilled cartridges for reasons noted above.

### Cornell Dining Cash ala carte Facilities Thanksgiving Schedule

	Closing	Reopen
Hughes	1:45 pm Wed., 11/25	7:00 am Mon., 11/30
Martha's	1:30 pm Wed., 11/25	7:00 am Mon., 11/30
Theory Center	2:00 pm Wed., 11/25	7:00 am Mon., 11/30
Malott Hall	2:30 pm Wed., 11/25	7:00 am Mon., 11/30
Straight Scoop	2:30 pm Wed., 11/25	9:00 am Mon., 11/30
Straight from the Oven	2:30 pm Wed., 11/25	4:30 pm Sun., 11/29
The Ivy Room	2:30 pm Wed., 11/25	4:30 pm Sun., 11/29
Trillium	2:30 pm Wed., 11/25	7:00 am Mon., 11/30
Commons Coffee House	2:30 pm Wed., 11/25	8:30 am Mon., 11/30
Dial L*U*N*C*H	3:00 pm Wed., 11/25	10:30 am Mon., 11/30
Big Red Barn	2:00 pm Wed., 11/25	8:00 am Mon., 11/30
Alfalfa Room @ Warren Hall	3:00 pm Wed., 11/25	7:30 am Mon., 11/30

### The Advisory Committee on the Status of Women Brown Bag Luncheon Series

presents

## Beverly Livesay

Tompkins County  
Board of Representatives

### "The Pay Equity Review in Tompkins County"

Tuesday, November 24, 1992  
G01 Biotechnology Building  
Noon to 1:00 pm

Luncheon can be purchased in the foyer of the Biotechnology Building

## UNCLASSIFIED ADS

All ads will be printed on a FIRST COME, FIRST SERVED basis. They will be printed in the order received, AS SPACE PERMITS. The Editorial Board of *Networking* has established the following guidelines for unclassified ads.

- All ads must be sent through CAMPUS MAIL to **Networking Unclassifieds**, c/o Flora Karasin, 272 Roberts Hall.
- All ads must include items for sale of a **personal nature only**, such as: automotive, household items, clothing, land, homes, etc. Ads that promote work outside of the University (ie: consulting, office help, employment, other services, etc.) will not be accepted.
- All ads must include your **name and campus phone number**.
- All ads must be limited to **20 words or less**.

- Only one ad per person per issue** will be accepted.
- If your ad does not appear in the upcoming issue, it is your responsibility to **re-submit** it (by the appropriate deadline) for the next issue. Unprinted ads will not be saved by the *Networking* staff for future issues.

**Any ads that do not comply with these guidelines will not be printed.** The *Networking* staff retains the right to review and reject any ads that are submitted for publication. *Networking* is not responsible for typing errors or lost ads.

### FOR SALE:

Commodore 128 computer, 2 disk drives, mouse, printer, mouse printer, and more. Please call evenings and ask for Jim, 564-7227.

1987 Plymouth/Mitsubishi Colt 91K, engine/body/interior GREAT! Slight damage rear bumper. Runs very well. \$990. Frank 5-5080 or 272-4150.

Mobile Home, 1976 Vista, 3 bedrooms, 14X70, set up in park, awning. Call Donna 5-6848 or 347-4967.

Goose down comforter, twin size, with custom duvet cover, \$70. Call Margie 5-2902.

1984 Nissan Pulsar, 5-speed, sun-roof, red, \$2600 OBO. Call Pat M-F 8-4:30 5-3622 or 257-2668 evenings or weekends.

5 BR, 2 1/2 baths, 2 fire places, 2 car garage, steal at \$149,000 in NE Ithaca area. Call 5-7288 or 257-0515.

Wood Stove Huntsman 24" wood box, \$225. King-size waterbed, headboard bookcase, best offer. Linda 5-5325.

Electric ride-on car "red vette". Great Xmas gift for child over 3 years, under 60 lbs, \$75. Ellen 5-6708 or 273-4379.

Queen size, semi-wave water bed with frame, good condition. \$75 or best offer. Carrie 5-4987 or 533-4483 after 5:00p.m.

### FOR RENT:

Beautiful 2-BR 2 bath half-house in Fall Creek, hardwood floors, appliances, fenced yard. \$725/mo. plus. Call Philip Argyres 5-4750.

### WANTED:

Roommate wanted. 3 bedroom house, 15 miles from campus in Mecklenburg on a bus route. Must have references. Call 5-9395.

"Gravity Boots" The apparatus that one can use to hang by one's ankles/feet from a bar attached to a wall or ceiling. Gary 5-0493 or 835-6675.

## CORNELL RECREATION CLUB

Hey, hey, hey! Have we got some great trips planned for you! Why not consider giving that someone special a Christmas gift of travel. Better yet—treat yourself! Here's the scoop on a few of CRC's upcoming trips:

### THE NUTCRACKER AT LINCOLN CENTER 12/29/92:

Spend a wonderful afternoon exploring New York City, then get ready for the 100th year of *The Nutcracker*. CRC will be leaving Ithaca at 7:00 a.m., arriving in New York City at approximately 12:30 p.m., and attending the 6:00 p.m. performance of *The Nutcracker*. There are only a few tickets left on this exciting trip. The price is \$80.00 for members, \$85.00 for non-members. Call the office at 255-7565 right away to reserve your spot.

### A MARDI GRAS GALA/MURDER MYSTERY EVENT 2/5-7/93:

The Pocono Manor Inn in Pocono Manor, PA invites you to a fun-filled weekend in the country, interrupted, if you please, by MURDER - MYSTERY - MAYHEM. Be both suspect and sleuth as you interact with professional actors in an attempt to untangle the web of murders that occur before your very eyes. At the Pocono Manor Inn everything will be perfectly executed, including some of the guests! There will be a grand Mardi Gras Gala Ball—so find a costume and enjoy this fabulous evening. There is wonderful cross country skiing on the property, or if you love downhill skiing, it's available only a few miles away. Here is what this

fabulous weekend includes:

- \*Deluxe accommodations
- \*Breakfast and Dinner daily
- \*Cocktail Reception Friday evening
- \*Champagne Party Saturday evening
- \*Mardi Gras Gala Ball
- \*Prizes for Best Costumes
- \*A Murder Mystery Living Theater Experience
- \*Lots of special activities
- \*Deluxe motorcoach transportation

Get rid of those mid-winter blahs and join the CRC gang on the Murder Mystery Weekend. The price is \$275.00 per person, double occupancy.

### WALT DISNEY WORLD/PREMIER CRUISE 3/8-15/93:

Here's a vacation most people only dream about. Filled with all the warmth of togetherness and the wonder of discovery you can only get from the Disney and the Official Cruise Line of Walt Disney World. Premier's Cruise and Disney vacation is two incredible vacations in one. The first four days you will spend choosing between the wonderful variety of things to do in the Walt Disney World Resort area. Admission tickets are included for EPCOT, MAGIC KINGDOM, and MGM Studios. Your cruise sets sail from Port Canaveral for a wonderful three day trip to the Bahamas. Please call the CRC office for all of the details on this vacation of a lifetime.

## Media Services

ON-CAMPUS SPECIALISTS FOR ALL YOUR COMMUNICATION AND PRINTING NEEDS!

### Graphic Design

255-7673

First impressions mean a lot. Our design studio can bring your ideas to life with colorful graphics and creative design concepts. We offer a complete range of graphic design services that can be tailored to meet your needs and budget.

brochures  
annual reports  
magazines  
research publications  
special event packages  
programs  
logos

posters  
newsletters  
letterheads  
business cards  
certificates  
calligraphy

### Computer-generated Slides and Prints

We offer high-quality slide design and production. We use the latest in computer-graphic technology to create graphics that can provide new dimensions for your visual presentations.

1- and 3-dimensional still images for:  
35 mm text slides  
35 mm image slides

Hours: Monday through Thursday 8-12 and 1-5,  
Friday 8-12 and 1-4

1160 Comstock Hall

### Exhibits and Signs

255-2088

An attractive, informative exhibit can do wonders for your program. A combination of striking graphics and text can convey a great deal of information in a very short time. Our exhibit shop produces a variety of exhibits for use at meetings, conventions, workshops, and other places where large audiences gather. We design and produce signs of any size for both interior and exterior use. We use both pressure-sensitive vinyl graphics and screen printing on a variety of materials.

interior and exterior signs  
table-top signs and exhibits  
multimedia exhibits  
pressure-sensitive vinyl graphics  
vehicle lettering  
banners  
screen printing

Hours: Monday through Thursday 8-12 and 1-5,  
Friday 8-12 and 1-4

5 Cornell Business and Technology Park

### Printing and Computer-Aided Publishing

255-3157

Our printing and copying unit operates a full-service print shop. We produce a complete range of printed material, from simple photocopying to multicolor printed publications. The computer-aided publishing unit provides quick and economical service for the client who does not need the full services of our editorial and design staffs.

color printing  
folding  
collating  
theses  
addressing  
mailing  
punching  
offset  
pads  
quick copy  
photostats  
ups  
fax service  
bindery service

letterheads  
envelopes  
newsletters  
disk conversion  
scanning  
résumés  
word processing  
graphs  
newsletters  
overheads  
postscript laser type  
telecommunications  
text enhancement  
formatting

**New** Networked Electronic Publishing  
Call for details.

Hours: Monday through Thursday 8-4:30,  
Friday 8-4

B10 Martha Van Rensselaer Hall

CORNELL  
UNIVERSITY

SERVING THE CORNELL  
CAMPUS COMMUNITY

## Tompkins County Health Department

### Cornell University

### Open Blood Pressure Clinics

Date	Site	Time
<b>NOVEMBER 1992</b>		
19	Research Park—Langmuir Lab First Floor Conference Room	9:00 a.m. - 11:00 a.m.
23	Graphics Arts Office	8:00 a.m. - 10:00 a.m.
23	Alumni House 626 Thurston Ave.	10:15 a.m. - 11:45 a.m.
<b>DECEMBER 1992</b>		
1	Statler Hotel/School Statler Dartmouth Room	1:00 p.m. - 4:00 p.m.
2	Snee Room 4144	10:00 a.m. - 11:30 a.m.
8	Mallott Room 224	12:30 p.m. - 2:00 p.m.
9	Public Safety Barton Hall	7:00 a.m. - 9:00 a.m.
9	Research Park 20 Thornwood	10:00 a.m. - 11:30 a.m.
10	Purchasing/Traffic Bureau Purchasing, 120 Maple Ave.	9:00 a.m. - 12:00 noon
10	Day Hall Board Room	1:00 p.m. - 4:00 p.m.
15	Newman/Wilson Newman Wilson	10:30 a.m. - 12:00 noon 1:00 p.m. - 3:00 p.m.



software, hardware and network emergencies. Provide software support for administrative MAC systems.  
**Requirements:** BS degree or equivalent in mathematics or computer science. 1-2yrs. with systems administration and programming (UNIX) on large, networked multi-vendor computer systems. Must have good planning and organizational skill. Experience with networks and distributed computer (TCP/IP, Ethernet, NFS and/or NIS) is highly desirable. Mac systems and software experience also desirable. Send cover letter and resume to Sam Weeks.

**Applications Programmer/Analyst I (PT4207) Level 32**

**Mechanical and Aerospace Engineering-Endowed**

**Posting Date: 10/22/92**

Develop a large program in support of a research group. Write and maintain code to implement additional functionality in existing programs, new applications and system utilities. Project will involve interactive computer graphics, database concepts, distributed processing and use of the Cornell supercomputer. Maintain workstation and network facilities.

**Requirements:** BS degree or equivalent in a technical field with experience in FORTRAN and C; UNIX; and color graphics. Experience with data structures helpful. Send cover letter and resume to Sam Weeks.

**TV Producer/Director (PA4602) HRII**

**Media Services-Statutory**

**Posting Date: 11/19/92**

Develop, write, produce, direct and supervise editing of videotaped programs for the Educational Television Center. Provide creative supervision of TV/film production staff as necessary. Provide counsel to faculty and clients in all areas of television and film production.

**Requirements:** Bachelor's degree or equivalent in TV/film production required. 5yrs. experience in producing, writing, directing and editing educational, documentary television programs. Minimum 2-3yrs. of management experience is necessary. Proven ability in securing grant monies for educational television and film. Strong demonstrated writing skills. Ability to interface easily with all levels of faculty and staff. Ability to work under pressure and difficult time frames. Send cover letter and resume to Cynthia Smithbower.

**Senior Systems Analyst (PT4311) HRII**

**Albert R. Mann Library-Statutory**

**Posting Date: 10/29/92**

Work with a team to develop innovative solutions in the creation of the Electronic Library. Provide consultative support and programming expertise. Provide training for information professionals, library staff, and other technicians in the specification, design, implementation, and support of computing systems for desktop delivery of scholarly information. Assist research teams with consulting support while they explore the frontiers of electronic delivery systems.

**Requirements:** BS degree or equivalent with computer related courses.

5-7yrs. related experience. A minimum of 2yrs. experience with local area networks and telecommunications software. An in-depth knowledge of the UNIX operating system and C programming and shell-scripting. Experience supporting software development. Experience with computer systems management, network management and multi-user systems highly desirable. Send cover letter and resume to Sam Weeks.

**Research Support Specialist I (PT4606) HRI**

**Food Science-Statutory**

**Posting Date: 11/19/92**

Provide technological support to an extensive research program in the area of extrusion processing. To assist in the planning, design, conducting, and analyzing experimental results in the area of food processing and engineering.

**Requirements:** Bachelors degree or equivalent in food sciences/engineering required. Master's preferred. Minimum 2yrs. of related experience required. Send cover letter and resume to Sam Weeks.

**Research Support Specialist II (PT4609) HRI**

**Agricultural Economics-Statutory**

**Posting Date: 11/19/92**

Research the applicability and environmental impact of energy and natural resource technologies in developing countries. Evaluate economic feasibility of new technologies. Prepare manuscripts for professional journals.

**Requirements:** Master's degree or equivalent required in resource or environmental economics. Training and/or experience in environmental and resource economics, business, statistics and international relations. Experience with computers desired. Send cover letter and resume to Sam Weeks.

**Editorial Associate (PT4611) HRI**

**Chemistry-Endowed**

**Posting Date: 11/19/92**

Perform administrative duties relating to the content of the international journal "Accounts of Chemical Research". Coordinate, monitor, and maintain a timely manuscript flow from solicitation, to peer review, and final publication. Check manuscripts for adherence to policies. Communicate with authors, reviewers, editorial staff and publisher. Prepare surveys and reports.

**Requirements:** BS or equivalent in chemistry, MS desirable. Familiarity with modern chemistry and science library. Editorial experience helpful. Send cover letter and resume to Sam Weeks.

**Workstation Analyst (PT4502) HRI**

**Human Ecology Administration-Statutory**

**Posting Date: 11/12/92**

Provide support for a 500 user base including hardware and software support, testing, evaluation and purchasing. Provide technical assistance and decision support for administration, maintenance and troubleshooting of a large local area network. Responsible for planning, design, and support of a CAD facility. Supervise computing technicians.

**Requirements:** Bachelor's degree or equivalent experience in technical field required. 3-5yrs. experience with a wide variety of peripheral equipment. Knowledge of PC and Mac computers, operating systems and applications software. Able to work with administrators, faculty and other technical professionals in complex college environment. Good analysis and communication skills. Strong service orientation and interest in support technology. Minimum 2-5yrs. related experience. Send cover letter and resume to Sam Weeks.

**Assistant Director (PA4501) HRI**

**Financial Aid/Student Employment-Endowed**

**Posting Date: 11/12/92**

Responsible for the Perkins student loan program, university long-term loan programs, the federally insured/Stafford loan program, and parent PLUS, ABLE and SHARE loan programs.

**Requirements:** Bachelor's degree or equivalent; Master's degree preferred in student personnel, higher education administration, business

or related fields. 1-3yrs. in financial aid administration or related field. Experience in staff supervision required. Send cover letter and resume to Cynthia Smithbower.

**Research Support Specialist II (PT4405) HRI**

**Section of Ecology and Systematics-Statutory**

**Posting Date: 11/5/92**

Conduct non-lethal biochemical and ultrasound analyses of fat and protein content of swallows. Develop and maintain data bases in PC environment. Supervise and assist in mist-net capture of swallows and monitoring of breeding success in hundreds of nests. Supervise student assistants in analysis of aerial insect samples. Prepare, analyze, and synthesize data for publication. Construct and maintain laboratory equipment.

**Requirements:** B.S. degree or equivalent in biology or related field required. 3-5yrs. of experience in several of the following: field ornithology (including mist-netting and banding); gas chromatography; ultrasound fault-detection; computer programming and data base management; insect sampling and identification. Send cover letter and resume to Sam Weeks.

**MIS System Programmer (PT4204) HRI**

**ILR-Resident Division-Statutory**

**Posting Date: 10/22/92**

Work on special administrative information projects. Analyze function and performance requirements. Write and maintain special applications programs, document programs and train staff to use programs as necessary. Diagnose and fix problems with applications programs and procedures. General consulting, problem solving, trouble shooting and referral for administrative users. Advise and assist users in feasibility and design of computer projects. Develop skills and experience in programming and operating environments.

**Requirements:** Bachelor's degree or equivalent experience and 5-6yrs. experience writing administrative applications. Extensive experience using IBM PC'S or compatibles, Macintoshes and UNIX operating systems. Extensive experience using LOTUS, DBASE and other spreadsheet and database management systems. Expert knowledge of database concepts and systems such as ADABAS, SQL, Informix, Oracle and object oriented programming. Ability to handle sensitive and confidential data. Send cover letter and resume to Sam Weeks.

**Executive Staff Assistant II (PC4110) HRI**

**Plant Breeding and Biometry-Statutory**

**Posting Date: 10/15/92**

Provide staff assistance to the executive director of International Service for the Acquisition of Agribiotech Applications. Prepare and write highly sensitive reports; coordinate telecommunications; prepare accounting reports; train, supervise, and evaluate office staff; coordinate schedules; develop policies; maintain confidential records. Available as long as funding lasts.

**Requirements:** BS degree or equivalent in business or related international area. 5-7yrs. related experience. Requires independent judgement. Skillful communication techniques. Originality and accounting skills. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

**Research Support Specialist I (PT3605) HRI**

**School of Chemical Engineering-**

**Endowed**

**Posting Date: 9/10/92**

Design and conduct experiments involving differentiated cells and vesicles. Provide support to a research group (primarily graduate students) in instruction in maintenance of analytical devices, and in appropriate laboratory procedures. Perform and assist in experiments using radiolabels. Establish and maintain primary cell lines. Operate HPLC and Coulter Counter. Perform ELISA and gel electrophoresis (DNA and protein gels). Maintain equipment.

**Requirements:** B.S. or equivalent in biochemistry, cell biology, microbiology or related area. Experience with mammalian cell tissue culture is essential. At least 2yrs. as laboratory technician is desirable. Send cover letter and resume to Sam Weeks.

**Applications Programmer II (PT2205) HRI**

**Section of Ecology and Systematics-Statutory**

**Posting Date: 9/3/92 Repost**

Design and code (in C++) the porting of an existing DOS-based database applications to UNIX, Windows, or Macintosh for the MUSE project. Provide programming documentation. Provide fixes for system bugs.

**Requirements:** BA or equivalent experience in computer science required. Minimum of 2-3yrs. of C and C++ programming experience. Requires experience programming user interfaces on at least two of the following platforms: DOS, UNIX, Macintosh, Windows. Database programming experience desirable. Send cover letter and resume to Sam Weeks.

**Professional Part-time**

**Research Support Specialist I (PT4601) HRI**

**Ecology and Systematics-Endowed**

**Posting Date: 11/19/92**

Participate in research on the field ecology and epidemiology of insect-transmitted diseases of plants. Major tasks will include conducting field and laboratory experiments, maintenance of insect colonies, and analysis of data.

**Requirements:** B.S. degree or equivalent in biology, botany, entomology, plant pathology, or related field. Master's preferred. 2-3yrs. field and greenhouse experience and knowledge of ecology and agriculture. Statistics and computer use, with reference to biological or agronomic data. Send cover letter and resume to Sam Weeks.

**Boyce Thompson Institute**

**Part-time Library Assistant Boyce Thompson Institute/Small Special Library**

**Posting Date: 11/12/92**

**\$6.00/hr, 20hrs./week**

Record receipt of serial publications, claiming unreceived issues, assist librarian in sending out ILL requests, shelving library materials, retrieval of materials for patrons, and inputting data into applications software.

**Requirements:** High school diploma required. Must be detail orientated. Good interpersonal and communications skills. Medium typing. Ability to use effectively a microcomputer and some applications software. Previous library or recordkeeping experience preferred. Anne Zientek, 254-1239.

**Research Specialist**

**Environmental Biology**

**Posting Date: 11/12/92**

**Salary: Minimum \$16,000/yr., com-**

**mensurate with experience**

Examens how an environmental stress such as soil anoxia or ozone alters the interdependence between the root function of supplying phosphorus to the shoot and shoot function of supplying photosynthate to roots of tree seedlings. responsible for the growth and maintenance of seedlings in solution and soil culture; assist in the design and execution of short-term radioisotope experiments; analyze plant tissue for various <sup>14</sup>C and <sup>32</sup>P labeled fractions; prepare plant tissue for histological examination via light microscopy, and scanning and transmission electron microscopy; analyze plant tissue for various carbohydrate fractions and associated enzymes; statistically analyze and prepare data for reports and manuscripts; assist in the preparation of manuscripts for publication. Routine duties include general laboratory maintenance and periodic monitoring and record keeping of radioisotopes.

**Requirements:** Master's degree in the plant sciences or related field, or a Bachelor's degree with a minimum of 3-4yrs. of laboratory experience. An aptitude for precision in analytical procedures, and familiarity in plant biochemical or physiological techniques are essential. Experience in one or more of the following areas is desirable: radioisotope usage, histological techniques, analysis of plant tissue for carbohydrates and nutrients, enzyme assays, and experimental design and statistical analysis. Anne Zientek, 254-1239.

**Research Assistant  
Molecular Biology****Posting Date: 10/22/92**

Participate in a project using in vitro transcription to study the regulation of maize mitochondrial promoters. Prepare transcriptionally active protein extracts from maize mitochondria, use recombinant DNA techniques to construct appropriate promoter test plasmids, conduct transcription assays, and analyze results using radioactive imaging and autoradiography. Experience with manipulations of DNA and/or protein is highly desirable. Applicable techniques include differential centrifugation, column chromatography, FPLC, restriction endonuclease digestions, gel electrophoresis, transformation of *E. Coli* and plasmid DNA purification. Limited laboratory maintenance duties, including processing of purchase orders and general organizational tasks.

**Requirements:** Bachelor's degree in biology/biochemistry or equivalent. Salary commensurate with experience, minimum \$13,690. Contact Anne Zientek, 254-1239.

**Technical****Curatorial Technician GR18****(T4607)****Laboratory of Ornithology-Endowed****Minimum Biweekly Salary: \$542.89****Posting Date: 11/19/92**

Edit field recordings of animal sounds for incorporation into the collection of the library of Natural Sounds. Prepare and enter into a computerized information storage and retrieval system, catalog data for recordings in the library.

**Requirements:** Associates degree or equivalent in biology or related field. Must have strong interest and/or coursework in ornithology. Experience in the operations of studio audio equipment highly desirable. Good organizational skills essential. Ability to learn quickly and work independently. Light typing. Send cover letter and resume to Sam Weeks.

**Technician GR19 (T4610)****Nutritional Sciences-Statutory****Minimum Biweekly Salary: \$566.28****Posting Date: 11/19/92**

Assist in the conductance of basic research in a biochemistry/biophysics laboratory. Perform experimental procedures such as protein and lipid determination, low and high-speed centrifugation, protein purification, cell fractionation, and spectroscopic studies. Maintain records and lab.

**Requirements:** B.S. in chemistry, biochemistry, biophysics, biology, or related field. Previous experience in relevant lab work (1-3yrs) preferred. Familiarity with the above procedures desirable. Send cover letter and resume to Sam Weeks.

**Technician GR20 (T4503)****Plant Breeding and Biometry-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 11/12/92**

Provide technical support in genetic mapping of RFLP markers in the tomato. Extract DNA, run and blot gels, isolate and screen plasmid clones, and radiolabel probes. Manage computer data files and analyze genetic data on the computer. Assist in lab maintenance, prepare solutions, order supplies and monitor safety.

**Requirements:** BS degree or equivalent in biology, genetics, biochemistry or related discipline. Minimum 2yrs. related lab experience in biochemistry or molecular biology. Send cover letter and resume to Sam Weeks.

**Technician GR20 (T4306)****Veterinary Pathology-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 10/29/92**

Provide technical support and perform experiments for the Cancer Biology Lab studies on the role of endothelial cell adhesion molecules in cancer metastasis. Isolate and culture cells. Perform tumor cell/endothelial cell adhesion assays. Assist in generating monoclonal antibodies. Keep routine records. Order supplies. Maintain tissue

culture lab.

**Requirements:** Bachelor's degree or equivalent in the biological sciences. 1-2 yrs. experience in tissue culture and molecular and biochemical techniques. Send cover letter and resume to Sam Weeks.

**Technician GR20 (T4304-5)****Division of Nutritional Sciences-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 10/29/92**

Provide technical lab support for a program investigating vitamin metabolism in humans. Analyze blood for various nutrition related factors including vitamin A and carotene. Perform solvent extractions, HPLC separation/quantification, and gas chromatography-mass spectrometry. Maintain lab, glassware and supplies. Assist in recruiting subjects. Assist in maintaining computer bibliographic and reprint files.

**Requirements:** BS degree or equivalent in biological science or chemistry required. 2-3yrs. lab experience including quantitative analytical procedures. Experience with solvent extraction, gas, or liquid chromatography and human metabolic studies preferred. Send cover letter and resume to Sam Weeks.

**Animal Health Technician GR20 (T4203)****Veterinary Medical Teaching Hospital-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 10/22/92**

Provide support therapy for ICU patients and assist with emergency procedures. Teach intensive care and emergency protocol to students assigned to ICU duty. 39hrs/rotating shifts.

**Requirements:** A.A.S. in animal health technology, NYS licensure or eligible. Experience working with small animals and an interest in teaching critical care. Send cover letter and resume to Sam Weeks.

**Office Systems Specialist GR21 (T4608)****Chemistry-Endowed****Minimum Biweekly Salary: \$615.42****Posting Date: 11/19/92**

Assist in system, network and security administration of departmental computers. Provide consulting to academic and student users. Monitor system performance. Provide trouble shooting. Perform backups.

**Requirements:** AAS degree or equivalent in computer sciences. 1-2yrs. related experience with UNIX, Mac and PC computer systems. Send cover letter and resume to Sam Weeks.

**Research Equipment Technician GR21 (T4210)****Division of Biological Sciences-Endowed****Minimum Biweekly Salary: \$615.42****Posting Date: 10/22/92**

Assist in instrument repair and maintenance function for the division. Repair and maintain all types of scientific research and teaching lab equipment, e.g. shakers, cold boxes, microfuges, fraction collectors, gel boxes, incubators, heaters, power supplies, chart recorders, water baths, vacuum pumps, etc. Initiate and maintain small equipment preventive maintenance program. Train users on proper machine shop techniques.

**Requirements:** AAS degree or equivalent. 1-2 years related experience. Knowledge of lab equipment, simple electronic design and familiarity with computers. Send cover letter and resume to Sam Weeks.

**Technician GR21 (T3303)****Diagnostic Laboratory/Clinical Pathology-Statutory****Minimum Biweekly Salary: \$615.42****Posting Date: 8/20/92**

Perform various diagnostic tests in hematology, cytology, chemistry and

immunology. Use computer for data entry and retrieval.

**Requirements:** AAS in medical technology required. BS in medical technology and ASCP certification. 1-2 yrs. clinical laboratory experience. Send cover letter and resume to Sam Weeks.

**Technician GR22 (T3801)****Food Science and Technology-Statutory****Minimum Biweekly Salary: \$641.92****Posting Date: 11/5/92 Repost**

Provide technical lab support by carrying out specialized physiological, biochemical, immunological and genetic experiments with plants and their tissue cultures. Record and analyze data. Order chemicals and supplies. Instruct graduate students in the use of laboratory equipment. Perform general laboratory work and upkeep.

**Requirements:** B.S. or equivalent required. M.S. degree preferred in plant physiology, biochemistry, molecular biology or related fields is required. Must be familiar with general biochemical, immunological and molecular biology techniques, including HPLC, FPLC, column chromatography, gel electrophoresis, handling of radioisotopes, sterile techniques and tissue culture propagation. Knowledge in the use of a personal computer for word processing and data analysis is required. Send cover letter and resume to Sam Weeks.

**Technician GR22 (T4202)****Animal Science-Statutory****Minimum Biweekly Salary: \$641.92****Posting Date: 10/22/92**

Supervise and carry out routine meat animal slaughter, carcass evaluation, carcass fabrication and meat merchandising. Assist in sample collection and analysis. Assist with teaching meat science undergrad courses. Maintain facilities and equipment to USDA requirements.

**Requirements:** BS degree or equivalent in animal science, food science or related field. 1yr. experience in meat animals slaughter, carcass evaluation, carcass fabrication and meat processing. Teaching skills. Computer experience: spreadsheet and word processing desirable. Send cover letter and resume to Sam Weeks.

**Technician GR26 (T4603)****Biotechnology Program-Statutory****Minimum Biweekly Salary: \$769.07****Posting Date: 11/19/92**

Supervise the routine operations of the Genome facility under the general direction of the facility director. Bring new techniques on-line and trouble-shooting on going projects involving isolation of DNA, running gels, establishing libraries, etc.

**Requirements:** B.S. degree or equivalent in biological sciences. Formal training and/or experience in specific techniques required. Minimum 2yrs. related experience required. Send cover letter and resume to Sam Weeks.

**Technical Off-Campus****Laboratory Technician GR20 (T4101)****Quality Milk Promotion Services/Geneseo-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 10/15/92**

Provide technical microbiology lab and administrative support for a veterinarian and field technicians promoting quality milk. Culture milk samples for isolation of mastitis causing organisms. Perform microscopic examination of stained films or wet preparations. Identify mastitis organisms biochemically and serologically. Perform antibiotic sensitivity tests. Perform brucellosis card tests. Keep accurate records of procedures and results. Enter

**The Cornell Workplace**

Mission of University Human Resource Services: "to advance the practice of human resource management in the Cornell workplace."

EDITOR: Nancy Doolittle, 255-3541 PRODUCTION: Cheryl Seland, 255-6890  
PHOTOGRAPHY: University Photography

Published weekly except for one week each in January and November and two weeks in December by the University Human Resource Services, Cornell University, 14853. Distributed free and available to staff and faculty at locations around the campus.

Mail subscriptions available US delivery first class mail at: \$12.00 for 3 months; \$18.00 for 6 months; or \$26.00 for 12 months. Make checks payable to: Cornell University, 160 Day Hall, Ithaca, NY 14853.

It is the policy of Cornell University actively to support 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, sexual orientation, 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, Cornell University, 234 Day Hall, Ithaca, NY 14853-2801 (Telephone: 607-255-3976).

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

data into a computer. Clean and sterilize glassware. Maintain stock cultures, equipment and supplies.  
**Requirements:** BS degree or equivalent in microbiology. At least 2yrs. microbiology coursework and experience in diagnostic microbiology. Typing and strong communication skills. Basic knowledge of computer programs: WP 5.1 and Lotus. Ability to work with minimal supervision. Send cover letter and resume to Sam Weeks.

#### Technical Part-Time

#### **Histotechnologist GR21 (T4303) Vet Anatomy-Statutory Minimum Full-time Equivalent: \$615.42**

**Posting Date: 10/29/92**

Perform a wide range of histological, histochemical, and immunocytochemical procedures on paraffin, plastic, or frozen tissue sections. Maintain lab equipment and supplies. Review and evaluate new techniques, reagents, and equipment. Assist in the collection, preservation, and cataloging of specimens.

**Requirements:** BS degree or equivalent with ASCP certification. 2-4yrs. histological lab experience. Send cover letter and resume to Sam Weeks.

#### Technical Temporary

#### **Temporary Technician (T4208) Fruit and Vegetable Science-Statutory**

**Posting Date: 10/22/92**

Conduct chemical analysis of fruit products. Maintain lab facilities in a safe and orderly manner. Record and maintain research results. Perform library searches. 20-39hrs/week.

**Requirements:** BS degree or equivalent with coursework in organic chemistry. Experience in data collection and record keeping. Familiarity with libraries and library searches. Send cover letter and resume to Sam Weeks.

#### **Service Research Technician (T4001)**

**Entomology-Statutory**

**Hiring Rate: \$7-9.00**

**Posting Date: 10/8/92**

Provide technical support in a laboratory conducting studies in toxicology, molecular genetics, and receptor ligand interactions. Conduct biochemical assays on insects. Order supplies, general laboratory maintenance, data analysis, recordkeeping and library work.

**Requirements:** BS degree or equivalent in a biological science or relevant course experience. Master's degree or relevant job experience with biochemical assays strongly desired. Send cover letter and resume to Sam Weeks.

#### Office Professionals

#### **Secretary GR17 (C4405) Family Life Development Center-Statutory**

**Minimum Biweekly Salary: \$530.38**

**Posting Date: 11/5/92**

Provide telephone reception and general office support to the staff of the Child Protective Services Training Institute. Appointment until 9/30/93.

**Requirements:** High school diploma or equivalent. Minimum 6 months related office experience. Familiar with Macintosh computer and word processing programs. Excellent organizational, interpersonal and communication (written and oral) especially concerning telephone communications. Medium typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East

Hill Plaza #2. Employees should include employee transfer application.

#### **Receptionist/Front Desk Clerk GR18 (C4609)**

**Statler Hotel-Endowed**

**Minimum Biweekly Salary: \$542.89**

**Posting Date: 11/19/92**

Performs daily duties of the front office in a manner which conveys hospitality, efficiency and genuine interest in the Hotel's guests. Duties include operating the computer and telephone switchboard; check guests in and out of the hotel; post guests and club account charges and payments; help with reservations for guest rooms; serve as an accurate information source for all guests. Flexible nights and weekends.

**Requirements:** High school diploma or equivalent. Some college coursework preferred. Some accounting, switchboard and computer experience required. Minimum of 6 months rooms division experience preferred. Ability to deal with the public easily and cordially. Regular CU employees only. Send cover letter, resume, and employee transfer application to Esther Smith, Employment Services, East Hill Plaza #2.

#### **Secretary GR18 (C4601)**

**CU Press-Endowed**

**Minimum Biweekly Salary: \$542.89**

**Posting Date: 11/19/92**

Prepare editors correspondence from disks and dictaphone tapes; keep detailed records on current manuscripts, file, and prepare materials for mailing; some telephone duties; prepare some legal documents.

**Requirements:** High school diploma or equivalent required. Some college coursework preferred. 1-2yrs. related office experience required. Ability to work independently in an extremely busy and often disrupted department. Heavy typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

#### **Secretary GR18 (C4604)**

**Family Life Development Center-Statutory**

**Minimum Biweekly Salary: \$542.89**

**Posting Date: 11/19/92**

Provide administrative support to the FLDC administrative staff. Work with several project areas sponsored through state/federal funding grants; word processing of documents; program support functions and other support staff duties as requested. Monday-Friday 8-4:30. Appointment until 9/30/93-continuation contingent upon funding.

**Requirements:** High school diploma or equivalent. Some college coursework preferred. 1-2yrs. in an office setting. Knowledge of Macintosh and word processing. Medium typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

#### **Exhibit Assistant GR18 (C2608)**

**Media Services-Statutory**

**Minimum Biweekly Salary: \$542.89**

**Posting Date: 10/29/92**

Construction and design of exhibits, displays, and signage using a variety of tools, materials, and technologies.

**Requirements:** Associates degree in graphic design, fine arts, or related field preferred. 1-2yrs. related experience. Experience in design, layout, and typography. Applicant must be able to fabricate in wood, metals, and plastics. Screen printing experience desirable. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza

#2. Employees should include employee transfer application.

#### **Serial Records Assistant GR18 (C3502)**

**Mann library-Statutory**

**Minimum Biweekly Salary: \$542.89**

**Posting Date: 10/22/92**

Records receipt of serial publications and performs related serial maintenance activities. This includes searching the online system and recording holdings of serials, claiming unreceived issues, and ceasing or inactivating serial titles. Inputs new serial titles and orders. Assists the serials records specialist in processing titles received on the U.S. federal depository program. Sorts and distributes mail.

**Requirements:** High school diploma or equivalent. Associate's degree plus 1-2yrs. of previous library or record keeping experience preferred. Additional related experience may be substituted for formal degree. Ability to use effectively a microcomputer and some applications software. Strong organizational skills and ability to prioritize. Good interpersonal and communication skills. Some foreign language skills desirable. Medium typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include and employee transfer application.

#### **Accounts Assistant GR19 (C4603) Family Life Development Center-Statutory**

**Minimum Biweekly Salary: \$566.28**

**Posting Date: 11/19/92**

Maintain an accounting system for the Family Life Development Center which involves approximately 20 accounts, representing \$4 million annual budget. Monday-Friday, 8:00-4:30. Appointment until 9/30/93, continuation contingent upon funding.

**Requirements:** High school diploma or equivalent. Some college coursework in accounting preferred. 2yrs. related experience. Experience with statutory accounting system preferred. Macintosh spread sheets and data base knowledge. Medium typing. External applicants send cover letter and resume to Esther Smith, Employment Service, East Hill Plaza #2. Employees should include employee transfer application.

#### **Administrative Aide GR19 (C4606) Veterinary Facilities and Services-Statutory**

**Minimum Biweekly Salary: \$566.28**

**Posting Date: 11/19/92**

Provide support for administrative operations in the office of Facilities and Services for the college of Veterinary Medicine. Serve as initial contact person. Screen incoming visitors, telephone calls and mail; handle correspondence; maintain appointment calendars; arrange meetings and travel; perform accounting responsibilities for office accounts. Other duties as assigned.

**Requirements:** High school diploma or equivalent. Some college coursework preferred. 2yrs. related experience. Strong organizational, interpersonal and communication (oral and written) skills essential. Computer experience. Ability to work independently and set priorities. Working knowledge of Cornell accounting/budgeting systems and procedures. Medium typing. Regular CU employees only. Send employee transfer application, cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2.

#### **Administrative Aide GR19 (C4502) Biological Sciences-Statutory**

**Minimum Biweekly Salary: \$566.28**

**Posting Date: 11/12/92**

Provide administrative and secretarial support to staff of Cornell

Institute for biology teachers and Hughes Scholars Program. Process accounting forms, organize and maintain program files and participant database; assist with arranging details of programs. 1yr. appointment, renewal contingent on funding.

**Requirements:** High school diploma or equivalent. Some college coursework preferred. 1-2yrs. related experience. Good computer skills (Macintosh), knowledge of MS Word, Excel, FileMaker Pro, Pagemaker. Familiarity with Cornell accounting procedures helpful. Attention to detail, able to prioritize many details in busy office. Medium typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

#### **Accounts Assistant GR20 (C4602) Veterinary Library-Statutory**

**Minimum Biweekly Salary: \$590.45**

**Posting Date: 11/19/92**

Perform wide variety of accounting, financial management and other business functions. process invoices for payment. Bill departments/individuals for services. Manage cash and other income sources. Maintain budgeted accounts on computer based systems. Monitor account balances. Prepare various financial and statistical reports and analyses. Prepare payroll; maintain leave balances.

**Requirements:** AAS degree or equivalent. Coursework in accounting or business procedures desirable. Minimum 2-3yrs. experience in a business office with some accounting background. Excellent mathematical, analytical, organizational, communication and interpersonal skills. Knowledge LOTUS 1-2-3. Previous library experience helpful. Able to work independently. Light typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

#### **Administrative Aide GR20 (C4408) Agricultural and Biological Engineering-Statutory**

**Minimum Biweekly Salary: \$590.45**

**Posting Date: 11/5/92**

Assist professor in administering a large program in environmental quality/renewable fuel areas as the program goes through a substantial transition. Preparation of reports, papers, grant proposals; assist in organizing an off-campus (Game Farm Rd.) wet-chemistry biology laboratory; arrangement of meetings, travel schedules, etc. Appointment until 6/30/93, contingent upon funding.

**Requirements:** A.A.S. or equivalent. 2-3yrs. administrative/secretarial experience. High speed, accurate typing. Shorthand/transcription. Very good grammar, spelling, punctuation. Well-developed communication skills. Thorough knowledge of word processing (MAC). Ability to work independently. Heavy typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include an employee transfer application.

#### **Administrative Aide GR21 (C4504) Human Development and Family Studies-Statutory**

**Posting Date: 11/12/92**

Provide administrative support for Cornell youth and work program. General administrative responsibilities including correspondence, accountability supervisor, publications, newsletter, and project development.

**Requirements:** Associate's degree or equivalent. 2-3yrs. related experience. Knowledge of

WordPerfect 5.1. Ability to work independently and under pressure. Excellent organizational, interpersonal, and communication (written and oral) skills. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application. **Collection Development Associate GR22 (C4503)**

**Albert R. Mann Library-Statutory Minimum Biweekly Salary: \$641.92 Posting Date: 11/12/92**

Under the direction of the head of collection development and preservation, manages a wide variety of procedures and workflows associated with the development of the library collection. Provides administrative, computer, and bibliographical support for librarians involved in building and evaluating the collections. Pre-selects print and electronic titles which fall within the subject scope of Mann library. Manages the handling and routing of selection sources. Conducts collection evaluation projects, complex searching, and problem-solving. Manages gifts and exchange program. Performs clerical/secretarial functions as needed.

**Requirements:** Bachelor's degree or equivalent required. Excellent organizational skills. 2yrs. of library or other information handling and analysis-related experience. Well developed microcomputer skills, and medium typing skills required. Demonstrated writing, analytical, and interpersonal skills essential. Ability to manage multiple tasks under pressure. Education in agriculture, biology, or human ecology highly desirable. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

#### Office Professionals Part-time

**Circulation/Reserve Assistant GR17 (C4608)**

**Circulation/Uri Library-Endowed Minimum Biweekly Salary: \$530.38 Posting Date: 11/19/92**

Assist in the daily reshelving of materials returned from circulation. Work at the security desk inspecting knapsacks, briefcases, etc. when security alarm sounds. Monday-Friday, (am hours), 20hrs/week.

**Requirements:** High school diploma or the equivalent. Minimum 1yr. related experience. Ability to work well with a variety of people at a public services desk. Must be able to shelve and shift books. Must be exceptionally dependable. Good interpersonal skills. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

**Secretary GR18 (C4108) Neurobiology and Behavior-Statutory**

**Minimum Full-time Equivalent: \$542.89**

**Posting Date: 10/15/92**

Computer-based text and graphics processing and editing; ordering supplies and maintaining inventories; coordinating and trouble shooting administrative procedures; extending support to co-workers and staff for a large biology course. High level of confidentiality; Student grades, generating exams and answers. 20hrs/4 days.

**Requirements:** High school diploma or equivalent required. Some college coursework preferred. 1-2yrs. related experience. Experience with Macintosh computers and office-based software or aptitude to learn specific software programs.

Heavy typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

**Accounts Assistant GR19 (C3707) Human Development and Family Studies-Statutory**

**Minimum Full-time Equivalent: \$566.28**

**Posting Date: 9/17/92**

Process standard vouchers, purchase orders and interdepartmentals for busy academic department. Assist administrative supervisory with other accounting activities. Monday-Friday, 8am-12noon, 20hrs.

**Requirements:** High school diploma or equivalent required. Some college coursework preferred. 1-2yrs. previous Cornell accounting experience, or fund accounting experience in other settings. IBM computer, WordPerfect 5.1 and Lotus. Light typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include an employee transfer application.

**Senior Night Supervisor GR20 (C4407)**

**Physical Sciences Library-Endowed**

**Minimum Full-time Equivalent: \$590.45**

**Posting Date: 11/5/92**

Responsible for the security, maintenance, and provision of all services of the Physical Sciences Library during evening hours (occasional weekends) usually without the presence of any regular library staff. Also responsible for the provision of the table of contents and photocopy services. Assist in the training and scheduling of student staff. Monday-Thursday 6pm-12midnight.

**Requirements:** Associates degree or equivalent required with coursework in the physical sciences desired. 2-3yrs. related experience. Must be able to work effectively in a changing environment with interruptions. Demonstrated ability to act responsibly and with good judgement when interpreting and enforcing policies. Demonstrated reliability essential. Ability to work effectively with all levels of the academic community. Familiarity with computers. Previous experience in library public services desired. Light typing. External applicants send cover letter and resume to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include employee transfer application.

**Office Professionals Part-time Temporary**

**Temporary Interviewer (S4601) Nutritional Sciences-Statutory**

**Posting Date: 11/19/92**

Assist faculty member in the conduct of a research project that involves interviews with pregnant women in their homes; recruit subjects; conduct interviews; ensure accuracy of transcribed tapes; enter codes in computer. 24hrs/week, to be arranged, up to 6 months.

**Requirements:** masters degree or equivalent in related field. Experience in interviewing (qualitative) preferred. Strong interpersonal, communication (written and verbal) and organizational skills required. Attention to detail. Prior computer experience preferred. Send cover letter and resume to Karen Raponi, Employment Services, East Hill Plaza #2.

**Office Assistant (S4508) International Agriculture**

**Posting Date: 11/19/92**

Provide office support to IAP/CIIFAD: format and distribute seminar notices, produce certificates, check telex

messages, maintain mailing lists, provide secretarial support to one professional, monitor office supply inventory, and fill in for mail distribution and reception desk coverage when other staff are not available. 20hrs/5days/6months appointment.

**Requirements:** High school diploma or equivalent required. Associates degree preferred. 1-2yrs. related experience. Strong organizational skills and ability to prioritize. Good interpersonal skills. Word processing skills (WordPerfect preferred). Proficiency in graphics software highly desirable. Send cover letter and resume to Karen Raponi, Employment Services, East Hill Plaza #2.

#### General Service

**Short Order Cook SO04 (G4601) Statler Hotel Food and Beverage Department-Endowed**

**Hiring Rate: \$7.52**

**Posting Date: 11/19/92**

Prepare breakfast and/or lunch items in the club or student dining outlets. Flexible nights and weekends. 10 month appointment.

**Requirements:** High school education or equivalent. Basic reading and writing skills. A minimum of 2yrs. short order experience in high-volume operation. Good interpersonal skills. Regular CU employees only. Send employee transfer application to Esther Smith, Employment Services, East Hill Plaza #2

**Dairy Worker SO06 (B4601) Animal Science-Statutory**

**Hiring Rate: \$8.26**

**Posting Date: 11/19/92**

Under general supervision, care for and attend to heifer rearing, dry cow handling, and maternity activities. Attend to aggressive reproduction program. Act as lead person in absence of supervisor. Some weekends.

**Requirements:** High school diploma or equivalent. NYS drivers license. 3-5yrs. directly related experience. Ability to lift 100lbs. Pre-employment physical required. Send application materials to Cynthia Smithbower.

#### General Service Part-time

**Night Custodian SO02 (G4301) Dining Services-Endowed**

**Hiring Rate: \$6.90**

**Posting Date: 10/29/92**

Performs the routine cleaning of an assigned area. Monday-Wednesday, 5:30p.m.-midnight; Thursday-Friday, 5:30p.m.-1:30a.m. 32hrs/week.

**Requirements:** Basic reading and writing skills. Some related experience desirable. Must be in good physical condition. Able to lift 60 pounds and climb an 8' ladder. External applicants send application to Esther Smith, Employment Services, East Hill Plaza #2. Employees should include an employee transfer application.

#### Academic

**Extension Associate II CA04 Integrated Pest Management**

**Posting Date: 11/12/92**

Provide leadership for planning, conducting, and evaluating a comprehensive educational program in Integrated Pest Management and Pesticide Management for the commercial dairy industry in the New York City Watershed area. (Counties within the Watershed area include: Delaware, Dutchess, Greene, Putnam, Schoharie, Sullivan, Ulster and Westchester).

**Requirements:** Master's degree in plant pathology, entomology, pest management or closely associated field. Coursework in dairy and field crops production, soils, plant physiology, toxicology, economics, education, and communication. Minimum 3yrs. professional work experience in cooperative extension, agribusiness, dairy or field crop production, pest management, or in developing informal educational programs. Must possess agricultural experience with ability to related to routine farm situations. Must possess a certified NYS pesticide applicators license. Must possess a NYS drivers license. Send letter of application, resume, and 3 references to Keith Waldron, 5130 Comstock Hall, Cornell University, Ithaca, NY 14853.

#### Reference Librarian

**Martin P. Catherwood Library, Cornell School of Industrial and Labor Relations**

**Minimum Beginning Salary: \$24,200 Applications are requested by December 31**

**Posting Date: 11/12/92**

Provides information services including advanced electronic delivery of information as well as more traditional research library services to students, faculty, visiting scholars, and clients of a fee-based information service. Participates in all aspects of the reference departments service program. Includes: providing in-depth reference assistance using specialized reference sources; assisting library users with CD-ROM and online services such as LEXIS and HRIN; providing mediated online searches on a variety of databases; participation in instructional activities including classroom instruction and workshops; creating instructional materials and developing printed guides, bibliographies and multimedia instruction programs; participating in reference collection development; and supervision and training of student information assistants.

**Requirements:** Masters degree or equivalent graduate degree in librarianship. Preferred academic background in the social sciences and one or two yrs. experience providing reference service and instruction in an academic library. Knowledge and experience with a variety of electronic information resources. Demonstrated interest or experience in developing innovative uses of educational technology in a library setting. Excellent written and oral communications and interpersonal skills, and strong demonstrated service orientation. Send cover letter, resume and the names, addresses, and phone numbers of three references to Ann Dyckman, Director of Cornell University Human Resources, 201 Olin Library, Cornell University, Ithaca, NY 14853.