

# CORNELL CHRONICLE

Volume 21 Number 33 May 17, 1990



State budget  
outlook

Ithaca Players

Rhodes on  
Science & Technology

## 5,650 eligible for degrees at 122nd commencement

More than 5,600 students from Cornell's 11 schools and colleges will be eligible to receive degrees at the university's 122nd commencement on Sunday, May 27, at 11 a.m. at Schoellkopf Field.

This year also marks the university's 125th anniversary.

Tradition keeps Cornell commencement a celebration for students and families, with no honorary-degree recipients or outside speakers. President Frank H.T. Rhodes, who will join the procession of thousands of robed students, faculty, administrators and trustees from the Arts Quadrangle to the stadium, will give the

only speech and then confer degrees.

Two guests will speak prior to the commencement, however:

- Industry consultant Kenneth A. Blanchard, co-author of "The One Minute Manager" and a Cornell trustee, will deliver the pre-commencement convocation speech on Saturday, May 26, at 1 p.m. in Bailey Hall. Blanchard earned a Ph.D. in educational administration and leadership at Cornell in 1967.

- Letty Cottin Pogrebin, a founder and contributing editor of Ms. magazine, will speak at the baccalaureate service on May 27, at 8:30 a.m. in Bailey Hall.

Diplomas will be handed out during receptions at the schools immediately following the university ceremony. Locations will be noted in the commencement program.

The Samuel Curtis Johnson Graduate School of Management, however, will hold its own ceremony to award diplomas on May 27, at 1 p.m. in Bailey Hall.

The Cornell Law School will hold a convocation ceremony on Sunday, May 20, at 2 p.m. in Bailey Hall. Speakers include President Rhodes; Professor David Williams, who will present the faculty address, entitled "Don't Go Content to the Crocodile: Staying More Than an Image"; and

student Paul Mahoney, whose topic is "Getting Called On."

The College of Veterinary Medicine will hold a hooding ceremony on May 26, at 5 p.m. in the Ithaca College Dillingham Theater.

ROTC commissioning will take place on May 26, at 5 p.m. in Barton Hall. The commissioning will be conducted by Maj. Gen. William Wood, chief of the U.S. Army Reserve in Washington, D.C.

The Cornell Medical College, located in New York City, will hold commencement ceremonies on Tuesday, May 22, at 3 p.m.

*Continued on page 8*

### Cool down



Senior Barry Logan, a member of the track team, shakes his head over a water hose after running.

Tim Moersh

## Several faculty criticize Barker's call for increase in productivity

When Senior Provost Robert Barker used "the P word" — productivity — and specifically called for a 10 percent increase in the student-faculty ratio, he knew he'd face charges. They have begun:

"How can you calculate the value of loyalty and devotion?" one professor asked in a letter to Barker.

"Your proposed cure leads to bizarre conclusions," wrote another.

"You shouldn't compare people with productivity; you compare productivity with productivity," said a third, referring to Barker's conclusion that rising national productivity requires Cornell either to raise tuition or to increase its student-faculty ratio (its own measure of productivity).

These comments, in letters to Barker, were responses to an enrollment-planning study that the senior provost completed last month for President Frank H.T. Rhodes and to a summarizing letter he sent to all faculty members.

"I knew there would be criticism, and I welcome the engagement," said Barker, who has received about half a dozen letters and a dozen phone calls, all critical to some degree. "But I also regret the misperception, in some cases, that I have doubts about faculty dedication and accomplishments."

In faculty letters and follow-up discussions that Barker has encouraged, he said that there was unanimity on two points:

*Continued on page 8*

## June meeting to explore minority education

Upstate New York educators will meet here on June 11 and 12 to look at how to increase participation in higher education by people of color.

Participants in the "One-Third of a Nation Conference" will focus on the implications of a 1988 national report of the same name that points out that by the year 2000 one of every three Americans will be a person of color and that concludes that minority participation in American education and in the mainstream is on the decline.

The conference was triggered by the report, which contains the findings and conclusions of the Commission on Minority Participation in Education and American Life established by the American Council on Education and the Education Commission of the States.

The two-day event is open to educators at all levels, according to a conference organizer, William M. Thompson, director of

the Office of Equal Opportunity at Cornell. There is a registration fee.

Thompson said he hopes that one day "one-third of a nation" is a phrase that "will be remembered as a call to action to save American society, not with guns this time but with the human mind."

The conference will focus on issues such as minority student and faculty recruitment and retention, programs designed to increase minority participation and achievement, affirmative action, and improving coordination and cooperation from the preschool to graduate school levels.

Guest speakers will include Reginald Wilson, senior scholar with the American Council on Education in Washington, D.C., and President Frank H.T. Rhodes, chairman of the commission which published the "One-third of a Nation" report.

Former President Jimmy Carter, who served as honorary co-chairman of the com-

mission along with former President Gerald R. Ford, said the report "identified one of the most serious threats to our society. . . . Participation by citizens of every race and ethnic origin in all aspects of American life, and particularly in education, is essential to the growth and well-being of the nation."

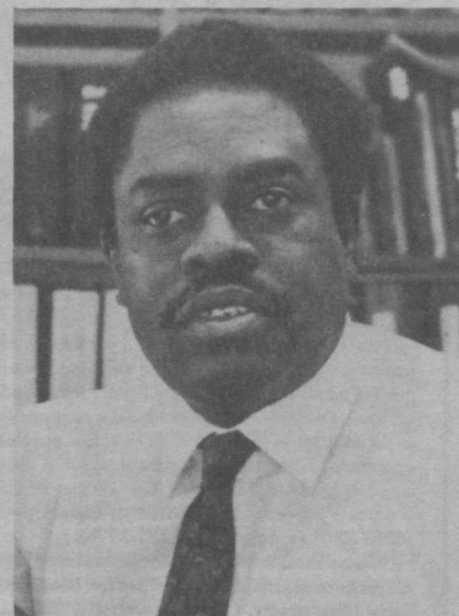
The 35-page report, which will form the background for the conference, contained these concluding statements:

- America is moving backward — not forward — in its efforts to achieve the full participation of minority citizens in the life and prosperity of the nation.

- If we allow these disparities to continue, the United States inevitably will suffer a compromised quality of life and a lower standard of living.

Additional information about conference registration may be obtained by phoning 253-3709 or 255-3976.

— Martin B. Stiles



William M. Thompson

Don Alber



## BRIEFS

■ **Summer parking:** Beginning on Friday, June 1, the Traffic Bureau will sell a limited number of summer parking permits for central-campus areas. Letters of request must be submitted for permits for the J zone in the Bailey Hall area and the D zone around Sage Hall. Summer hours for the bureau, located at 116 Maple Ave., are 7:45 a.m. to 4 p.m. For more information, call 255-4628.

■ **Recycled paper:** A number of recycled-paper products, including copier paper, canary legal pads, plain white pads and paper towels, are available at Cornell General Stores. For more information, call 255-5121.

■ **Equipment deadline:** Friday, May 18, is the last day students can purchase equipment this academic year through Micro-

computers & Office Systems at 110 Maple Ave. The sales office is open weekdays from 9:30 a.m. to 4 p.m.

■ **Bus service:** Bus service on five campus routes will discontinue for the summer at the end of their May 18 runs: West Campus, North Campus-Collegetown, Blue Light 1 & 2, and the East Ithaca evening service. The daytime East Ithaca service will continue, with its last run leaving Day Hall at 6 p.m. weekdays during the summer.

■ **Women's Studies:** Four faculty, three staff, three community members and nine students have been elected to the Cornell Women's Studies Executive Board for 1990-91. They are faculty members Samia Mehrez, Jeanne Mueller, Donna Scott and Elaine Wethington; staff members Judy

Bogges, Lesley Fredericks and Mary Rhodes; community members Nimat Hafez Barazangi, Cynthia Koepf and Leslie Miller-Bernal; and students Sarah Averill, Paisley Currah, Katherine Friedman, Karen Jones, Natasha Minsker, Shannon Minter, Larisa Semenuk, Ruth Yun and Kyna Janine P. Taylor.

■ **Graduate students:** Information available through CUINFO that is of interest to graduate students has been expanded to include sections on activities, intellectual cross-fertilization, rides wanted and rides offered. CUINFO terminals are situated in the main lobbies of Day Hall, Gannett Clinic, Willard Straight Hall, Sage Hall (Graduate Student Lounge) and Uris, Olin, Mann, ILR, law, engineering, physical sciences and Johnson Graduate School of Management libraries.

## NOTABLES

**Yong H. Kim**, a science writer for Cornell News Service, has received two top awards this year for an article he wrote in 1989 on a technique developed at Cornell for the removal of 90 percent of the cholesterol from milk. He was the first-place winner in Writing for Newspapers in the 1990 Critique and Awards Program of Agricultural Communicators of Education. It is the ninth straight year that Kim has won an award in writing from the ACE. In 1985, Kim received ACE's highest writing award. Kim's article also received the Northeast Farm Communicators Association's 1990 Award for the best general farm news story for print media. It is the sixth straight year that Kim has received an award from the association for his writing, including the association's top award as Farm Communicator of the Year in 1985. A native of Korea, Kim joined Cornell in 1965.

## Faculty rejects copyright plan for software

The Faculty Council of Representatives (FCR) voted 28 to 16 on May 9 to reject a copyright policy that has been debated off and on for eight years.

The latest draft, recommended by the FCR's Research Policies Committee, dealt primarily with computer software created by faculty or other employees.

While the preamble specified that the policy's foundation was the "academic tradition that creators of works own the copyright resulting from their research, teaching and writing," opponents said the draft policy's language favored the university at the expense of individual software creators.

Opponents returned several times to the draft's statement that encoded works (software) would be owned by the university — not the creators — if they were "developed with the 'substantial use' of university resources, funds, space or facilities."

Two years ago, the FCR approved a draft policy ceding university ownership when there was "extraordinary" rather than "substantial" use. But the Board of Trustees' Executive Committee rejected that wording and, in September 1988, asked the University Counsel's Office to prepare a new software-policy resolution after consultation with the FCR and other groups. That redraft went to Dean of the Faculty Walter Lynn a year ago and, following further revisions, was the one rejected last week.

Despite the exclusion of resources commonly available to faculty members, several expressed concern about the "substantial use" phrase. The chairman of the Research Policies Committee, botany Professor David M. Bates, said a precise definition would prove impractical given the wide range of cases that the policy might be applied to and that the term could be defined only in consideration of specific cases.

Without such narrowing of the meaning, a majority of FCR members present decided it was better to endorse no policy rather than one whose terms might ultimately prove unfavorable, some faculty members said later. They said the trustees had the right to approve the policy anyway but that, in any future legal dispute over ownership, the documented FCR rejection of the policy might strengthen the position of an individual faculty inventor.

What seemed to sway some FCR voters were the gray areas. For instance, Senior Provost Robert Barker said that software developed with the aid of Cornell's supercomputer would in some cases — but not all — provide the basis for a Cornell claim to ownership, depending on the level of use.

He said that if a faculty member devotes substantial time to a commercial venture for the creation of software or any other product, he or she might be engaged in a conflict of interest or commitment that is covered under a separate policy.

The administration will now have to decide what recommendation to make to the trustees. Barker indicated that he was inclined to recommend the policy as approved by the Research Policies Committee to the board later this year. In the meantime, he would welcome further input or comment from faculty, staff and students.

— Sam Segal

## Lighting the way



Tim Moersh

Buck Gofgosky (left) and David Richardson put a glass panel into place after replacing light bulbs at Olin Library.

## APPOINTMENTS

The following academic administrative appointments were approved by President Frank H.T. Rhodes: **Thomas R. Dyckman**, the Ann Whitney Olin Professor of Accounting, reappointed associate dean for academic affairs at the Johnson Graduate School of Management, through June 30, 1993; Associate Professor **Ann T. Lemley**, to acting chairwoman of the Department of

Textiles and Apparel, through Jan. 31, 1991; Associate Professor of Agricultural Economics **William H. Lesser**, to director of the Western Societies Program in the Center for International Studies, through June 30, 1993; and philosophy and law Professor **David B. Lyons**, to acting chairman of the Department of Philosophy, through June 30, 1990.

## GRADUATE BULLETIN

**Deadline:** May 18 is the deadline for completing requirements for a May degree.

**Registration:** Students receiving summer support from the Graduate School must register by May 21. Students must register if they are receiving financial aid during the summer (such as summer assistantships or fellowships), wish to use campus facilities during the summer or are off campus but require credit for summer study.

**Faculty:** Graduate faculty meeting will be held on Friday, May 25, at 4 p.m. in the Sage Graduate Center. The meeting is to vote on May degrees.

**Commencement:** A reception will be held for all graduate degree recipients, families and friends at The Henry, Sage Graduate Center, immediately following the May 27 commencement. Degree recipients who completed requirements by mid-March may receive their diplomas at the reception.

## BARTON BLOTTER

Cash and valuables totaling \$5,478 were reported stolen on campus, including \$1,460 in band equipment taken from the basement of Risley Hall, according to the morning reports of the Department of Public Safety for May 7 through 13.

Other thefts included four bicycles worth \$1,252 and \$1,803 in cash and valuables taken in six thefts.

One person was referred to the judicial administrator for aggravated harassment, and one person was charged with driving while intoxicated.

CORNELL  
CHRONICLE

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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, 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, 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 the handicapped student 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 be directed to that office.



## Bright as a star



Graduate student Steve Uzmann, who works for the astronomy department, polishes brass on the

75-year-old 12-inch refracting telescope at Furtess Observatory as part of a restoration project.

Tim Moersh

## Two named to Theory Center posts

Peter M. Siegel has been named director the Cornell National Supercomputer Facility (CNSF) and Jay Blaire has been named executive director of the Theory Center, it has been announced by the center's director, Malvin Kalos. The CNSF is the unit of the Theory Center that provides supercomputing services to users nationwide.

Siegel succeeds Lawrence A. Lee, who left Cornell last October for the post of executive director of the newly established North Carolina Supercomputing Center.

Siegel has served as deputy director for supercomputing technologies at the CNSF since 1988 and has held other positions at Cornell Computer Services and at the center since its establishment in 1985.

Most recently, he was on sabbatical as a visiting scientist at the International Business Machines Corp. Palo Alto Scientific Center from August of 1989 until returning to Cornell at the beginning of April.

Kalos praised Lee's "enthusiasm and vision" during his tenure as CNSF director and welcomed Siegel to the post. The appointment was effective April 3.

"Pete knows everything about supercomputing: the hardware as well as the software," Kalos said. "He has a very broad picture of where we are in supercomputing, where we need to be and how to get there."

Siegel received his B.S. with honors and an M.A., both in linguistics, from the University of Hawaii. He received an M.A. from Cornell in linguistics in 1979 and, after teaching at the State University of New York at Cortland, re-

turned to Cornell in 1980 as a lecturer in computational linguistics.

Blaire has 13 years of experience in senior-level management positions at New York University, where he is assistant vice president for computing and information systems. His appointment is effective July 2. At Cornell, he succeeds Janice M. Abraham, who left in October 1989 to become treasurer and chief financial officer at Whitman College in Walla Walla, Wash. Business Manager Jeffrey A. Silber has been serving as acting executive director.

"As the Theory Center faces new and diverse challenges, the focus of the executive director position has changed to help us meet those challenges," Kalos said. "Jay will join me, Pete Siegel, Don Greenberg, Tom Coleman and Linda Callahan in providing leadership to the Theory Center in locating and securing additional sources of funding, in representing the center to the NSF and other government agencies, in the grant renewal process with the NSF, and in administering grants and contracts."

"He will also interface with and negotiate contracts with IBM, Supercomputer Systems Inc. and other major vendors who contribute to and are a vital part of the Theory Center's efforts," Kalos said.

The Theory Center, formally named the Center for Theory and Simulation in Science and Engineering, is one of four national supercomputer centers funded by the National Science Foundation.

— Martin B. Stiles

## State units face \$2 million budget cut

With some details still unresolved for the 1990 state budget, it appeared as of May 16 that Cornell's state-supported colleges and divisions face a cut of about \$2 million from the Executive Budget that Gov. Mario Cuomo proposed in January.

That budget's allocation of \$118.5 million for Cornell already reflected a cut of \$984,000 in core programs that sustained 15 positions. But the State Operations part of the budget approved by the legislature restored some of that, and more could be restored by the completion of budget action, said Nathan Fawcett, director of statutory college affairs.

"If the estimate of about \$2 million proves correct, it will certainly be an improvement over the \$2.7 million cut we faced a month ago," Fawcett said. "But it will still represent a significant constraint on program activity across all four colleges. We hope, however, that we can at least weather the state's budget problems with no layoffs, or virtually none."

Cornell's cut reflects its share of the reductions asked of the State University of New York (SUNY). Virtually all state agencies were required to trim costs to compensate for revenue shortfalls projected for the fiscal year that began April 1 but for which final budget passage was more than six weeks behind schedule.

Fawcett said that, once details of the SUNY cuts are passed on to Cornell, the deans of Cornell's College of Agriculture and Life Sciences, College of Human Ecology, College of Veterinary Medicine and School of Industrial and Labor Relations will have until June 15 to respond with plans for carrying out the reductions over the following nine and one-half months.

Although Cornell's budget picture has brightened

slightly in the past month, Cornell officials are still deeply concerned about the larger context of state support.

Between July 1988 and December 1989, the state-supported colleges absorbed five separate reductions totaling more than \$2.8 million. Since 1970, their number of state-funded positions has declined steadily, by a total of 19 percent, from 2,254 to 1,823. And the state's revenue prospects are likely to remain strained beyond the year just begun, according to Fawcett.

"We certainly hope for our employees' sake that we can avoid layoffs," Fawcett said, adding: "But even if we do, the erosion at the state-supported units will continue, affecting morale and programs — from little but important things like professors having adequate teaching supplies to big things like leaving key teaching posts unfilled."

A few Cornell bright spots — items not in the Executive Budget but included in the legislature's State Operations funding — were:

- Additional funding of \$80,000 for a joint program in New York City between the School of Industrial and Labor Relations and Baruch College of City University.
- \$300,000 for a labor-studies program that had been deleted in the executive budget.
- \$200,000 in the fifth year of a five-year plan to help the College of Veterinary Medicine strengthen its faculty.
- \$200,000 for a new program, to be developed by the College of Agriculture and Life Sciences, to help regional business improve national competitiveness.
- \$100,000 for library automation.

Fawcett said Cornell appears to have been excluded from a new plan to facilitate early retirement by some state employees.

— Sam Segal

## Graduate's book redefines dining for changing population

Restaurants are serving healthier fare these days in part because food managers with heart problems are being warned not to partake of their own menus.

Discussing her new book on healthy menus, Cornell graduate Beth Carlson Ganem said that during the past five years a number of restaurant managers introduced more healthy foods after they suffered heart attacks.

"Their doctors told them to avoid the kind of meals they were serving in their own restaurants," Ganem said.

So to meet their own needs and the needs of diners, managers revised their menus. For example, the Four Seasons Restaurant, one of New York City's most upscale restaurants, is renowned for more than its lofty prices and wealthy patrons.

"The Four Seasons was one of the first restaurants to design special menus to meet specialized nutritional requirements," she said. "The reason for this is that many of their patrons are high-powered business executives with heart problems."

Ganem earned her Ph.D. in the School of Hotel Administration in 1986. In her first book, "Nutritional Menu Concepts for the Hospitality Industry," Ganem addresses the increasing demand on restaurants and institutional dining rooms to serve nutritious meals. The book will be published by Van Nostrand Reinhold in June.

"As the population ages, as single-person households increase in number, and as more and more women enter the work force, the demand for healthful foods consumed away from home will increase," Ganem writes.

She reports that Americans 55 years and older control 50 percent of discretionary dollars and account for 32 percent of hotel occupancy. By the year 2000, about 72 percent of women will be working compared with only 40 percent in the 1950s, she says.

"The most nutritionally concerned market segments are women and the elderly, who, finding it increasingly necessary or desirable to eat away from home, will demand lighter and more healthful menu items," she writes.

To meet this demand, Ganem designed a book to guide chefs and managers of restaurants, company dining rooms, student dining halls and other public eating places.

Ganem bases her book on research she conducted for her Ph.D. thesis, "Analysis of Nutrition in the Hospitality Industry," and in professional consulting for a number of food service organizations.

Her book discusses changes in demographics, lifestyles and attitudes that are affecting eating habits in the United States. She provides guidelines and recommendations for healthful dining programs, and detailed explanations of product labeling and contents of food.

She gives tips on how food service managers can market nutritious menus and keep the customers coming back. She provides a number of healthful recipes for appetizers, soups, salads, light entrees, luncheon dishes, dinner entrees, condiments, dressings, sauces, breads and desserts.

Ganem expresses her love for good food by quoting comments from great names:

- George Bernard Shaw: "There is no love sincerer than the love of food."
- The 18th-19th century French lawyer, politician and writer Anthelme Brillat-Savarin: "The discovery of a new dish does more for the happiness of mankind than the discovery of a star."
- Georges Auguste Escoffier, father of the French culinary tradition: "The greatest dishes are very simple dishes."

— Albert E. Kaff

## Up & down



Tim Moersh

Sophomore engineering major Roel Zylstra concentrates on his yo-yo technique in front of Willard Straight Hall.



# CALENDAR

All items for the Chronicle Calendar should be submitted (type-written, double spaced) by campus mail, U.S. mail or in person to Joanne Hanavan, 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 subheading of the calendar in which the item should appear.

## DANCE

### Cornell International Folkdancers

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

Instruction and requests, 7 p.m., to 9:30 p.m., May 20, North Room, Willard Straight Hall.

Global Dance, co-sponsored by the Cornell International Folkdancers and the Cornell Wellness Program, foxtrot, 7:30; folk dances, 9 p.m., May 22, Dance Studio, Helen Newman Hall. Partners not necessary. For information, call 273-0707.

### Israeli Folkdancing

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

## EXHIBITS

### Johnson Art Museum

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

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

"Paintings and Drawings by J.O. Mahoney," a retrospective exhibition of 56 paintings and drawings by the late Ithaca painter J.O. Mahoney, on view through June 24. The exhibit includes work from the museum's collection, Mahoney's colleagues and friends, and the artist's estate.

### Olin Library

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

### University Library

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

## FILMS

Films listed below are sponsored by Cornell Cinema unless otherwise noted. Most

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

### Thursday, 5/17

"Henry V" (1989), directed by Kenneth Branagh, with Kenneth Branagh, Derek Jacobi and Ian Holm, 6:45 p.m., Willard Straight.\*

"The Little Mermaid" (1989), directed by John Musker and Ron Clements, 9:45 p.m., Willard Straight.\*

### Friday, 5/18

"The Little Mermaid," 7:15 p.m., Willard Straight.\*

"Henry V," 9:30 p.m., Willard Straight.\*

### Saturday, 5/19

"The Little Mermaid," 7:15 p.m., Willard Straight.\*

"Henry V," 9:30 p.m., Willard Straight.\*

### Sunday, 5/20

"The Little Mermaid," 4:30 p.m., Willard Straight.\*

"Wizard of Oz" (1939), 8 p.m., directed by Victor Fleming, with Judy Garland, Ray Bolger and Frank Morgan, Willard Straight.\*

### Monday, 5/21

"Cabaret" (1972), directed by Bob Fosse, with Liza Minelli, Joel Grey and Michael York, 8 p.m., Willard Straight.\*

### Tuesday, 5/22

"Casanova" (1977), directed by Federico Fellini, with Donald Sutherland, Tina Aumont and Cicely Browne, 8 p.m., Willard Straight.\*

### Wednesday, 5/23

"Stand By Me" (1986), directed by Rob Reiner, with Wil Wheaton, River Phoenix, Carey Feldman, Jerry O'Connell and Richard Dreyfuss, 8 p.m., Willard Straight.\*

### Thursday, 5/24

"The Graduate" (1967), directed by Mike Nichols, with Dustin Hoffman, Anne Bancroft and Katharine Ross, 7 p.m., Willard Straight.\*

The Second Animation Celebration, including "The Simpsons" and "Umbablauma," 9:30 p.m., Willard Straight.\*

## MUSIC

### Bound for Glory

Records from the studio. Bound for Glory can be heard Sundays from 8 to 11 p.m. on WVBR-FM, 93.5.

### Senior Week Concert

The Cornell Wind Ensemble, under the direction of Mark Scatterday, will perform on May 26 at 3 p.m. in Bailey Hall.

The Cornell Chorus, under the direction of Susan Davenny Wyner and the Glee Club, under the direction of Thomas A. Sokol, will perform in concert on May 26 at 8:15 p.m. in Bailey Hall. The concert will feature works by Hector Berlioz, Johannes Brahms, George Gershwin, L. Janacek, Orlande de Lassus, Franz Schubert and Vaughan Williams, along with Cornell songs. Tickets are available at the Lincoln Hall ticket office and Sage Chapel basement for \$4 until May 25, or at the door for \$5. For information, call 255-3396 or 257-2324.

## RELIGION

### Sage Chapel

There will be no Sage Chapel service on May 20.

### Baha'i

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

### Catholic

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

Mass: Sundays, 10 a.m., Anabel Taylor Auditorium.

Ascension, May 24, 12:20 p.m., 5:15 p.m., Anabel Taylor Auditorium

### Christian Science

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

### Episcopal (Anglican)

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

### Friends (Quakers)

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

### Jewish

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

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

### Korean Church

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

### Lutheran

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

### Muslim

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

### Protestant

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

### Zen Buddhism

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

## SEMINARS

### Agricultural Economics

"Toward Making Human Resource Management a Part of Farm Business Management Extension, Teaching and Research," Bernie Erven, Cornell, May 21, 3:45 p.m., 401 Warren Hall.

### Biochemistry

"Structure and Function of Drosophila Homeodomains," Martin Muller, Biocenter, Basel, Switzerland, May 17, 4 p.m., Small Conference Room, Biotechnology Building.

### Biophysics

"Membrane Glycoprotein Movements in Cell Motility," Michael Sheetz, Washington University Medical College, May 17, 4:30 p.m., 700 Clark Hall.

### Chemistry

Title to be announced, Wilfried Konig, Universitat Hamburg, May 24, 4:40 p.m., 119 Baker Laboratory.

### Ecology & Systematics

"Ecodiversity and Behavioral Dynamics in Relation to Host-Thrips Interactions," T.N. Ananthakrishnan, Loyola College, Madras, India, May 17, 12:15 p.m., Morison Seminar Room, Corson/Mudd Hall.

### Immunology

"Antigen Processing and Presentation to Class I and Class II MHC - Restricted Cytolytic Lymphocytes," Vivian L. Braciale, School of Medicine, Washington University, May 18, 12:15 p.m., G-3 Vet Research Tower.

"Human Trophoblast - Uterine Interactions," Harvey Kliman, University of Pennsylvania School of Medicine, May 24, 7:30 p.m., Conference Room, James A. Baker Institute for Animal Health (off Snyder Hill Road).

### Microbiology

"Evolution of Antibody Structure During the Immune Response," Tim Manser, Lewis Thomas Laboratory, Princeton, N.J., May 21, 12:15 p.m., G-3 Vet Research Tower.

### Natural Resources

"Evolutionary Genetics of Salmonid Fishes," Fred Allendorf, population biology section, NSF, May 22, 12:20 p.m., 304 Fernow Hall.

### Pharmacology

"Applications of Monoclonal Antibodies to the Study of Cytochrome P-450," Fred Friedman, National Cancer Institute, May 21, 4:30 p.m., G-3 Vet Research Tower.

### Physiology

"Platelets," Patricia Gentry, University of Guelph, May 22, 4:30 p.m., G-3 Vet Research Tower.

### Poultry Biology

"The Influence of Major Histocompatibility Complex Dosage on Early Immune Organ Development in Chickens," Richelle A. Hemendinger, Cornell, May 17, 4:30 p.m., 300 Rice Hall.

### Stability, Transition & Turbulence

"Bifurcation Phenomena in Natural Convection in Porous Media," Peter Vadasz, Israel Electric Corp., May 17, 3:30 p.m., Grumman Conference Room.

### Textiles & Apparel

"Purification and Detoxification of Disperse Dye Effluent by Electrochemical Treatment," Anne Wilcox, University of Guelph, May 18, 10:30 a.m., 317 Martha Van Rensselaer Hall.

## MISC.

### Intramural Softball

Summer softball intramural deadline is Tuesday, June 5 at 5:30 p.m. in Helen Newman lounge. Entry forms (\$40 entry fee due with roster) are available in 305 Helen Newman Hall. Play begins on June 11. Mandatory captain's meeting on June 5 at 5:30 p.m. in Helen Newman lounge.

## Two concert series planned for 1990-91

The Faculty Committee on Music will present two concert series next year: Great Soloists and Orchestras in Bailey Hall and Chamber Music in the Alumni Auditorium of Kennedy and Roberts halls.

Cellist Yo-Yo Ma and pianist Emanuel Ax will open the 1990-91 Bailey Hall series on Sept. 25. Pianist Murray Perahia will follow on Oct. 18; the English Chamber Orchestra with Pinchas Zukerman as conductor and violin soloist will perform on April 2, 1991; and the Philadelphia Orchestra, under guest conductor Yuri Temirkanov, will give its first performance at Cornell in 26 years on April 25, 1991.

Subscription prices are \$77 to \$124 for the general public and \$58 to \$93 for students.

A special concert not included in the Bailey Hall series is planned for March 10, 1991: The Syracuse Symphony, Cornell Chorus and Glee Club under the baton of Karel Husa will perform Beethoven's "Missa Solemnis." Tickets can be purchased separately from subscriptions. Same seat location may be requested. Ticket prices for this special event are \$8 to \$12.50 for the general public and \$7 to \$10.50 for students.

Next season's chamber music series will feature performances by the Los Angeles Piano Quartet, joined by double bassist James VanDemark, for a performance of Schubert's Trout Quintet on Nov. 2; the Cleveland Quartet, on Nov. 30; and the flute-guitar duo of Paula Robison and Eliot Fisk, concluding the chamber music season on Feb. 2, 1991.

Subscription prices for the chamber music series are \$34.50 or \$40.50 for the general public and \$29.50 or \$34.50 for students.

Tickets can be reserved with a non-refundable deposit of \$25 per series with the balance due by Sept. 15. Visa, MasterCard and Cornellcard are accepted.



## Students, employees help bring back community theater

While Brooks Appelbaum has been listening to Eudora Welty on tape and Jonathan Dundas has been watching "Eyes on the Prize," a television series about the civil rights movement, Christine Williamson has been using a thick Southern accent to ask her customers at Friendly's how they'd like their burgers done.

All three want to feel more like Mississippians for their parts in "The Wake of Jamey Foster," a play by Beth Henley that the Ithaca Players are presenting tonight through Saturday, May 19, and from Thursday, May 24, through Saturday, May 26, at Kaufmann Auditorium in Goldwin Smith Hall. Showtime is 8 p.m.

Like "Crimes of the Heart," one of Henley's better-known works, "The Wake of Jamey Foster" is the story of three siblings brought back to their family home by a small disaster — in this case the death of one of their husbands, a failed history professor who died after he was kicked in the head by a cow while whooping it up in the arms of a woman who wasn't his wife.

In the 24 hours before the wake, the widow, her brother-in-law and his wife, her sister and brother, her brother's girlfriend and her own paramour rub each other raw as tensions flare and then subside in what is finally a moving story with moments of great humor.

Among the cast of seven are three Cornell employees and a graduate student: Ross Haarstad (Class of '80) is coordinator of peer educators in the Office of Human Relations, Darren Longo (Class of '89) works in Uris Library, Kathleen Moschak is an editorial assistant at Cornell University Press and Appelbaum is a graduate student in the English Department. Haarstad is also director for the production. Assistant director Maureen Kelly is a postdoctoral research associate in the Boyce Thompson Institute for Plant Research.

The Ithaca Players hope to become what Central Casting was when it started out: homegrown theater with actors and others from the community, said Haarstad, a member of the 35-strong organization.

With the demise of the professional Central Casting and First Street Playhouse, Ithaca was left without any community theater until the Ithaca Players was formed two years ago, in association with the Community School of Music and Arts, which provides rehearsal space and



Tim Moersh

Christine M. Williamson (left) yells about a poor pie as (from left) Brooks Appelbaum, Darren

Longo and Kathleen Moschak look on in a rehearsal of "The Wake of Jamey Foster."

some coordination. The Players meet on the first Monday of each month at the Community School for theater workshops, lectures or related activities. For a \$10 membership fee, anyone can join and take part in educational activities. Auditions are open.

Last fall the Ithaca Players produced three short plays by Samuel Beckett and in February three one-acts by Sam Shepard, A.R. Gurney and Ellen Byron. The per-

formances were at Cornell's Risley Theater. The Ithaca Players hope to be able to rent performance space of their own some day.

Tickets for "The Wake of Jamey Foster" are \$5 general admission, \$4 for students and \$4 for groups of 10 or more. They can be purchased at the DeWitt Box office or at the door.

—Carole Stone

## CU considers using Big Red Barn as graduate-student center

A decision is expected to be announced in the near future on a proposal to move the center for Cornell's more than 5,000 graduate and professional students from The Henry, a lounge in Sage Hall, to the Big Red Barn.

The provost's office is working with other university officials to assess how much it will cost to make needed structural changes in the building, renovate it for use as a graduate and professional student center with food service, furnish it and operate it. The officials also are working to identify potential funding sources.

Graduates and faculty from various disciplines could meet more easily in a more centrally situated and larger facility, according to The Henry Steering Committee, which submitted its proposal in January for renovating the Big Red Barn, which was closed in December.

The proposal was submitted with the support of the Dean of Students Office and the Department of Unions and Activities. The Graduate Student Council and the Stu-

dent for campus affairs and campus life.

The new facility, Trillium, has been serving breakfast and lunch to more than 1,900 people daily since it opened in January. By contrast, the Big Red Barn served fewer than 100 customers for breakfast and coffee and about 350 for lunch, said Cleo Bash, director of Willard Straight Hall.

Ronald N. Loomis, director of Unions and Activities, explained that officials were concerned that the Big Red Barn would not generate enough revenue to cover expenses once Trillium opened, and they therefore kept it open only until Trillium was operational.

Another reason behind the decision to close the barn at the end of the 1989 fall semester was that "it needed a lot of things done to it — added insulation, second-floor reinforcement, new screens, ventilation — things you can't keep Band-aiding after awhile," Bash said. "The quality of the barn's physical structure is presently not suitable for public use."

Bash noted that the current solution to the dining crunch, building Trillium, might lead to a solution to the graduate students' problem, because opening Trillium led to closing food service at the Big Red Barn, making that building available for other uses.

The Henry, the first organized center for graduate and professional students, was opened on a temporary basis in the first-floor parlor of Sage Hall in September 1988. More than 600 separate events have been held at The Henry, including socials, aerobics, concerts, receptions and talks. But The Henry's space is limited; it is not large enough for some events that the graduate students would like to hold.

Under the graduate students' proposal — the only one submitted so far — space would be allocated in the Big Red Barn for various needs, including study areas, lounges, offices and food services. Entertainment, receptions and meeting space would be available to more groups and individuals there than in The Henry.

"I think moving to the barn would be a chance to expand graduate student programs and bring a wider variety of grads together," said Sharon Boedo, a graduate student and the manager of The Henry.

And Assistant Dean of Students Hilary Ford noted that "grads, faculty and others would find a place for meeting, reading and studying in the reopened Big Red Barn."

—Sara Frank



Tim Moersh

Karen Clements helps herself to a salad in the Trillium dining hall.

## Trillium is called an upper-campus hit

When Stuart Orefice, Cornell's assistant director of dining services, attended his first lecture as an undergraduate in the School of Hotel Administration, he learned that location is the key to a successful business. So far it has proved true for Trillium; the new dining facility in Kennedy Hall on the upper campus is fast becoming popular with students and faculty in the area.

The new, 372-seat dining facility opened in January and is serving more than 1,900 customers daily for breakfast and lunch, according to Orefice. That compares with projections for between 1,500 and 1,700 derived from market studies conducted in 1984. "We are filling a definite need by having our services up here," said Ward Ganger, manager of dining services in Kennedy Hall.

Gwathmey-Siegel, the New York City architectural firm that designed the new Engineering/Theory Center Building, also designed the linked Kennedy and Roberts halls and Trillium, which was named after an endangered species of flower native to New York state.

Trillium's design sets it apart from other dining facilities on campus. The service area is attractively decorated in black tile and light-grained wood, with overhead lighting and lighted menu signs.

The dining area is spacious and airy, with a three-story-high ceiling and one wall of picture windows facing Tower Road.

There are five service areas, each offering a different kind of food: delicatessen sandwiches and salads; grilled items such as hamburgers and hot dogs, teriyaki chicken sandwiches or the captain's seafood platter; hot entrees and vegetables; gourmet desserts; and Trends, which features different cuisine every week. One week, Trend's menu featured Northern Italian food; and hot dogs, large soft pretzels and fries were available during the week when the baseball season finally opened. Also, salads, fruit, milk, juices and yogurt are always available.

There are no definite figures to show how many people Trillium is attracting from the other dining facilities or if they are former customers of the nearby Big Red Barn, which closed at the end of the 1989 fall semester, Orefice said. A spot check of patrons during one week early in April did indicate that they are fairly representative of the university community, not just the surrounding facilities such as the Ag Quad, Johnson Graduate School of Management, College of Human Ecology and School of Industrial and Labor Relations.

—Sara Frank

*'I think moving to the barn would be a chance to expand graduate student programs and bring a wider variety of grads together.'*

—Sharon Boedo

dent Assembly have passed resolutions endorsing the move, and several graduate student organizations have backed it.

The Big Red Barn, hidden amidst rustic landscaping behind the A.D. White House and near Bailey Circle, was built in 1874 as the carriage stable for the president's house. Since then, it has served many functions.

In 1981, for example, the barn was converted for snack-bar-type luncheon service by the Department of Unions and Activities to better serve student and faculty dining needs on the upper campus.

However, because of the growing number of students, faculty and staff at Cornell, the university decided to add a dining facility on the upper campus to serve people working and studying nearby and to help ease crowding at central campus sites such as Sage, Okenfields and The Ivy Room, explained William D. Gurowitz, vice presi-



On May 11, President Frank H.T. Rhodes gave the address excerpted below at a symposium commemorating the 40th anniversary of the National Science Foundation. For a copy of the full address, contact the President's Office, 255-5201.

My role is to speak to you about the prospects for science and technology as we look ahead to the year 2030, and there is a special challenge in that. Mark Twain used to say that predictions are difficult to make — especially when they deal with the future. It is even more difficult to predict the future today, given the pace of change — technical as well as political and social — that has transformed the world in the last year alone.

Let me sketch for you two possible scenarios for the future, one optimistic and one pessimistic:

- **Population.** We will either stabilize the world's population at a level that enables people to improve their standard of living, or we will expand beyond the limits of the Earth's carrying capacity, with devastating consequences for all.

- **Disease.** Breakthroughs for viral, genetic and chronic disorders will occur, comparable in influence to those that conquered infectious diseases 40 or so years ago, or we will face new pandemics of AIDS and other diseases.

- **Education.** We will meet President Bush's goal of being tops in science and mathematics achievement by the end of the century, or we will continue at or near the bottom of the international heap.

- **Environment.** We will learn effective stewardship and how to mitigate the effects of environmental change, or we will suffer from a loss of biological diversity, global warming and toxic build-ups that threaten life itself.

- **Urban environments.** We will see a rebirth of cities as centers of commerce and community life, or we will see continued decay, with high unemployment, welfare dependency, drug and alcohol abuse, and crime.

- **International relationships.** We will make continued progress toward greater individual and economic freedom and true global community, or we will have a backlash of nationalism, insularity and repression.

Which scenarios become realities will be influenced in part by the NSF and the science and technology enterprise it helps to nurture, especially in such areas as education and the environment. Moreover, the health of NSF and of science and technology in general will be influenced by the extent of progress or decline in each of these areas.

What, then, are the options for the foundation in allocating its resources and in managing its research programs in the coming years?

I realize that "managing research" is considered by many to be an oxymoron — a contradiction in terms even worse in its way than postal "service" or airline "cuisine." One might as well talk of managing Mozart's composition or Monet's painting or Milton's writing. A basic scientific discovery is just as much a creative masterpiece — unpredictable and unmanageable — as works by these great artists. Yet there are several major questions, each involving management issues, the answers to which will profoundly influence the shape of NSF, of science and engineering, and of national and international life 40 years from now. None of these policy questions lies exclusively within the province of the National Science Foundation, yet I see no other organization addressing them in any systematic fashion.

**Can we retain our national scientific and technological strength?**

That is partly a question of dollars — not only the total spent, but also expenditures as a percentage of our gross national product and the distribution between civilian research and development and defense-related work. How we answer that question is at the heart of our economic competitiveness, personal well-being and national security.

The good news is that the U.S. spends more on R&D than the next four largest countries — Japan, West Germany, France and the United Kingdom — combined. Its position in relationship to these countries has remained relatively stable over the last decade, even though its share of the combined R&D budgets of the five countries has declined by 14 percent since 1966. Moreover, federal support for basic research and academic research and development has continued to grow, although at a slower rate than in the past, while the rate of increase for defense-related R&D, which has consumed so many research dollars in the past, has been reduced. But these relatively encouraging figures mask more disturbing trends: For two decades, Japan and West Germany have been spending a greater percentage of their GNP on civilian R&D than the U.S., and their rates of investment in civilian R&D as a percentage of GNP have been increasing more rapidly than that of the U.S. since 1981. It is particularly distressing that the rate of growth of corporate funding of R&D has declined even though the U.S.'s position as the world's largest supplier of high technology goods is precarious at best. Although American inventors are patenting their discoveries at a higher rate than in the past, foreigners are acquiring U.S. patents at a significantly faster rate.

What are we, as a nation, to do to ensure our future strength? What will preserve the vitality of American science and technology as we move toward the year 2030?

First, the nation must maintain funding for R&D, and particularly for civilian R&D, at a level that is at least comparable to what our international competitors spend. It has been said that money never starts an idea; it is the idea that starts the money. That remains generally true, but today there are far more ideas than money to support them. We shall never transform those ideas into marketable products and processes at a rate comparable to our competitors unless our spending is also at least comparable to that of our competitors. We can do that most cost-effectively, perhaps, by shifting some of the "peace dividend" to be gained from decreased defense-related R&D into civilian R&D.

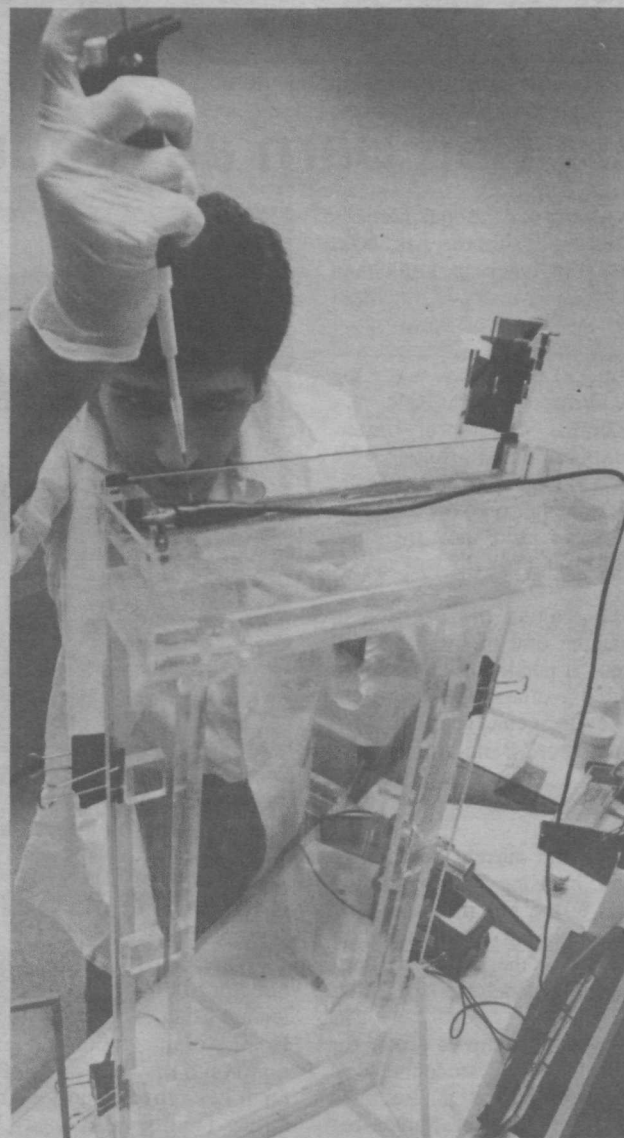
Second, we must encourage industry, which over the decades has performed roughly three-quarters of the total

# ENSURING THE U.S. FUTURE

## President Rhodes outlines challenges now facing research universities

U.S. R&D work (about \$95 billion in 1989), compared to roughly 10 percent each for universities and federal laboratories and 5 percent for other entities, to continue its commitment. We must especially find ways of encouraging smaller companies to make investments in this area. Among the initiatives that deserve support are preserving R&D tax credits, easing restrictive legislation that sometimes stands in the way of cooperative R&D endeavors, and encouraging more consortial arrangements among industries in particular fields in order to share information and expenses involved in pre-commercial research.

Yet even these kinds of incentives may be insufficient to help many small and medium-sized firms, whose research budgets are often minimal at best. To help companies of this kind with their manufacturing and productivity problems, we should develop a university-based industrial extension effort, similar to the agricultural extension effort that put American agriculture on a sound scientific base. A pilot program in my own College of Engineering, begun with modest state funding, has proved valuable in that regard and has potential for expansion beyond New York's Southern Tier. A few similar programs also exist in other states.



Jill Peltzman

Arthur Benjamin conducts a DNA sequencing experiment in Professor David Wilson's biochemistry lab.

Third, we must preserve the health of the nation's great research universities, especially its independent research universities, which lately have been under siege. Despite the continuing growth of academic R&D, which has been brought about by increases in federal, corporate and institutional support, there are several issues which are cause for concern.

For example, although recent investments in university facilities and equipment are welcome, they fall far short of needs. "Science and Engineering Indicators-1989" notes that universities are deferring \$2.50 for every \$1 of construction planned through 1989, and they are deferring \$3.60 in renovations and repairs for every \$1 spent. This is a substantial problem in an era when the quality of facilities and equipment can significantly influence the outcome of research.

The need for better facilities and equipment is part of the reason that indirect costs at many private institutions have soared in recent years. Many private universities now find

themselves in no-win situations: If they exercise their right to recover the full cost of research, including the cost of new buildings and equipment, they may make their faculty members' research proposals uncompetitive when judged against those from institutions with lower indirect-cost rates.

High indirect cost rates already are taking their toll. When one looks at a list of the top 10 research universities in terms of total research expenditures, only three of the 10 (Stanford, first; Cornell, second; and M.I.T., fourth) are private. I fear that unless, as a nation, we come to terms with meeting the indirect costs of research and the facilities problem to which it is connected, there may be virtually no private universities left among the top 20 by the year 2030. The loss to the nation in that would be enormous, not just in terms of research output, but in terms of our future work force. For it is the private research universities that have traditionally been particularly concerned with gifted students, particularly supportive of the liberal arts, particularly open to innovation and experimentation, and which have contributed, far out of proportion to their size, to the nation's supply of advanced degree holders, both professional and Ph.D. They have also served as a bulwark for all universities in defending institutional autonomy and academic freedom. If private research universities, with all the benefits they bring, are to survive another 40 years, we shall have to solve these problems, not only with the federal government, important as that is, but also with our corporate sponsors and with members of our own faculties.

**Can we provide a future skilled work force?**

In his State of the Union address, President George Bush declared that, "By the year 2000, U.S. students will be first in the world in science and mathematics achievement." With that statement, he gave the nation a challenge as ringing as John F. Kennedy's charge to put a man on the moon by the end of the 1960s, but one that will be far more difficult to achieve.

Despite some seven years of well-publicized reform, prompted by publication in 1983 of "A Nation at Risk," the results of school reform efforts have been disappointing. American students still rank at or near the bottom in international assessments of achievement in science and mathematics. The challenge of improving upon those statistics will become increasingly difficult as recent immigrants and members of minority groups, who have traditionally shied away from science and technology careers, account for an increasing share of our public school population. They are already a majority in the nation's largest urban school districts.

Equally distressing is the extent to which we lose people along the way from elementary school to graduate school in science and engineering — the fastest growing fields in terms of employment opportunities today. The pipeline narrows at every turn, as fewer and fewer students, beginning in the middle school years and continuing through the high school and college years, take courses in science and mathematics. Of the 340,000 freshmen who entered college with an interest in natural science and engineering in 1980, only 206,000 (61 percent) earned degrees in those fields four years later. Only 61,000 (18 percent of the original total) went on to graduate programs in those fields, and a meager 10,000 "survivors" (3 percent of the original total) are expected to earn Ph.D.s by 1992. If current trends continue, the nation may face a cumulative shortfall of 400,000 B.S. scientists and engineers by the year 2006. At the Ph.D. level, the shortage could reach 7,500 per year.

Shortages of this magnitude would be a crippling national handicap. Even if we still have the geniuses to devise the most creative investigations in science and engineering fields, we may not have enough well-trained foot soldiers to put their ideas into productive practice as they carry out the work of science and technology day by day.

Many worthwhile ideas have been proposed for improving science and math education and plugging the leaks in the pipeline leading to science, mathematics and engineering careers. These include revamping the curriculum in grades K-12 to stress concepts over facts, process over memorization, and to make instruction parallel the way that science and math are actually done. They include establishing more specialized high schools, such as the North Carolina School of Science and Mathematics and the Bronx High School of Science, to provide opportunities for advanced study to those who show substantial aptitude and interest in science and math. They include providing special enrichment programs for minority youngsters to encourage them to attend college and consider science and engineering careers. This is something that the General Electric Foundation has done at Aiken High School in Cincinnati and at several other sites around the country where the company has plants or offices.

Colleges and universities can play a major role in these efforts.

They should, first, require all undergraduates to complete meaningful programs of science and mathematics or quantitative reasoning. These subjects are important, not just for a wide variety of careers, but for effective citizenship, for they are vital to informed debate on public-policy issues from solid-waste management to nuclear energy, which require a basic understanding of science and math. Furthermore, scientists and engineers must engage in the debate on more general undergraduate curriculum requirements and reform, both in substance and in style.

Second, colleges and universities should insist that prospective teachers, in elementary and secondary education programs, complete rigorous college-level courses in math and science, and these should also be required for certification. Currently, fewer than half of the nation's 200,000 high school mathematics teachers and fewer than 10 percent of elementary teachers meet current professional standards for teaching in their field. Many science teachers are similarly ill-prepared. We can no longer allow elementary

*Continued on page 7*



continued from page 6

teachers, especially, to be drawn from the three-quarters of the population that stopped taking math after two or three courses in high school. Such teachers too often convey the impression that science and mathematics are dull and difficult disciplines designed to weed out all but the gifted few. Their expectations become a self-fulfilling prophesy when students reach the middle and high school years.

Third, colleges and universities should renew their commitments to undergraduate teaching, including the teaching of introductory courses in science and math, and they should provide incentives and rewards for faculty members who carry out these responsibilities well. For too long, introductory courses have been foisted off on the most junior members of the faculty, who have passed on the unwelcome responsibility at the first opportunity. Now is the time to commit serious intellectual and financial resources to improvement of introductory undergraduate courses.

Fourth, colleges and universities, in partnership with the federal government, industry and others, must encourage more of the best students in science, math and engineering to go on for advanced degrees. Universities last year awarded more doctorates than ever before, but foreign students accounted for much of the increase. This is especially true in science and engineering fields. Of those earning engineering doctorates in 1989, non-U.S. citizens represented 55 percent of the recipients whose citizenship was known. At my own institution, foreign students accounted for 41 percent of the graduate students in engineering last year, up from 34 percent just four years before.

But the problem is not that there are too many foreign students, about half of whom will remain in the U.S. after completing their Ph.D.s and contribute substantially to the nation's science and engineering base. The problem is that there are too few American students in advanced-degree programs. Only about 3 percent of American students who major in mathematics as undergraduates go on to earn mathematics Ph.D.s. Improving those numbers will take more than better undergraduate education, important though that is. It will also take fellowships and assistantships to finance study beyond the baccalaureate, and improved academic research facilities with state-of-the-art equipment.

Fifth, we must face the fact that no matter how well we prepare students in science and engineering — or any other field, for that matter — it is no longer realistic to talk in

than it now receives. And, just as new partnerships are required in post-baccalaureate education, so new partnerships are urgently required in pre-baccalaureate education. Hundreds of individual cooperative ventures already exist between universities and local schools. What is now needed is creative leadership, coordination and long-term financial support.

**Can our institutions use their scientific base to assist in "non-scientific" societal problems?**

As we look ahead 40 years, it is clear that science and technology, important though they are, will not by themselves solve the problems we face. Problems as diverse as population and disease control, environmental conservation, inner-city blight and international relationships have social as well as scientific dimensions. They require not only technical knowledge of cause and effect, action and reac-

*Colleges and universities must encourage more of the best students in science, math and engineering to go on for advanced degrees.*

tion, but knowledge of how that kind of knowledge can be most effectively applied. Can our institutions assist in the solution of such non-scientific societal problems?

If they are to try, they may need, at one level, additional support from NSF or some other source for work in the social and behavioral sciences. I realize that NSF support for behavioral and social science research has long been a sore point for investigators working in those fields. A report this past March by an advisory committee to NSF's Biological, Behavioral and Social Sciences Directorate pointed to severe under-funding, a legacy of the sharp cut-backs in funding that occurred in the early Reagan years. Yet better understanding of people, as well as better knowledge of things, will be essential if we are to meet the challenges ahead and realize the positive rather than the negative scenarios I outlined at the beginning of these remarks.

Beyond that, it seems that the challenge of the next 40 years for science and technology is how to change disciplines that for generations have been analytic and deductive

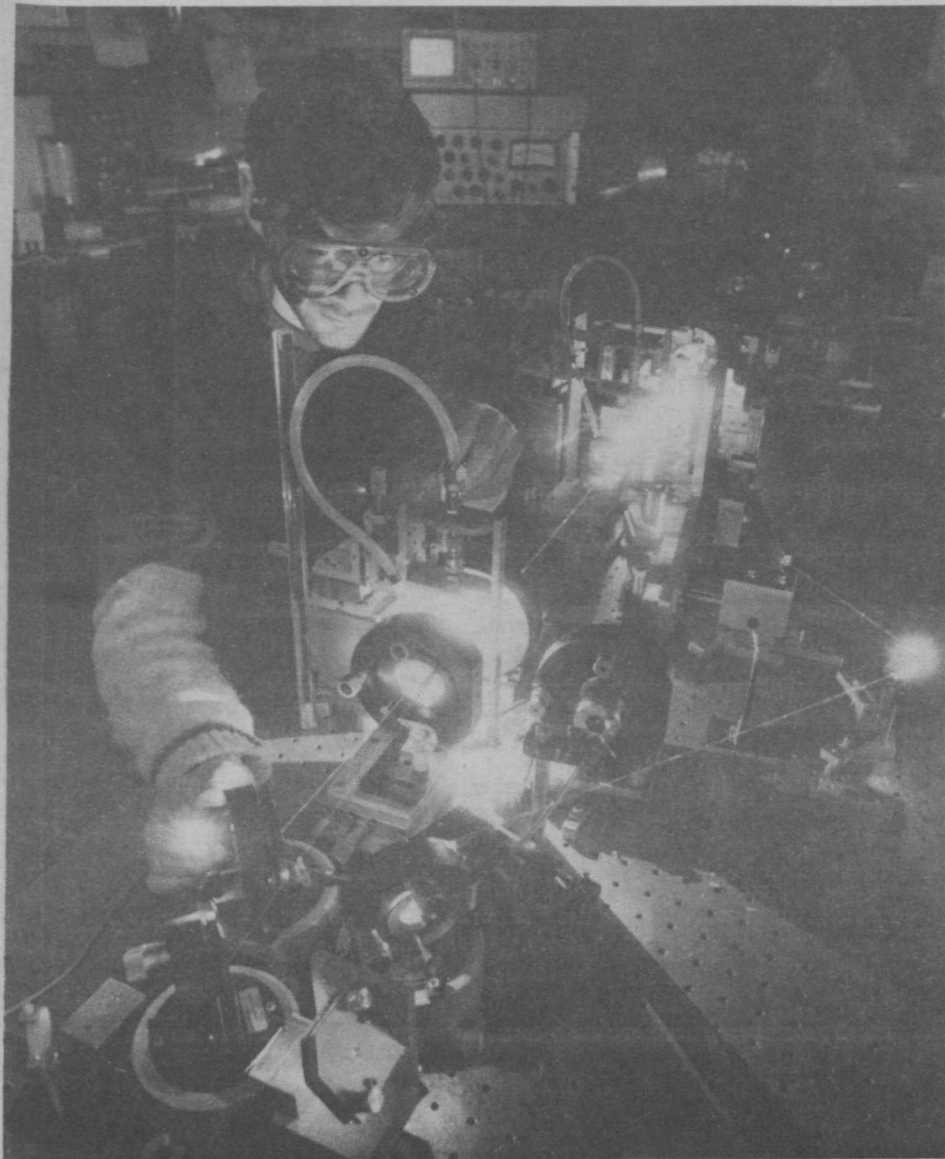
In letters, there are no laws, only conventions, whose greatest beauty lies in their sweet fragility. Here we can count on nothing. Nothing can be proved. The two worlds are antithetical, but they desperately need each other.

The challenge of the years ahead is to bridge those two worlds of feeling and of knowing in ways that solve the complex problems at hand. In this, I wonder if it is time to reinvent the land grant universities, which long ago discovered, through their Cooperative Extension programs, how to apply the fruits of university research in the service of human needs, to address the problems of our current age.

Problems such as industrial competitiveness and urban decay are admittedly far more complex than putting agriculture on the sound scientific footing that has been responsible for its incredible productivity in this century. Still, some land grant universities, including my own, have made a modest start in directing that kind of extension work toward other areas. Cornell Cooperative Extension, for example has gradually enlarged its focus to address challenges of urban as well as rural life, including nutrition education for the poor and elderly, assistance and advice to those providing home day care, and leadership development for teenagers. In the area of industrial extension, as I mentioned earlier, we are adapting the agricultural extension model to increase the manufacturing productivity of small and medium-sized firms in our region. We are also making modest overtures to foster regional economic development, through, for example, satellite transmission of engineering courses to industrial work sites and attempts to identify regional strengths and needs.

For almost three years now, Cornell has been seeking funds to develop a program of outreach in industrial extension, regional economic development and service to youth-at-risk, which could serve as a model for a comprehensive outreach program whose influence would be nationwide, but funding for the pilot program, much less for a comprehensive program nationwide, has been elusive at best.

Yet in my more expansive moments, I see the possibility of the land grant model being extended, not only to meet a broad range of human needs in our own country, but also to address problems, from disease prevention to agricultural productivity to environmental protection, on a global scale. I see the possibility of creating a handful of land grant universities of truly international scope, whose benefits to our own nation and the global society of which we are a



Chris Hildreth

Elliot Wachman adjusts a laser system he and a fellow student helped to develop.



Claude Levot

Guang-Ning Ye with the gene gun of Professors Edward Wolf and John Sanford.

terms of a terminal degree, whether high school diploma or Ph.D. In electrical engineering, the half life of information is now two years; in many other technical fields, it is less than five. As a result, we need to devise better programs — on campuses and in the workplace — to upgrade job skills of workers throughout their lives and better ways of enabling individuals to combine continuing education with their other responsibilities — to work, family and community. Time and money are both factors in this.

The task of training a work force competent in science and technical fields is big enough to require efforts of many diverse players — colleges and universities, the federal government, the states, industry, foundations, local school boards, parents and teachers. But success will take more than isolated initiatives, good intentions and good ideas. It will require total mobilization, akin to preparation for war. And, without supplanting the local control that has been so fundamental to the concept of public education in America, it may well require more federal coordination and oversight

— that have tended to achieve their undoubted success by more and more vigorous reductionism — into disciplines that are also (and I stress "also," not "instead of") able to use the results of analysis and deduction in disparate fields in new and synthetic ways. That challenge goes far beyond integrating the work of biologists with physicists or chemists or engineers, although that kind of integration is important and is already occurring on a modest scale. On my own campus, Professor Tom Eisner, a biologist, and Professor Jerrold Meinwald, a chemist, shared the Tyler Prize for their role in founding the field of chemical ecology.

The greatest challenge involves uniting the various scientific disciplines with the broader realm of intellectual thought in ways that consider both things and people. As author John Hersey has written: "In the physical sciences and engineering, laws hold sway. That to every action there should be an equal and opposite, or contrary, reaction is absolutely confirmable. One can count on it. Literature, on the other hand, is a tangled bank of honeysuckle gone wild.

part would be substantial indeed.

Our continued hope for a fuller and more fruitful employment and fuller and more fruitful lives, not only for our own citizens, but for those in the world community of which we are a part, will depend on the vision, the will and the drive we can bring to the continued exploration and extension of the frontiers of the mind. That remains our ultimate challenge; that must be our ultimate goal.

I should like to think that at this significant milestone in NSF history, the nation will rededicate itself to that task. We should not drift through by neglect or inadvertence. The time is ripe, I believe, for a high-level NSF task force to analyze each of these major questions I have identified and to draft a set of guidelines that will serve us best.

Our national strength, our personal well-being, and the security and productivity of the larger world will all depend, in large part, on how well we succeed. And on those things will depend, to a significant degree, the kind of nation and the kind of world we become in 2030.



## COMMENTARY

## Universities give more than they take in forgone taxes

*This editorial is reprinted with permission from the April 25 issue of The Providence Journal.*

Providence officials are looking hungrily at Brown University and its 140 acres of tax-exempt land for some added revenue, whether from taxes or user fees. The hunger is understandable — state aid to the city is being cut — and officials are trying every option to get more money. (Such as sending thousands of people supplemental property-tax bills from the early 1980s!)

But academia is the wrong pasture to graze on. The fact is that Brown, and the other institutions of higher education in the

city, give Providence and Rhode Island far more than they take away in forgone tax revenues and service costs. And in the case of Brown, the city's timing is particularly peculiar: The university, the poorest in the Ivy League, is trying to dig itself out of a \$3 million deficit.

What sort of a city would Providence be without Brown, which, in the latter half of this century, has become a world-renowned institution? Well, it would be a much poorer and less interesting community.

Thousands of well-heeled students and well-paid (if not to themselves, at least compared to the state average) faculty members wouldn't be here, paying millions

in property, sales and income taxes. The companies that thrive close to universities, and pay copious taxes, wouldn't be here. There would be fewer, and far less distinguished, hospitals in the area. Nor would the intellectual ferment and cultural diversity provided by a major university be here, with the immeasurable wealth they provide the community. And as a result, there would be far fewer of those high-income and well-educated people who enjoy living in the environment that such an institution creates.

User fees and taxes for educational institutions are generally bad ideas. That's because virtually all educational institutions,

including such private ones as Brown, fulfill so many public services. And it is ironic that while the city offers . . . tax holidays and other incentives to businesses it is seeking to attract to Providence, it occasionally makes noises about imposing levies on a major reason to move to Providence: The city's colleges and universities.

Indeed, in the long run, the city would be better off not pressing for any such payments — including the \$75,000 Brown already pays Providence in user fees. Why not make things as easy as possible for distinguished institutions that bring in so much wealth? Providence shouldn't be allowed to shoot itself in the foot.

## Some colleges are beginning to meet their obligations

*This editorial is reprinted with permission from the April 27 issue of The Hartford Courant.*

One of the longstanding sources of tension between town and gown in communities where colleges exist is that of burden-sharing.

Public and private institutions of higher education are exempt from most service and property taxes. Municipalities, not surprisingly, complain that colleges and universities don't pay their way when it comes to street maintenance or fire protection.

Some colleges are beginning to own up to their obligations. Even so, city officials say that what tax-exempt institutions pay voluntarily doesn't make up for the continuing erosion of the property-tax base, especially in urban locations. Moreover, most

colleges haven't the resources to play savior to ailing cities.

Yale University has announced that it will contribute \$2.6 million to New Haven, whose city budget faces a \$38 million gap. Yale also will lend \$7.5 million, if the city raises \$22.5 million from other donors. In addition, the university has agreed to pay 5.67 percent of the city's fire department budget.

Cornell University spends \$1 million a year maintaining roads. It runs a day-care center that is open to non-university personnel. The university has been paying \$125,000 a year in fire protection.

Princeton voluntarily pays \$2 million on property that it could claim as tax-exempt.

Trinity College in Hartford runs a day-care program open to non-college families and is participating in plans for a language-

immersion magnet school that would exist in partnership with West Hartford, Glastonbury and East Hartford. Trinity is also at work on a program to help first-time home buyers finance housing purchases in the campus neighborhood.

But consider the limits for Trinity, which is not large and not rich and so is perhaps representative of the financial constraints faced by most schools: To pay, say, \$2 million in lieu of taxes would be to spend roughly 5 percent of the annual Trinity budget. That sum might also be less than the in-kind and direct public services Trinity renders, from free land for a public television station to jobs, programs for city youth and use of its sports facilities by Hartford residents.

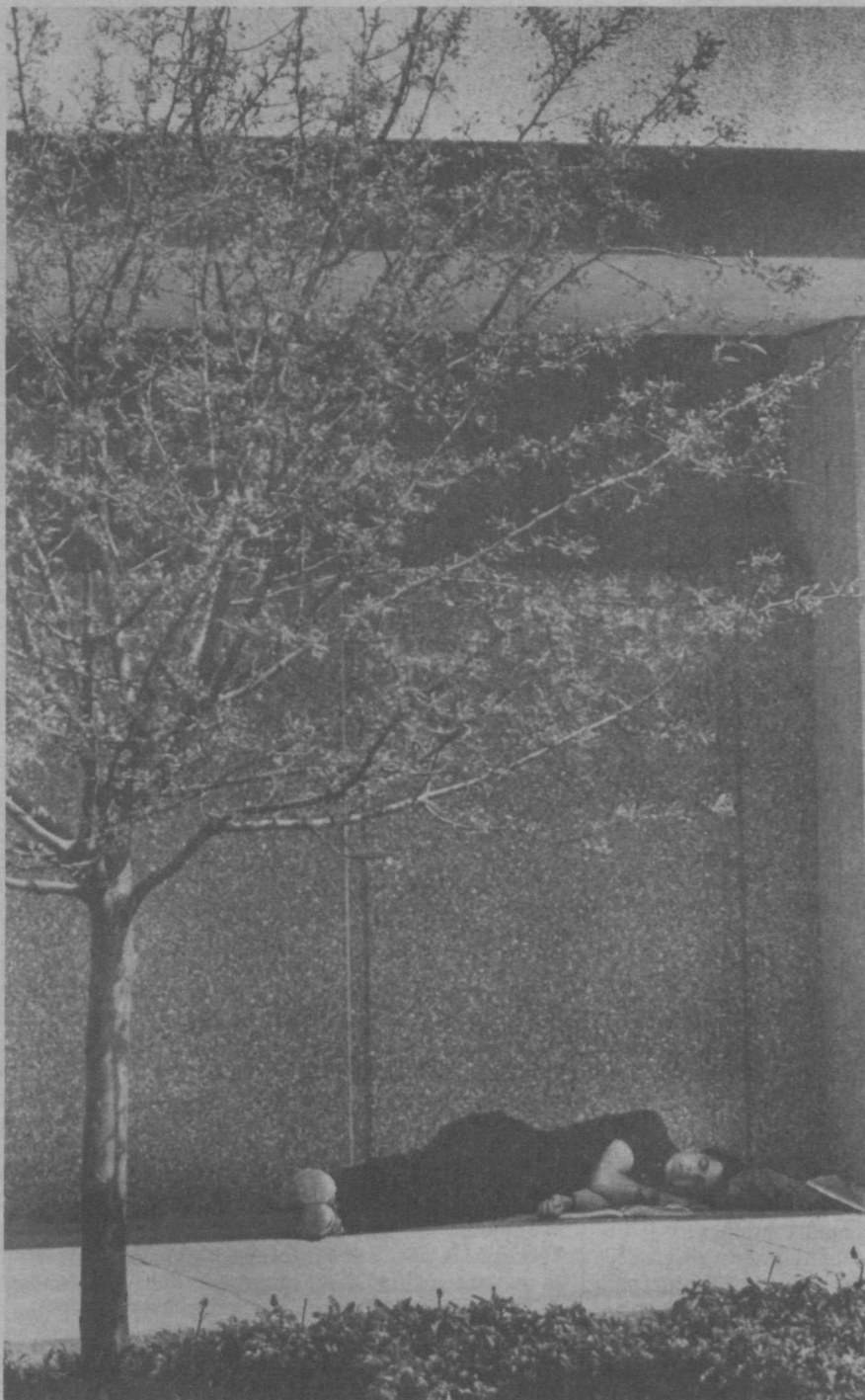
Trinity occupies approximately 2 percent of the tax-exempt land in Hartford.

The rest is held by churches, by institutions like the Atheneum, and by government, which claims 50 percent of the exempt property. Under the PILOT program the state partially compensates cities and towns for the land and properties it owns within their borders.

If the stewards of all tax-exempt land and institutions were forced to pay the full freight, then it might be fair to ask colleges to do the same. But such a burden might be more than many of the schools can bear.

In lieu of such a drastic and unlikely turn of events, voluntary payments like Cornell's and Yale's, and public service like Trinity's, should be applauded and encouraged. But the urban bailout of the 1990s will more likely and more properly depend upon burden-sharing by state and federal taxpayers.

## Study break



Tim Moersh

Sophomore Mike Goodisman takes a break from his studies at Clark Hall.

Productivity *continued from page 1*

"No one denied that our budget problems are real and important; and no one suggested a more workable solution than accelerating the generation of revenues through a higher ratio, campuswide, of tuition-paying students to faculty members."

The critics repeatedly objected to the word "productivity," which they said implies that faculty members are not now sufficiently productive. They particularly objected that the faculty's own indices of productivity were not considered along with the student-faculty ratio.

One said that faculty are not merely academically productive but are devoted to the point of sacrifice. He said he has accepted a steady loss of teaching assistants, buys supplies out of pocket, types his manuscripts because secretaries are overworked and works at home to save office electricity.

In written replies to some critics, Barker said "we are outstandingly productive" and apologized if people inferred any other belief from his report and letter. "I had taken a narrow focus on student-faculty ratios on purpose, not because students are our product, but because they provide the revenues that support us," he said.

While acknowledging budget pressures, several faculty members said productivity ought to include what faculty research and alumni add to national productivity — measured, as one put it, "not in numbers of people we educate, but in the productivity (whatever that may be!) those people are capable of delivering by virtue of the education they have received from us."

"I agree that our productivity would be most effectively measured by assessing our impact on the overall productivity of the nation," Barker said, adding, "I happen to believe it is very substantial, but it is not measurable, and nobody pays us for it."

Paying the bills is a fact of life that Cor-

nell must contend with, Barker said. More than 70 percent of the money in the general-purpose budget derives from tuition.

With other revenue sources flat and with financial aid claiming an ever-increasing piece of the general-purpose budget — following federal retrenchment in grants to needy students — tuition revenue must be increased to pay the bills.

Barker already has said that student numbers should not be increased, because "the barn is full." And raising per-student tuition to meet all revenue needs will tend inevitably to make Cornell less accessible to low- and middle-income families. The only other way to raise tuition revenue is to get more instruction per tuition dollar.

In affirming his respect for Cornell productivity on all fronts, Barker told one critic, "It is probably incorrect to refer to the student-faculty ratio as a productivity measure. Rather, it is a measure of revenue generation by a faculty member."

Barker said he knew discussion of the student-faculty ratio would disturb some. In fact, he said in writing and in meetings with faculty that the "businesslike approach" might seem antithetical to the academic enterprise; and he repeatedly stressed that he was not calling for across-the-board measures.

"In spite of those efforts, my language conveyed to some a misimpression that I regret," Barker said. "Actions will be highly localized, but we have to work together — in colleges, departments and administrative units — if Cornell is to achieve long-term budget stability."

"There's much more to a great university than its bottom line, yet somehow we do have to pay the bills," he continued. "I hope I will continue to get advice and help on how to do it."

—Sam Segal

Commencement *continued from page 1*

in the Avery Fisher Hall of Lincoln Center.

Preliminary figures indicate that approximately 5,650 students are eligible for degrees at all levels, including 641 who completed their degree work last August and 761 who did so in January. Of the 4,248 remaining, 613 are eligible to receive master's or doctoral degrees from the Graduate School, which includes dozens of

fields of advanced study.

If there is heavy rain in Ithaca on May 27, two ceremonies will be held in Barton Hall — for candidates from Agriculture and Life Sciences and Arts and Sciences at 1 p.m., and for all other candidates at 11 a.m. The decision will be announced on local radio stations starting at 8 a.m.

—Lisa Bennett



# CORNELL EMPLOYMENT NEWS

May 17, 1990

Including Job Opportunities

Volume 2, Number 21

## Affirmative Action Unit Representatives at Work

Making steady progress in affirmative action at a large university like Cornell requires the involvement and commitment of people throughout the university.

To increase the effectiveness of Cornell's affirmative action efforts, deans, directors, and department heads have designated staff members to serve as affirmative action unit representatives.

The affirmative action unit representatives (AAUR) have the following responsibilities:

- Monitor the hiring procedures in their units. They review employee requisitions and search plans. They review and make approval decisions on waivers of posting for all nonacademic waivers.
- Check the progress of the unit in achieving affirmative action goals. They review statistical reports and assess whether the unit is making satisfactory progress toward its goals.
- Work with the dean, director or department head to plan strategies for addressing identified problem areas.
- Report on the affirmative action of the unit.



AAURs discuss waiver policy — (left to right) Linda Budinger, State Finance & Business; Judith Stewart, Human Resources; Valerie Sellers, Summer Session; Ann Dyckman, University Library; Kevin Sharp, Equal Opportunity, and Valerie Hayes, Equal Opportunity.

- Answer questions about affirmative action within the unit.
- Communicate policy and procedure changes to the unit head and hiring supervisors.

- Advise employees about places within Cornell to seek assistance in solving work-related problems such as discrimination, sexual harassment, or handicap accessibility.
- Meet monthly with the Office of Equal Opportunity through Affirmative Action Unit Representatives' meetings.

In recent months, the AAURs have been critically analyzing and evaluating their current role and duties, with a keen eye toward being more proactive. Two subcommittees were formed to look at two issues: (1) the direction AAURs should go in light of their changing roles and University policy, and (2) the development of a procedure and resource manual on affirmative action/equal employment opportunity issues. Both issues are important in order to reach university affirmative action program goals.

Cornell employees who have questions or concerns about affirmative action within their units should feel free to contact their representatives. If you have a question about who your affirmative action unit representative is, please call the Office of Equal Opportunity (255-3976).

Affirmative Action Unit	Unit Representative	Phone #	Affirmative Action Unit	Unit Representative	Phone #
Agriculture & Life Sciences	Rebecca Coles	5-3211	Media Services	Betty MacCheyne	5-1861
Architecture, Art, & Planning	Cynthia Prescott (Non-academic)	5-4377	Nutritional Sciences	Carol Pyhtila	5-5411
	Elizabeth Walker (Academic)	5-9110	President	M. Joy Wagner	5-5201
Arts & Sciences	Pamela Sieradzki (Non-academic)	5-9644	Provost	David Yeh	5-8728
	Jane Pederson (Academic)	5-7507	Statutory Finance & Business	John Hartnett	5-4425
Athletics, Physical Education	Roxana Bahar	5-5220		Linda Budinger	5-5400
Biological Sciences (Academic Unit)	Harry Stinson	5-4101	Statler Hotel	Carol Lang	4-2533
Cooperative Extension	Kenneth Hillary	5-0791	Summer Session	Valerie Sellers	5-4987
	Sandra Payne	5-0795	University Counsel	Thomas Santoro	5-5124
Engineering	William Kaminski	5-9678	University Library	Ann Dyckman	5-5181
Geneva Experiment Station	Charene Hibbard	122-204	University Relations	Linda Carr	5-4909
Graduate School	Angela Mesmer	5-5812	Veterinary College	Rita Harris	3-3710
Hotel Administration	Carol Lang	5-8344	VP Campus Affairs	Wilson Small	5-3352
Human Ecology	Elizabeth Hughes	5-3113	VP Facilities & Business Operations	David Field	5-9031
Human Resources	Judith Stewart	5-6874	VP Finance & Treasurer	Gerald Boothby	5-9331
Industrial & Labor Relations	Pamela Strausser	5-3154	VP Public Affairs	Gil Ott	4-6182
Johnson Grad. School of Mgmt.	Nancy Culligan	5-5037	VP Research	Anna Moratz (until 6/16/90)	5-8607
Law School	Richard Robinson	5-4299		Linda Morse (after 6/16/90)	

### Women Veterans Group Established

The New York State Department of Labor has established a Women Veterans Group to provide career advancement information and assistance to women veterans.

To find out more about this new service, contact the NYS Department of Labor, Veterans Program Unit, Room 570, Building 12, State Office Campus, Albany, New York 12240 or call 518-457-1344.

### Summer Programs for Children and Teenagers

A directory of camps and other summer programs for children and teenagers is published each year by the Tompkins County Youth Bureau.

Copies are available in the Office of Equal Opportunity, 234 Day Hall, 255-3976 or at the Tompkins County Youth Bureau, 301 Harris B. Dates Drive in Ithaca, 274-5310.

## Commencement Ushers Needed

For the over 5,000 students who have just earned degrees, the day of commencement is exceedingly important. Those of us who volunteer our time to make this day a pleasant one have to be aware that it is a day that will be fixed in the memories of these 5,000 participants for the remainder of their lives. We need 350 ushers to help guide students, trustees, parents, faculty and staff in the various routes and places on campus.

Employees who VOLUNTEER for the 1990 Commencement to be held on Sunday, May 27 at 11am, will be granted compensatory time-off equivalent to their standard work day. Each volunteer is asked to attend one designated rehearsal on Wednesday, May 23 or Thursday, May 24 at 3pm in the Robison Hall of Fame Room, Schoellkopf Memorial Building. The rehearsal will be ap-

proximately 1.5 hours long, and you will be informed as to which session to attend. Approximately 5 hours of your time is required at Commencement.

To express his appreciation and say thank you, President Rhodes will host a wine and cheese reception for ushers and other volunteers on Wednesday, May 30, 4:30pm at his home. At the reception, we will continue our tradition of giving Commencement volunteers an attractive coffee mug suitably inscribed to commemorate the occasion.

If you are willing to join us as a volunteer usher, please fill out the form below. We also ask for your supervisors' name so we can advise them of the compensatory time-off policy. **Please send the form below, as soon as possible, to the Commencement Office, B-25 Day Hall.**

#### Commencement Volunteer Form

I will be able to help as an usher at Commencement on May 27, 1990.

Name \_\_\_\_\_ Phone \_\_\_\_\_

Department \_\_\_\_\_

Campus Address \_\_\_\_\_

Name of Supervisor \_\_\_\_\_

Campus Address \_\_\_\_\_

Campus Telephone \_\_\_\_\_

Please return this response to: Commencement Office, B-25 Day Hall.



# JOB OPPORTUNITIES

May 17, 1990

Volume 2, Number 21

Staffing Services, 160 Day Hall, Cornell University, Ithaca NY 14853-2801

Day Hall: (607) 255-5226

East Hill Plaza: (607) 255-7422

Employees may apply for any posted position with an Employee Transfer Application. A resume and cover letter, specifying the job title, department and job number, is recommended. Career counseling interviews are available by appointment.

Requests for referral and/or cover letters are not accepted from external candidates unless specified in the ad. Candidates should submit a completed and signed employment application which will remain active 4 months. Interviews are conducted by appointment only.

## Professional

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

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

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

### Assistant Director Student Aid Development and Stewardship (PA1805) HRII

#### University Development/Public Affairs-Endowed

Assist Director in the identification, cultivation and solicitation of alumni and friends who have the capacity to make large individual gifts to Student Aid Development.

**Requirements:** Bachelor's or equivalent. 3-5 years experience preferably in development and involving the organization of volunteers. Excellent communication (oral/written) skills. Solicitation experience and prospect management expertise highly desirable. Travel is required. Send cover letter and resume to Cynthia Smithbower.

### Business Manager (PA1801) HRII

#### Office of Financial Aid/Student Employment-Endowed

Responsible for the development of the annual financial aid budget including compiling fiscal planning data and monitoring expenditures against those budgets. Prepare all financial reports. Oversee monthly accounting activities, coordinate administrative service within the office, and supervise accounting staff.

**Requirements:** Bachelor's in accounting or finance, MBA preferred. 3-5 years related financial experience including budget development and financial systems development. Supervisory experience preferred. Send cover letter and resume to Cynthia Smithbower.

### Computer Systems and Network Manager (PT1509) HRII

#### Mann Library-Statutory

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

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

### Research Support Specialist III (PT1501) HRII

#### Division of Nutritional Sciences-Statutory

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

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

### Director of Graduate Records (PC1304) HRII

#### The Graduate School-Endowed

Responsible for all aspects of management of the Graduate Records Office. Interpret Graduate and University legislation regarding student status, degree requirements; oversee maintenance, accuracy and security of the permanent records of all students enrolled in the Graduate School; monitor and verify graduate students' status and progress toward the satisfaction of requirements of the specific advanced degree programs; the distribution of information regarding fields of study and programs available in the Graduate School to faculty and students and coordinate policies with other offices; the development of the Graduate School Information System; and supervision of a permanent staff of four (the Degree Coordinator, the Information Secretary, and two Records Assistants).

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

### Senior Systems Analyst (PT0705) HRII

#### Mann Library-Statutory

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

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

### Senior Research Support Specialist (PT0315) HRII

#### Materials Science Center-Endowed

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

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

### Assistant Manager Financial Systems (PT1911) Level 36 HRII

#### Finance and Business Services-Statutory

Assist the Manager in the planning, management, and supervision of operations, programming and technical staff. Assume responsibility for day-to-day management of financial systems. Must be able to lead and guide the development, maintenance, installation, documentation and upgrade/modification of administrative systems software. Serve as user consultant.

**Requirements:** Bachelor's in computer science, business administration, or equivalent combination of experience is required. 5 years of responsible experience in governmental, higher education or business computing and systems is required. Knowledge of CU mainframes, IBM System 36, PC's, DOS, JCL, CMS, MVS, ADABAS and Natural. Send cover letter and resume to Sam Weeks.

### Area Manager II (PT1706) Level 36

#### Plasma Studies-Endowed

Responsible for all aspects of the Lab of Plasma Studies computer system (purchase and install hardware, manage operations, assist users, etc.). Supervise undergraduate or part time employee assistants who carry out computer system jobs. Function as "senior" technician in Ion Beam Lab.

**Requirements:** Bachelor's in EE or computer science or equivalent. Formal training in operating computer systems, networking, programming, etc. 3-5 years related experience with DEC computer systems and with the UNIX operating system, or an equivalent combination is necessary. Strong interpersonal skills are necessary. Send cover letter and resume to Sam Weeks.

### Technical Specialist I (PT1703) Level 36

#### CIT/Systems-Endowed

Design, implement, install, document and maintain systems software and significant subsystems for the AIX/370 Operating Systems (IBM's version of UNIX for 370 architecture machines). Provide technical leadership in designing and adapting functional enhancements to AIX/370 and its subsystems. Some night, weekend and "on call" duties.

**Requirements:** Bachelor's in computer science or equivalent experience with computer courses in operating system fundamentals. 3-5 years experience with UNIX Operating Systems and significant subsystems preferred. Knowledge of "C" programming language, UNIX utilities and system calls is essential. Work with IBM 370 assembler language, the VM operating system and large systems is a plus. Send cover letter and resume to Sam Weeks.

### Senior Systems Programmer/Analyst (PT1903) Level 35

#### Computer Services-Endowed

Provide technical support for CUINFO, electronic mail, and other related projects. Design, develop, maintain, and program software related to these communication systems. Prepare documentation, assist and train users. Process database changes. Research, investigate and evaluate other similar systems.

**Requirements:** Bachelor's with 3-5 years experience. Extensive knowledge of VM/CMS including XEDIT and IBM assembly language. The following are highly desirable: experience with Pascal and C, familiarity with IBM PC and Macintosh, familiarity with TCP/IP network concepts and protocols, and verbal skills including grammar and spelling. Send cover letter and resume to Sam Weeks.

### Senior Applications Programmer/Analyst (PT1906) Level 35

#### CIT/IR-Endowed

Design, develop, modify, maintain and document complex applications software in support of a major administrative system. Analyze the system to increase usability and efficiency and to decrease costs. Write program or procedural specifications. Diagnose problems in production system software and effect emergency repairs. Write production procedures, JCL, and user manuals.

**Requirements:** Bachelor's or equivalent with related courses. 3-5 years related experience. Knowledge of applications for interactive administrative systems; database management systems such as ADABAS; machine architecture; system utility programs and VM/CMS. Knowledge of several languages such as PL/1, COBOL, Natural, Mark IV. Ability to provide guidance/supervision. Send cover letter and resume to Sam Weeks.

### Senior Technical Consultant (PT1701) Level 35

#### Financial Systems-Endowed

Provide technical support. Serve as liaison to Financial Systems administrative technical consultant and Information Technologies staff. Write, maintain, and analyze system programs where normally used programming languages are unsuitable. Supervision of program analyst team as assigned.

**Requirements:** Bachelor's or equivalent. 5-10 years experience in application and system programming with ADABAS and BATCH, and VM/CMS interaction. Knowledge of commonly used programming languages such as Basic and assembler for mainframe to micro systems. Strong communication skills required. Send cover letter and resume to Sam Weeks.

### Applications Programmer/Analyst III (PT1905) Level 34

#### CIT/IR-Endowed

Design, develop, modify, maintain and document fairly complex applications software in support of a major administrative system. Analyze the system to increase stability and efficiency and to decrease costs. Diagnose problems in production system software and effect emergency repairs. Write production procedures, JCL and user manuals.

**Requirements:** Bachelor's or equivalent with computer related courses. 3-5 years related experience. Knowledge of applications for interactive administrative systems, database management systems, machine architecture and system utility programs. Knowledge of ADABAS and several languages: PL/1, Natural, COBOL, Mark IV. Send cover letter and resume to Sam Weeks.

### Systems Software Engineer (PT1716) Level 34

#### Computer Science-Endowed

Assist in the development of research software by providing system support (software installation and maintenance, and benchmarking) and C and Lisp programming (graphics, networking, and Lisp development). Some research work possible, depending on interest and qualifications.

**Requirements:** Bachelor's in computer science or mathematics or equivalent combination of education and experience. Work with UNIX required. Knowledge of Lisp and/or experience with complex Lisp systems advantageous. Send cover letter and resume to Sam Weeks.

### Applications Programmer/Analyst III (PT1715) Level 34

#### Computer Science-Endowed

Working with staff and graduate students, develop and implement the Synthesizer Generator, a system that generates language based software environments from formal specifications. Maintain the system and provide documentation.

**Requirements:** Bachelor's in computer science (Master's preferred) or equivalent combination of education and experience. Familiarity with C and UNIX, window systems, formal languages, and compilers. Send cover letter and resume to Sam Weeks.

### Software Engineer (PT1704) Level 34

#### Computer Science-Endowed

Specify, design, implement, document and maintain reliable distributed systems software and applications for a large research project. Work closely with staff and students and serve as liaison with external users of the software in academia and industry.

**Requirements:** Bachelor's in computer science, math, or equivalent combination of education and experience. 3 years programming work including large systems with emphasis on distributed systems and/or communications. Programming in C preferred. Send cover letter and resume to Sam Weeks.

### Systems Programmer/Analyst III (PT0401) Level 34

#### CIT/Research and Analysis-Endowed

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

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

### Applications Programmer/Analyst II (PT1708) Level 33

#### V.P. for Campus Affairs-Endowed

Design, develop, install, modify, maintain and document approved applications as needed for the Division of Campus Life departments. Set up hardware; diagnose problems; repair or arrange for repair of equipment; and apply fixes and upgrades.

**Requirements:** Bachelor's or equivalent with computer-related courses. 1-3 years of related experience. Working knowledge of applications for batch and/or interactive systems; VM/CMS; system utility programs; operating systems and software packages for PC and Macintosh computers (i.e., Wordperfect, Lotus, Filemaker, Excel, DOS, Dbase); and networks (Novell and/or AppleLink). Hardware experience on IBM mainframes and micros required. 2 programming languages-PL/1, Natural, Cobol, Pascal, Basic. Send cover letter and resume to Sam Weeks.

### Systems Programmer/Analyst II (PT1406) Level 33

#### Electrical Engineering-Endowed

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

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

### Applications Programmer/Analyst II (PT1905) Level 33

#### CIT-Endowed

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

**Requirements:** 2-3 years experience. Knowledge of applications for interactive and batch administrative systems, database management systems, machine architecture, system utility programs, VM/CMS. Knowledge of at least 2 languages: PL/1, Natural or COBOL. Send cover letter and resume to Sam Weeks.

### Technical Consultant II (PT6301) Level 33/HRI

#### HDFS/Family Life Development Center-Statutory

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

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

### Systems Programmer/Analyst II (PT1908) Level 33

#### Engineering College Educ. Computing-Endowed

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

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

### Technical Consultant I (PT1506) Level 32

#### Johnson Graduate School of Management-Endowed

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

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

### Visual Specialist I (PA1904) HRI

#### Biomedical Communications-Statutory

Conceive, design, and develop illustrative material applicable to medical teaching and research projects using a computer graphics workstation and freehand illustration.

**Requirements:** Bachelor of Fine Arts - Graphic Design/Illustration. Minimum 2 years work experience doing illustrations/computer graphics. Send cover letter and resume to Cynthia Smithbower.

### Administrative Supervisor, Interlibrary Lending (PA1905) HRI

#### Access Services/Interlibrary Lending-CUL-Endowed

Under the general direction of the Access Services Librarian, coordinate, organize, and supervise CUL's interlibrary lending operation. Supervise searching; handle negative responses to requests; reply to requestors, etc. Responsible for trouble shooting, interpreting lending policies and correspondence regarding lending problems.

**Requirements:** Bachelor's or equivalent. Minimum 2 years experience working in an academic or research library. Ability to work with foreign languages; supervisory experience; strong interpersonal and communication skills; strong bibliographic skills; familiarity with interlibrary loan. RLIN or OCLC knowledge and keyboarding experience helpful. Send cover letter and resume to Cynthia Smithbower.

### Assistant Director (PA1906) HRI

#### College of Arts and Sciences/Admissions-Endowed

Recruit applicants from assigned geographical regions and chair a selection committee comprised of faculty and academic deans. Play a major role in coordinating the recruitment and selection of students of color for the college.

**Requirements:** Bachelor's in liberal arts; advanced degree and fluency in Spanish are preferred. 3 years experience in admissions, teaching or related areas. Background in market research, admissions travel, recruitment and selection of student of color is particularly desirable. Excellent interpersonal, communication and organizational skills. Send cover letter and resume to Cynthia Smithbower.

### Staff Writer I (PC1808) HRI

#### Theory Center-Endowed

Develop and prepare written information for dissemination to the Theory Center's public.

**Requirements:** Bachelor's in English, journalism or closely related field, or equivalent combination of education and experience. 1-3 years writing experience; experience summarizing scientific information preferred. Experience working with print shops, the media and desktop publishing software. Must be able to work independently with high degree of accuracy and be able to meet deadlines in a fast-paced environment. Strong organizational and interpersonal skills necessary. Send cover letter, resume and 3 writing samples to Esther Smith, Staffing Services, 160 Day Hall.

### Managing Editor (PC1807) HRI

#### School of Hotel Administration-Endowed

Responsible for all aspects of the CU Hotel and Restaurant Administration Quarterly, an international professional journal. Copy-edit (or re-write) manuscripts, research and write feature articles; responsible for the layout and makeup of all pages, acquiring all artwork, and maintaining a production schedule.

**Requirements:** Bachelor's degree, preferably in English or journalism, at least 2 years of prior work in print publications. Must have top-notch grammar skills. Should have some familiarity with the Macintosh computer, Microsoft Word, and Aldus Pagemaker, also must understand basic type specifications. Send cover letter, resume and editing samples to Esther Smith, Staffing Services, 160 Day Hall. Application materials will be accepted until May 24.

### Clinical Volunteer Coordinator/Trainer (PA1802) HRI

#### University Health Services-Endowed

Responsible to the Director of Health Education for planning, implementing, coordinating and evaluating the clinical volunteer program and assisting in the overall development and administration of Health Education programs for students.

**Requirements:** Bachelor's in health education or a closely related field. 2-3 years related experience working in a health care facility or family planning program. Must have excellent oral and written communication skills and able to collaborate with wide variety of health professionals. Send cover letter and resume to Cynthia Smithbower.

### Applications Programmer II (PT1801) HRI

#### Animal Science-Statutory

Develop, install, service, maintain, modify, and document complex personal computer applications programs for the CU Dairy Records Processing Lab. Assist with planning of complex systems/applications programming projects involving mainframe and personal computer interaction.

**Requirements:** Bachelor's or equivalent in computer science or animal science. 2-3 years experience providing knowledge of CSP (IBM's 4th generation 'Cross System Product' programming language) application programming procedures. Send cover letter and resume to Sam Weeks.

### Assistant Manager Front Office (PA1807) HRI

#### Statler Hotel-Endowed

Under the supervision of the Director of Rooms Div. coordinates and participates in Reservations, Concierge, and Bellstand operations. Flexible nights and weekends.

**Requirements:** Bachelor's in hotel administration preferred; a minimum of 2 years related experience; CU experience preferred; excellent interpersonal and communication skills; demonstrated leadership qualities. Send cover letter, resume and employee transfer application to Cynthia Smithbower.

### Assistant Manager Front Office (PA1806) HRI

#### Statler Hotel-Endowed

Under the supervision of the Director of Rooms Div. coordinates and participates in Front Desk, and Telephone operations. Flexible nights and weekends.

**Requirements:** Bachelor's in hotel administration preferred; a minimum of 2 years related experience; CU experience preferred; excellent interpersonal and communication skills; demonstrated leadership qualities. Send cover letter, resume and employee transfer application to Cynthia Smithbower.

### Director Architecture, Art and Planning Career Office (PA1803) HRI

#### Career Center-Endowed

Provide career placement services to students in the College of Architecture, Art and Planning; organize job hunting seminars, coordinate recruiting program, maintain career library resources, advise students; interact with faculty, college offices, and employers; oversee all aspects of career office. Report to Director of University Career Center. 9 month recurring. September-May.

**Requirements:** Master's preferred in counseling, education or liberal studies. 2-4 years experience in working with college students. Excellent writing and administrative skills, ability to work independently. Send cover letter and resume to Cynthia Smithbower.

### Teaching Support Specialist II (PT1714) HRI

#### Biochemistry, Molecular and Cell Biology-Statutory

NOTE: this is a change from the previous, incorrect posting. Instruct and grade lab students. Design and perform new experiments. Working with teaching staff, help in developing and updating some

protocols. Maintain lab organization, prepare reagents, and order supplies. Set up and arrange lab and supplies for student use. Responsibilities include two courses each semester and possibly one in the summer.

**Requirements:** Bachelor's in biochemistry (or closely related field) or equivalent. 2-3 years experience in a teaching lab with various types of electrophoresis, chromatography, ultracentrifugation, protein purification, bacterial cell culture, and liquid scintillation counting. Need good skills in organization and communication. Some knowledge of Macintosh computers and programs is desirable. Send cover letter and resume to Sam Weeks.

### Research Support Aide (PT1512) HRI

#### Soil, Crop, Atmospheric Sciences-Statutory

Assist with data compilation and analysis, writing and production of monthly climate publications. Use computer to prepare graphics for publication. Respond to requests for climate data information and assist with research projects.

**Requirements:** Bachelor's preferred, with coursework in Meteorology/Climateology. Minimum 1-2 years related experience. Excellent oral and written communication skills. Familiarity with the use of Macintosh computer for word processing and other applications required. Experience with mini or mainframe computer systems desirable. Send cover letter and resume to Sam Weeks.

### Budget Analyst II (PC1515) HRI

#### Office for Research/CALS-Statutory

Provide administrative assistance to directors in preparing budget, administration of funds, accounting system design, preparation of reports, analysis of financial trends and provide forecasts and assessment of new funding opportunities. Supervise accounts management staff.

**Requirements:** Bachelor's in business management or accounting or equivalent experience; Master's or equivalent desirable. Experience in managing research accounts, familiarity with CU Statutory accounting procedures, knowledge of computers and management systems and electronic office equipment. Supervisory experience desirable. CU employees only. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

### Research Support Specialist II (PT1410) HRI

#### Chemical Engineering-Endowed

Provide technological support to faculty and students for research/teaching programs in the School of Chemical Engineering, including troubleshooting and fabricating sophisticated mechanical and electronic equipment. Responsible for facilities maintenance and safety enforcement.

**Requirements:** Bachelor's in mechanical/chemical field or equivalent combination of education and experience required. Applicant must be well versed in modern mechanical design, electronics and computer interfacing. 2-3 years experience in research/chemical engineering environment desirable. Ability to work independently essential. Some machine shop work helpful. Send cover letter and resume to Sam Weeks.

### Fiscal Officer (PC9204) HRI

#### Computer Science-Endowed

Under general direction from the Director of Administration manage fiscal operation in a 150 member computer science department with an academic budget of \$3M and an annual research volume of \$5M. Respond to faculty, staff and students by assisting in implementing new or revised policies to improve the environment for teaching and research within the department. Develop and prepare annual operating budget and research budgets. Develop and implement policies and procedures for all accounting functions as required. Supervise accounts assistant. Design and implement financial management systems.

**Requirements:** Bachelor's or equivalent combination of education and experience. 4 years financial analysis/management experience preferably in academic setting. Experience and aptitude with microcomputers and software for institutional analysis and database management systems. Excellent communication, interpersonal, analytical and problem solving skills. Ability to prioritize and work effectively with diverse groups. Demonstrated experience in planning, organizing and implementing new initiatives. CU employees send employee transfer application to Esther Smith, Staffing Services, EHP.

### Applications Programmer I (PT1403) HRI

#### Finance and Business Services-Statutory

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

**Requirements:** Bachelor's in computer science or equivalent. 1-2 years related experience. Work with PC's, IBM System 36,



ogy. Master's preferred. 2-3 years experience working with nutrition, health and social science data on micro and mainframe computers. Good organizational and interpersonal skills. Send cover letter and resume to Sam Weeks.

**Accountant I (PC1411) HRI**  
**Electrical Engineering-Endowed**  
Administer sponsored research accounts; manage accounting of- fice, and supervise staff of 2. Job sharing position. Hours to be arranged.  
**Requirements:** Associate's or equivalent in business or accounting. Bachelor's preferred. 2-3 years related experience. Ability to use IBM PC and database software and to work under pressure. Good interpersonal skills. CU employees send employee transfer applica- tion, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter, resume and salary requirements to Esther Smith, Staffing Services, 160 Day Hall.

Professional Temporary

**Applications Programmer (PT1602)**  
**Division of Nutritional Sciences**  
Design, develop and document state-wide reporting system in con- sultation with program staff. 4 months, Mon - Fri, 20 hrs pr wk.  
**Requirements:** Associate's or equivalent with computer experi- ence. 2-3 years programming experience preferred. Experience with database design & programming, preferably with dBASE. Excellent oral and written communications skills. Send cover letter and resume to Sam Weeks.

**Computer Consultants (T8212)**  
**Information Technologies**  
Information Technologies is seeking applicants for part-time posi- tions in customer (user) support. Successful applicants will have experience with a broad range of technologies (micro and main- frame) with general knowledge of major application software (wordprocessing, DBMS, operating systems etc.). Excellent com- munication skills and positive customer service orientation are essential. Knowledge of the CU computing environment preferred. Interested parties may submit a resume to Stephan Knapp, CU, CIT Resource Services, CCC Bldg. Room 121, Ithaca, NY 14850.

Technical

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

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

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

**Animal Technician, GR18 (T1203)**  
**Physiology-Statutory**  
**Minimum Biweekly Salary: \$529.35**  
Participate in long-term animal experiments with pregnant animals. Perform all aspects of general animal maintenance and maintain experimental records. Sample blood and prepare infusions. Perform general lab duties. Follow strict protocols for sterile or disease control environments and regulations for animal welfare.  
**Requirements:** Associate's or equivalent biological sciences or equivalent. Bachelor's desirable. Pre-employment physical and immunizations required. Previous experience with sheep preferred. Send cover letter and resume to Sam Weeks.

**Technician, GR19 (T1806)**  
**Genetics and Development-Statutory**  
**Minimum Biweekly Salary: \$551.86**  
Provide technical and administrative support for the efficient opera- tion of a genetics lab. Duties include participation in research; maintenance and ordering of lab supplies; and maintenance of a collection of genetic strains of C. elegans (nematode).  
**Requirements:** Associate's (Bachelor's preferred) with course work in genetics. Minimum of 1 year lab experience. Must be willing to learn new skills and procedures. Send cover letter and resume to Sam Weeks.

**Technician, GR19 (T1807)**  
**Genetics and Development-Statutory**  
**Minimum Biweekly Salary: \$551.86**  
Assist principal investigator and postdoctoral associate with experi- ments. Perform gel electrophoresis, blot transfers, radioactive labelling, autoradiography, and nucleic acid isolations, cell culture and plant stock. Prepare cell culture media and solutions. Prepare sterile glassware and apparatus for experiments.  
**Requirements:** Associate's in biological science or chemistry or equivalent. Bachelor's preferred. Minimum 1 year lab experience desirable. Send cover letter and resume to Sam Weeks.

**Technician, GR19 (T1507)**  
**Plant Pathology-Statutory**  
**Minimum Biweekly Salary: \$551.86**  
Conduct pathogen testing in potato plants, screen populations for disease resistance and maintain potato tissue and pathogen culture collections. Prepare clones for shipment. Work in the lab, green- house and field. Train graduate students.  
**Requirements:** Associate's in biological science or chemistry or training in biology, biochemistry or chemistry. 1 year lab experience with knowledge of tissue culture and testing procedures. Drivers license essential. Send cover letter and resume to Sam Weeks.

**Facilities Inventory Drafter, GR19 (T1409)**  
**Facilities Engineering-Endowed**  
**Minimum Biweekly Salary: \$551.86**  
Responsible for maintaining and updating the drawings and floor plans of all CU buildings for the Facilities Inventory section. Create or revise plans from field sketches or construction drawings. Calcu- late and verify field data on space usage and gross and net square footage. Do field inspections. Maintain work log. Assist in training and supervision of student drafters.  
**Requirements:** HS diploma or equivalent. Associate's preferred. 2 years drafting experience, strong communication and interpersonal skills. Experience with microcomputers and CADD desirable. Send cover letter to Sam Weeks.

**Technician, GR20 (T1904)**  
**Plant Breeding and Biometry-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Assist in genetic mapping of RFLP markers in tomatoes. Extract DNA, run and blot gels, isolate and screen plasmid clones, radiola- bel probes, manage computer data file and analyze genetic data on computer. Assist in overall maintenance of lab including preparing solutions, ordering supplies and monitoring safety. May involve some supervision of graduate students.  
**Requirements:** Bachelor's in biology, genetics, biochemistry or related discipline. Minimum 2 years experience, lab work preferred. Send cover letter and resume to Sam Weeks.

**Animal Health Technician, GR20 (T1908)**  
**Vet Medical Teaching Hospital-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Provide support therapy for Intensive Care Unit patients and assist with emergency procedures. Teach intensive care and emergency protocol to students assigned to ICU duty. Operate and maintain the systems providing oxygen therapy, intravenous and subcutaneous fluid therapy, central venous pressure, electrocardiograms, etc. Maintain records and inventory of supplies. Some weekends and holidays scheduled rotation through shifts. First, second and third shift.  
**Requirements:** Associate's in animal health technology, NYS licensure or eligible. Experience working with small animals preferred and an interest in teaching clinical care techniques. Send cover letter and resume to Sam Weeks.

**Animal Health Technician, GR20 (T1910)**  
**Vet Medical Teaching Hospital-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Assist the faculty in teaching and supervising staff, senior students and externs. Give them instruction in the proper procedures of animal health care for clinical patients on the Community Practice Service. Provide emergency animal care. Work with clients. Maintain stock of supplies. Assist with paper work and records.  
**Requirements:** Associate's in animal health technology (NYS licensure or eligible). Experience working with small animals preferred. Send cover letter and resume to Sam Weeks.

**Animal Health Technician, GR20 (T1909)**  
**Vet Medical Teaching Hospital-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Assist the faculty in teaching and supervising staff, senior students and externs. Give them instruction in the proper procedures of animal health care for clinical patients. Provide emergency animal care. Work with clients. Maintain stock of supplies. Assist with paper work and records.  
**Requirements:** Associate's in animal health technology (NYS licensure or eligible). Experience working with small animals preferred. Send cover letter and resume to Sam Weeks.

**Anesthesia Technician, GR20 (T1907)**  
**Vet Medical Teaching Hospital-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Assist with induction, monitoring and recovery of animals under anesthesia. Prepare and maintain anesthetic equipment. Assist with the education of the senior students assigned to anesthesia. Main-

tain records and inventory of supplies. Schedule will include some on-call and overtime when needed.  
**Requirements:** Associate's in animal health technology, NYS licensure or eligible. Experience working with small animals preferred. Send cover letter and resume to Sam Weeks.

**Electronics Technician, GR20 (T1804)**  
**Microcomputers and Office Systems-Endowed**  
**Minimum Biweekly Salary: \$575.30**  
Deliver and pickup microcomputers, peripherals, typewriters, and leased equipment from campus locations. Remove and install leased equipment and install and set-up microcomputers. Assist distribution staff with sales as needed. Assist in assembling and testing of microcomputers and office equipment.  
**Requirements:** HS diploma or equivalent. Associate's in electronic field preferred. Minimum 2 years experience with microcomputer technology. Familiarity with hardware and software. Mechanical aptitude necessary. Able to lift 75 pounds. Valid NYS driver's license. Send cover letter and resume to Sam Weeks.

**Technician, GR20 (T1404)**  
**Clinical Sciences-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Provide technical support for an immunological lab research staff. Prepare tissue culture, bacteriological media, buffers and other formulated reagents. Collect blood and milk samples from cows. Work with other common lab animals. Clean lab and glassware. Do literature searches.  
**Requirements:** Bachelor's in biology or equivalent experience in microbiological techniques. 1-2 years experience handling lab animals and knowledge of lab procedures. Send cover letter and resume to Sam Weeks.

**Animal Health Technician, GR20 (T1405)**  
**Vet Medical Teaching Hospital-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Responsible for maintenance of aseptic conditions and coordination of surgery team in the operating room during a surgical procedure. Cleaning and sterilization of surgical and hospital equipment. Must be available when on-call for emergency duty. Some weekends and holidays required.  
**Requirements:** Associate's in animal health technology. Licensed or eligible for licensure in NYS. 2 years operating room experience preferred. Send cover letter and resume to Sam Weeks.

**Technician, GR20 (T0706)**  
**Floriculture and Ornamental Horticulture-Statutory**  
**Minimum Biweekly Salary: \$575.30**  
Conduct field, greenhouse and lab experiments designed to evalu- ate the effects of weeds and weed control agents (including herbi- cides and biological control agents) on plant growth. Apply and evaluate herbicides and biological control responses to herbicides and weeds, data analysis and summary. Supervise 2 student employees, interact with Graduate students, other faculty, and department support staff. Some travel within New York State will be required.  
**Requirements:** Bachelor's in horticulture, agronomy, plant science or related field or equivalent. 1 or more years in the following experience: weed identification and control, micro-computers, macro- computers, pesticide application, physiology lab skills, culture and maintenance of turfgrass and ornamentals. NYS driver's license is required. Must have (or be capable of obtaining) an NY Commercial Pesticide Applicator's certification in categories 3A and 10. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T1711)**  
**Vet Pathology-Statutory**  
**Minimum Biweekly Salary: \$599.73**  
Prepare high quality microscope slides for interpretation by the pathologist. Primary duties include the embedding, sectioning, and staining of animal tissues. Assist in training new staff.  
**Requirements:** Associate's or equivalent in medical lab technology (Histology) or related field, with coursework in histological tech- niques HT(ASCP) certified or eligible. 2-4 years experience as a histology technician in a hospital or research lab desired. Or Bachelor's or equivalent with 1-2 years experience. Pre-exposure rabies vaccine required subsequent to hire. Must be able to work independently without constant supervision. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T1802)**  
**Psychology-Endowed**  
**Minimum Biweekly Salary: \$599.73**  
Assume operation and supervision of human newborn research lab. Participate in planning and evaluation of experiments and collecting and analyzing data. Supervise and train undergraduate research- ers. Work with parents and schedule infants and researchers. Maintain computer database; statistical analysis.  
**Requirements:** Bachelor's or equivalent. Minimum 1-2 years experience in related field. Good supervisory, interpersonal, orga- nizational skills essential. Must like working with infants. Computer skills required. Must be able to work independently, meeting with parents in hospital setting, handle newborns, videotape experimen- tal procedures, etc. Send cover letter and resume to Sam Weeks.

**Lab Technician, GR21 (T1606)**  
**Equine Drug Testing-Statutory**  
**Minimum Biweekly Salary: \$599.73**  
Perform advanced analysis under the direction of a senior chemist. Operate, maintain, and trouble shoot HPLC apparatus. Analyze samples for drugs and drug metabolites using TLC and associated extraction techniques.  
**Requirements:** BS in chemistry with 2-3 years experience in HPLC. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T1607)**  
**Floriculture & Ornamental Horticulture-Statutory**  
**Minimum Biweekly Salary: \$599.73**  
Design, establish, and maintain research plots. Conduct field, greenhouse, and lab experiments evaluating the efficacy and safety of herbicides and biological control agents on turf and ornamentals. Responsibilities include measurement of plant responses; soil tests; application and evaluation of herbicides; analysis and summary of data; preparation and presentation of reports; and some staff super- vision.  
**Requirements:** Bachelor's in Horticulture, Agronomy or Plant Science. Master's preferred; with 2 years of related experience in plant science research. Must have or be able to obtain a NYS Commercial Pesticide Applicators certification. NYS drivers license required. Knowledge of one or more of the following: weed identification and control; pesticide application and evaluation; measurement of plant responses to environmental or xenobiotic stimuli; culture and maintenance of turfgrass and ornamentals; and computers. Send cover letter and resume to Sam Weeks.

**Assistant Computer Support Technician, GR22 (T1803)**  
**Human Ecology Administration-Statutory**  
**Minimum Biweekly Salary: \$625.24**  
Provide faculty, staff, student support for IBM and compatible soft- ware including DOS, Wordperfect, Lotus 123, dBase III Plus, C19, and AutoCAD. provide data recovery services using utilities such and Norton and Mace. Install and troubleshoot IBM and compatible hardware and related peripherals. provide end user assistance with a large local area network.  
**Requirements:** Bachelor's or equivalent. 2-4 years related experi- ence. Knowledge of IBM and compatible microcomputer hardware and a wide variety of related peripherals as needed. Knowledge of DOS, Wordperfect, Lotus 123, communication, database, and utility software necessary. Network experience helpful. Send cover letter and resume to Sam Weeks.

**Electronics Technician II, GR22 (T1401)**  
**CIT/Network Resources-Endowed**  
**Minimum Biweekly Salary: \$625.24**  
Provide support for the Network Management Center, its campus clients and CU's connections to external networks. Monitor network, diagnose problems, coordinate and document service requests, and provide network access preventative maintenance.  
**Requirements:** Associate's or equivalent. 1-3 years data commu- nications experience. Understanding of data communications net- works and hardware highly desirable. Experience diagnosing net- work problems (especially TCP/IP) helpful. Strong interpersonal skills. Send cover letter and resume to Sam Weeks.

**Technician, GR22 (T1307)**  
**Pharmacology-Statutory**  
**Minimum Biweekly Salary: \$625.24**  
Conduct experiments and analyze results in research on vertebrate phototransduction and epidermal growth factor receptor system. Participate in design and interpretation of results. Work with cell cultures, purify membrane proteins, and perform radioligand binding assays. Calculate, analyze and present data. Use computer for graphing and statistical analysis.  
**Requirements:** Bachelor's in biochemistry or related field. 2 years lab experience required. Protein purification in cell culture work helpful. Send cover letter and resume to Sam Weeks.

**Technician, GR22 (T1108)**  
**Pharmacology-Statutory**  
**Minimum Biweekly Salary: \$625.24**  
Conduct experiments and analyze results on biochemical research relating to calcium channels. Calculation and analysis of data- statistical and graphical. Perform independently, to some extent, in the design and interpretation of results.  
**Requirements:** Bachelor's or equivalent in biochemistry, neurobi- ology or similar field. 2-4 years lab experience in a related field. Familiarity with balances, pH meters, centrifuges, gamma and scintillation counters, spectrophotometer, light microscope, and tissue culture equipment. Send cover letter and resume to Sam Weeks.

**Research Equipment Technician, GR22 (T0406)**  
**Nuclear Science and Engineering-Endowed**  
**Minimum Biweekly Salary: \$625.24**  
Build research lab apparatus using standard machine shop equip- ment; use and maintain research lab equipment; operate low power nuclear reactors; operate gamma irradiation facility; use radiation

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

**Research Equipment Technician, GR23 (T1713)**  
**Pomology-Statutory**  
**Minimum Biweekly Salary: \$651.82**  
Responsible for an on-going applied research and extension pro- gram in the biology and technology of fruit storage, including repairs to electronic equipment, computers, gas analyzers and CA control equipment. Operate and maintain 2 labs and controlled atmosphere storage rooms. Purchase materials and equipment. Some staff supervision.  
**Requirements:** Bachelor's or equivalent. 2-4 years experience with carpentry, plumbing, electrical wiring, electronics, Orsat and chro- matographic gas analysis. Driver's license required. Send cover letter and resume to Sam Weeks.

**Mac-CHESS Operator, GR24 (T1609)**  
**Biochemistry Molecular and Cell Biology/CHESS-Statutory**  
**Minimum Biweekly Salary: \$682.77**  
Give user groups supervision and instruction in the operations, safety procedures, and equipment usage for their biological diffraction experiments. Assist in some experiments. Repair diffraction apparatus and assist in design, modification, and development of beam lines. Do some computer programming when necessary. Help with data reduction using the storage phosphor detector system, some evenings and weekend hours are required.  
**Requirements:** Bachelor's or equivalent in engineering, physics, chemistry or biology. Good mechanical and lab skills. Several years related experience preferred. Computer programming skills desir- able. Send cover letter and resume to Sam Weeks.

**Coordinator of Workstation Facilities, GR24 (T0903)**  
**Information Technologies-Endowed**  
**Minimum Biweekly Salary: \$682.77**  
Act as primary information source in facility. Provide complex computer support to users. Operate and maintain all mainframe and micro-computer equipment. Maintain databases, networks and hard drives. Mon-Fri, 7:30am-4pm  
**Requirements:** Associate's with related computer coursework or background. 3-5 years related experience (CU systems preferred). Extensive knowledge of overall operation of mainframes, microcom- puters and networks. Excellent interpersonal, communication and organizational skills. Knowledge of CMS, VMS, Unix and Macintosh operating systems is essential. Send cover letter and resume to Sam Weeks.

**Plumber (T1901)**  
**Maintenance and Service Operations/Customer Service Shop-Endowed**  
Trouble-shoot and repair all types of heating and plumbing equip- ment associated with the piping and heating system (i.e. flushvalves, heat exchangers and controls, chill water systems and control valves). Must be willing to work with asbestos using OSHA approved proce- dures and to put in overtime when necessary. Will have direct contact with customers and other trade people.  
**Requirements:** HS diploma or equivalent. Must have and maintain a valid NYS driver's license. Minimum of 5 years experience in plumbing or heating. Must belong to the Plumbers and Pipefitters Union or be willing to join within 30 days of hire. Send cover letter and resume to Sam Weeks.

**Electrician (T1902)**  
**Maintenance and Service Operations/Customer Service Shop**  
Maintain electrical systems. Trouble-shoot and repair circuits, magnetics, various controls and lighting systems. Must be willing to work overtime when necessary. Will have direct contact with customers and other trades people.  
**Requirements:** High school diploma or equivalent. Completion of accredited apprenticeship or equivalent experience. Must have and maintain a valid NYS driver's license and be available for overtime. Send cover letter and resume to Sam Weeks.

**Chilled Water Plant Maintenance Mechanic Operator (T1812)**  
**Utilities-Endowed**  
Operate and maintain central plant equipment including electric driven chillers; pumps; cooling towers; vacuum and compressed air systems; water turbines and generators; and water treatment equip- ment and instrumentation. Plant operation also involves the use of a campus microprocessor-based central control system.  
**Requirements:** HS diploma, Associate's in mechanical or electrical technology or equivalent. 3-5 years in refrigeration, operation and maintenance of central utility plants desirable. 1-3 years experience in electric and solid state electronic controls and their application in control monitoring. Send cover letter and resume to Sam Weeks.

**Apprentice Refrigeration Mechanic (T1810, T1811)**  
**Maintenance and Services Operations/Administration-Endowed**  
Assist journeyman in the trouble-shooting, repair and installation of refrigeration and air conditioning equipment. Respond to assigned trouble call and repair all types of refrigeration including experimen- tal equipment. Perform other duties and responsibilities as assigned.  
**Requirements:** Must have completed a 2 year technical or trade school or 2 years work experience in a related field. Must have working knowledge of refrigeration and a basic knowledge of electric, plumbing and controls trades. Must have and maintain a valid NYS driver's license. Must be willing to join the union within 30 days. Send cover letter and resume to Sam Weeks.

Technical Part-time

**Technician, GR18 (T1201)**  
**Plant Pathology-Statutory**  
**Minimum full-time equivalent: \$529.35**  
Provide technical support in a cytology lab. Acquire, manipulate and plot data from videotapes using IBMXT. Update reference database, maintain fungal cultures, prepare solutions, also photographic printing and general lab maintenance. Possible full time after 6 months contingent on additional funding.  
**Requirements:** Associate's or equivalent in biology or related field. Knowledge of IBM-compatible computers. Minimum 1 year research experience desirable. Send cover letter and resume to Sam Weeks.

**Technician, GR20 (T1006)**  
**Biochemistry-Statutory**  
**Minimum full-time equivalent: \$575.30**  
Assist with culturing bacteria; enzyme purification, and assay. General lab duties. 25 hrs pr wk.  
**Requirements:** Bachelor's or equivalent; courses in biochemistry or microbiology. 1-2 years practical lab experience in biochemical/ microbiological lab, including chromatography, spectrophotometer, and gel electrophoresis. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T1702)**  
**Biotechnology Program-Endowed**  
**Minimum full-time equivalent: \$599.73**  
Assist in the operation of scientific instruments, including a computer and perform general lab activities in a service facility. Operate a flow cytometer and spectrofluorometer; maintain lab apparatus and supplies. Mon-Fri, 20 hrs pr wk.  
**Requirements:** Bachelor's or equivalent in physical or biological sciences preferred. Minimum 2 years lab experience involving the use of some instrumentation. Some programming experience is desirable. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T1608)**  
**Floriculture & Ornamental Horticulture-Statutory**  
**Minimum full-time equivalent: \$599.73**  
Design, establish, and maintain research plots. Conduct field, greenhouse, and lab experiments evaluating the efficacy and safety of herbicides and biological control agents on turf and ornamentals. Responsibilities include measurement of plant responses; soil tests; application and evaluation of herbicides; analysis and summary of data; preparation and presentation of reports; and some staff super- vision. Flexible hours, 20 hrs pr wk.  
**Requirements:** Bachelor's in Horticulture, Agronomy or Plant Science. Master's preferred; with 2 years of related experience in plant science research. Must have or be able to obtain a NYS Commercial Pesticide Applicators certification. NYS drivers license required. Knowledge of one or more of the following: weed identification and control; pesticide application and evaluation; measurement of plant responses to environmental or xenobiotic stimuli; culture and maintenance of turfgrass and ornamentals; and computers. Send cover letter and resume to Sam Weeks.

Technical Temporary

**Lab Assistant (T1603)**  
**Plant Breeding**  
Work on RFLP mapping project of barley. Assist in running gels, blotting, and DNA extractions. Help with data entry. Until 6/1/90, 4 to 5 hours per day.  
**Requirements:** Applicants with lab experience highly desirable. Must be able to follow directions exactly and work with care. Send cover letter and resume to Sam Weeks.

**Technician (T1604)**  
**Clinical Sciences**  
Lab assistant to complete biochemical assays used as clinical diagnostic tests in vet patients. 2 to 3 half days per week.  
**Requirements:** Understand basic lab techniques including quanti- tative pipetting, centrifugating, preparing reagents and operating a spectrophotometer. Cataloging samples and reporting test results by computer entry. Assist in projects that may include handling of dogs

and cats. Send cover letter and resume to Sam Weeks.

**Animal Technician (T1505)**  
**Lab Animal Services**  
Feed, water, clean and monitor research animals following strict protocols for sterile or disease control environments and regulations for animal welfare. Maintain animal records including health obser- vations. May include assisting Vets in treating and vaccinating animals. 6 months.  
**Requirements:** HS diploma or equivalent. Associate's in animal science desired. Assistant animal certificate helpful. Knowledge of a variety of lab animals and animal breeding required. 1 year animal experience. Pre-employment physical and all necessary immuniza- tions required. Able to lift 50 pounds. Must have a valid NYS driver's license. Some weekend work required. Send cover letter and resume to Sam Weeks.

Boyce Thompson Institute

**Research Specialist (Biotechnology)**  
**Boyce Thompson Institute**  
**Salary: commensurate with experience**  
Conduct research on insect baculoviruses. Studies include con- struction and evaluation of recombinant viruses used in field release programs, the regulation of virus gene expression, and collabora- tions using the baculovirus expression vector system. Research requires DNA cloning, sequencing and mutagenesis and the use of insect cell culture technology. Duties include supervision of under- graduate students and general lab operations.  
**Requirements:** Bachelor's and 4 years experience or a Master's degree. Lab experience in recombinant DNA techniques required. Background in virology or entomology desired, but not essential. Send resume and the names of 3 references to Dr. H. Alan Wood, Boyce Thompson Institute, Tower Road, Cornell University, Ithaca, NY 14853.

Office Professionals

Approximately half of all University openings are for Office Profes- sionals. 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.

All external candidates must have a completed signed employ- ment application on file with Staffing before they can be interviewed for a position. Employee candidates should submit an employee transfer application and cover letter, if requested, for each position in which they are interested.

Submit a signed employment application and resume 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.

**Office Assistant, GR16 (C1803)**  
**Dining Services-Endowed**  
**Minimum Biweekly Salary: \$498.93**  
Serve as Co-op office sales assistant and receptionist. Greet visitors; answer telephone; handle mail; daily transactions; incoming vouchers and meal ticket orders; copy; file; other duties as assigned.  
**Requirements:** HS diploma or equivalent. 6 months to 1 year related experience. Excellent organizational, interpersonal and communication skills essential. Personal computer and/or data entry experience helpful. Light typing.

**Preservation Assistant, GR18 (C1909)**  
**Conservation/Olin/CUL-Endowed**  
**Minimum Biweekly Salary: \$529.35**  
Under the direction of the Project Coordinator of a Digital Preserva- tion Project, be responsible for pre- and post-scanning procedures concerning the creation of paper facsimiles including: searching, collating, disbinding and trimming; complete worksheets; perform quality control tests; prepare volumes for binding; initiate withdrawal and cataloging procedures. 14 month appointment.  
**Requirements:** Associate's or equivalent. Excellent organizational and work-flow management skills. Attention to detail. Ability to work independently; previous library work experience, especially knowl- edge of searching and acquisitions procedures; knowledge of micro- filming techniques and equipment desired; computer skills, in par- ticular experience with the IBM-PC, Wordperfect and PC-file desired. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Preservation Assistant, GR18 (C1910)**  
**Conservation/Olin/CUL-Endowed**  
**Minimum Biweekly Salary: \$529.35**  
Under the direction of the Project Coordinator of a Digital Preserva- tion Project, set up and scan volumes according to project specifica- tions; enter printing and document structure information; perform visual inspection via monitor and through printouts; rescan docu- ments and insert corrected digital images in the digital store; transfer digitized information to more permanent medium; initial print order and permanent storage. 14 month appointment.  
**Requirements:** Associate's or equivalent. Excellent organizational and work-flow management skills. Attention to detail. Ability to work independently. Previous printing and/or photocopying experience. Familiarity with photocopying and printing equipment. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Faculty Secretary, GR18 (C1912)**  
**Law-Endowed**  
**Minimum Biweekly Salary: \$529.35**  
Provide secretarial support to faculty. Wordprocessing of manu- scripts; briefs, correspondence, class materials; coordinate travel arrangements; prepare travel and reimbursement vouchers; re- search references and citations in Law Library; copy; file; answer telephone.  
**Requirements:** HS diploma or equivalent. Business or secretarial school preferred. 1 year office experience and familiarity with IBM-PC, Wordperfect desirable. Able to coordinate and prioritize variety of tasks necessary. Excellent organizational, interpersonal and communication skills. Heavy typing.

**Secretary, GR18 (C1811)**  
**Division of Nutritional Sciences-Statutory**  
**Minimum Biweekly Salary: \$529.35**  
Provide secretarial support to 3 faculty and staff for Extension programs. Perform wordprocessing for forms, correspondence, reports, brochures, etc.; data entry using dBase III; produce dBase reports; coordinate and organize conferences and meetings; re- spond to requests for resources and information; direct phone calls; requisition supplies; monitor accounts; keep calendars. Transcribe audio-tapes. Until 5/31/91.  
**Requirements:** HS diploma or equivalent plus secretarial training. 1-2 years related experience. Wordprocessing (Wordperfect). Good organizational, interpersonal and communication skills. Requires use of IBM compatible PC and laser printer. Familiar with dBase preferred. Transcription experience. Heavy typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall. Minorities are particularly encouraged to apply.

**Office Assistant, GR18 (C1806)**  
**National Nanofabrication Facility-Endowed**  
**Minimum Biweekly Salary: \$529.35**  
Act as principal receptionist for active research facility. Provide office assistance to administrative staff. Coordinate user research pro- gram; process proposals; initiate correspondence; maintain sched- ule of visits; process user charges using VAX database; assist accounts coordinator as needed for daily posting and filing.  
**Requirements:** HS diploma or equivalent, some college course- work preferred. 1 year experience with computers desirable, espe- cially VAX systems. Strong interpersonal skills. Able to work under pressure. Excellent telephone expertise. Medium typing.

**Office Assistant, GR18 (C1414)**  
**Campus Store-Endowed**  
**Minimum Biweekly Salary: \$529.35**  
Record all incoming books for Tradebook department, into a compu- terized inventory control system; process related paperwork (in- voices, purchase orders, etc.); prepare merchandise for sales floor presentation or mailing; maintain inventory through data entry; take periodic physical inventory of stock. Occasional weekends.  
**Requirements:** HS Diploma or Equivalent. Some college course- work preferred. 1 year related retail experience, preferably with books required. Data entry experience essential. Excellent commu- nication, interpersonal and organizational skills. Light typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall. Minorities are particularly encouraged to apply.

**Accounts Assistant, GR18 (C1006)**  
**Administrative Operations/CUL-Endowed**  
**Minimum Biweekly Salary: \$529.35**  
Under the direction of the Accounting Manager, process and pay vendor invoices/credits for library materials for the 10 endowed libraries and some statutory units. Audit and process for payment, approval on library automated system; correspondence with ven- dors; review and update fine and replacement charges/credits with the Bursar's Office; maintain vendor fines (automated and manual); process orders for library supplies; process and monitor typewriter leases. Other duties as assigned.  
**Requirements:** HS diploma or equivalent. Some college course- work preferred. Minimum of 1 year previous accounting/bookkeep- ing experience and familiarity with standard office machines. High degree of accuracy. Attention to detail; experience with microcom- puters, IBM preferred, (data entry, word processing, spreadsheet



# Jobs

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management). Strong organizational, communication (written and verbal) and interpersonal skills. Familiarity with CU accounting system desirable. Light typing.

**Administrative Aide, GR19 (C1905)**  
**Engineering Cooperative Program-Endowed**  
**Minimum Biweekly Salary: \$551.86**  
Serve as administrative assistant to coordinator and assistant coordinator. Extensive contact with company representatives and students in organizing recruiting activities; maintain computer database; make travel arrangements; work with accounts (accounts receivable and payable); maintain reference library. Other duties as assigned.

**Requirements:** HS diploma. Some college course work preferred. 2 years related experience. Knowledge of CU's accounting, financial aid, and registration procedures helpful. Excellent communication skills. Organizational ability, attention to detail, and confidentiality extremely important. Macintosh experience very helpful. Medium typing. CU employees send transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Secretary, GR19 (C1913)**  
**Cooperative Extension Administration 4-H-Statutory**  
**Minimum Biweekly Salary: \$551.86**  
Coordinate and expedite the statewide work of the New York State 4-H Foundation executive director/program coordinator and the administrative assistant by providing secretarial support; receive and process all monetary contributions; function as team member in the 4-H unit to facilitate the CU Cooperative Extension 4-H Youth Development Program. Other duties as assigned.  
**Requirements:** HS diploma or equivalent. 1-2 years related experience. Computer knowledge of spreadsheets, databases, communications packages. Strong on office procedures. Able to work independently. Some travel involved. Must be able to relate and communicate with others effectively. High level of confidentiality essential. Heavy typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Collections Representative, GR19 (C1908)**  
**Bursar-Endowed**  
**Minimum Biweekly Salary: \$551.86**  
Perform duties involved in collection of delinquent student accounts receivable and student loans including telephone contact and written communication with former students to arrange for debt repayment. Mon. 12:30pm-5pm; Tues.-Fri. 8am-4:30pm  
**Requirements:** HS diploma or equivalent. Some college coursework preferred. 2 years related office experience. Excellent communication (written and oral) skills. Ability to deal with sensitive issues in a professional manner. Light typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Secretary, GR19 (C1809)**  
**Hotel Administration-Endowed**  
**Minimum Biweekly Salary: \$551.86**  
Provide secretarial support for faculty in the area of teaching and research in food science. Using IBM PC (Wordperfect) respond to correspondence, type exams, class handouts, and reports; respond to telephone inquiries, travel and guest lecturer arrangements. Heavy student contact.  
**Requirements:** HS diploma or equivalent required. Some college coursework preferred. 2 years related experience. Knowledge of wordprocessing. Experience with IBM PC (Wordperfect). Familiarity with culinary, chemicals, and biological terms, symbols and abbreviations. Excellent organization, interpersonal, and communication skills. High level of confidentiality required. Heavy typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Student Information Service Representative, GR19 (C1814)**  
**University Registrar-Endowed**  
**Minimum Biweekly Salary: \$551.86**  
The purpose of this position is to provide services to students, alumni, staff and external organizations and agencies and provide for the appropriate dissemination of publicly available information on students, to certify restricted student information at the student's request, and to register students for the current semester.  
**Requirements:** Associate's or equivalent. Some college coursework preferred. 1-3 years related experience required. Bookkeeping skills helpful. Apple Mac II data processing and word processing (preferably Microsoft WORD). Customer service, certification or willing to obtain for Notary Public. Excellent interpersonal and organizational skills. Excellent communication skills. Familiarity with University policies and procedures and the role of student services. Heavy typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Office Assistant, GR19 (C1506)**  
**JGSM-Endowed**  
**Minimum Biweekly Salary: \$551.86**  
Provide secretarial and administrative support to the Director of Business Operations and the School's Business Manager.  
**Requirements:** HS diploma or equivalent. Some college coursework preferred. 2 years of general office experience preferred. Familiar with the MAC. Heavy typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Administrative Secretary, GR20 (C1911)**  
**Law-Endowed**  
**Minimum Biweekly Salary: \$575.30**  
Provide primary secretarial support to the Associate Dean for Academic Affairs, the Director of Administration and Finance and the Assistant Director of Personnel. Provide back-up secretarial support to the Offices of the Dean of the Law School and the Dean of Students. One member of a Deans' Office support team.  
**Requirements:** Associate's or equivalent. 2-3 years related office experience. Word processing and spreadsheet software experience required. Knowledge of Wordperfect, Lotus 123 and Paradox helpful. Strong communication (written and oral) skills. Able to coordinate and prioritize multiple tasks, work well under pressure and maintain a high level of confidentiality. Heavy typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Accounts Assistant, GR20 (C1906)**  
**Facilities Engineering-Endowed**  
**Minimum Biweekly Salary: \$575.30**  
Responsible for processing and maintaining Job Cost System (JCS) data relating to Facilities Engineering. This includes processing Requests for Services (RFS) forms, change orders, weekly time sheets, and corrections to the system; also responsible for updating accounting records for changes, maintaining contact with clients for billings, and providing administrative support for the director, administrative manager and professional staff.  
**Requirements:** Associate's or equivalent in business, data processing, or equivalent. 2 years related experience. Must be knowledgeable of data entry principles. Also must have the ability to organize and complete a variety of tasks while maintaining attention to detail, comprehend and interpret a variety of reports with speed and accuracy, and input data using an online terminal. Excellent organizational and interpersonal skills required. Light typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Office Assistant, GR20 (C1812)**  
**Office of Sponsored Programs-Endowed**  
**Minimum Biweekly Salary: \$575.30**  
Perform a broad range of secretarial and office administrative services in direct support of one or more Grant and Contract Officers. Responsible for overall support of day-to-day, heavy workload. Tasks include; phone coverage and follow-up; document generation and some writing; mail screening; prioritizing and some initiating of transactions; meeting and travel scheduling.  
**Requirements:** Associate's or equivalent. 2 years related experience. Facility with word processing, (preferably Wordperfect). Strong interpersonal and communication skills. Strong ability to organize and prioritize disparate and competing tasks. Attention to detail. Strong proofing and good writing skills. Knowledge of university procedures preferred. Medium typing. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Income Control Accountant, GR21 (C1904)**  
**Statler Hotel-Endowed**  
**Minimum Biweekly Salary: \$599.73**  
Oversee daily flow of income and cash receipts for the Hotel. Flexible nights and weekends.  
**Requirements:** Associate's with accounting or banking experience. 2-3 years related experience. Good computer knowledge and skills necessary. Regular CU employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Administrative Aide, GR21 (C1903)**  
**VP for Research and Advanced Studies-Endowed**  
**Minimum Biweekly Salary: \$599.73**  
Production work; create newsletters, reports, brochures and handouts using MS Word and PageMaker on a Mac. See jobs through from beginning to end, i.e., gather, organize, edit and enter information; produce a high-quality document; meet deadlines; distribute finished document; aid in meeting and conference planning and support office databases on a small network of Mac equipment. Correspondence typing, filing and answering phones.

**Requirements:** Associate's or equivalent. 2-3 years work experience required. PageMaker experience, extensive knowledge of word processing and database management systems and orientation to Macintosh equipment required. Excellent communication (oral and written) skills. Attention to details. Project orientation requires ability to work cooperatively with a variety of people and develop skills as needs require. Medium typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Marketing Assistant, GR22 (C1704)**  
**University Press-Endowed**  
**Minimum Biweekly Salary: \$625.24**  
Assist 4 members of the Promotion Department in executing seasonal advertising, publicity, direct mail, and exhibit plans for CU Press books. Marketing Assistant is also responsible for preparing copy for new paperbacks.  
**Requirements:** Bachelor's or equivalent. Strong writing and proof-reading skills essential. Prior experience in publishing helpful. Familiarity with Macintosh and basic knowledge of wordprocessing and page maker programs are desirable. Medium typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Office Systems Specialist, GR23 (C1702)**  
**ILR Resident Division-Statutory**  
**Minimum Biweekly Salary: \$651.82**  
Trouble shoot questions about hardware and software. Be the first person called when computer problems arise; provide word processing support for staff, faculty and grad students. Consult with secretarial staff about special features of word processing such as mass mailings, envelope addressing, etc.; encourage communications among users by activities such as user group, newsletter. Set up machines and install security devices; assist users preparing graphs, etc.; send out memos for Computer Support Offices.  
**Requirements:** Associate's or equivalent. Minimum 3-5 years word processing experience. Ability to work well with people. Good follow through on questions and commitments. Medium typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

## Office Professionals Part-Time

**Office Assistant, GR15 (C1405)**  
**Vet Medical Teaching Hospital-Statutory**  
**Minimum full-time equivalent: \$486.92**  
Work with weekend hospital census package and other medical record computer programs; check in records from the Small Animal Clinic on a daily basis; file lab reports and records on a daily basis; pull medical charts for research; assist doctors in finding records and prepare records for microfilm. Some holiday work required. Mon-Fri, 2pm-6pm; Sat 8am-12 noon.  
**Requirements:** HS diploma or equivalent. Some experience preferred. Must be dependable. Good organizational, interpersonal and communication skills desirable. Light typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Senior Records Assistant, GR18 (C1802)**  
**Catalog-CTS, Olin Library, CUL-Endowed**  
**Minimum full-time equivalent: \$529.35**  
Responsible for editing (accepting or revising) name, subject, and series authority headings; correcting machine-readable bibliographic and authority records; pre-input searching, and inputting or overlay of authority records. 20 hrs pr wk.  
**Requirements:** 2 years college coursework or equivalent experience. Problem solving and editing comprehension required. Ability to do detailed work accurately. Working knowledge of NOTIS and RLIN cataloging systems and the USMARC bibliographic and authorities formats desirable. Medium typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Conservation Technician, GR18 (C1701)**  
**Mann Library-Statutory**  
**Minimum full-time equivalent: \$529.35**  
Under the direction of the Coordinator of Preservation, perform a variety of tasks relating to microfilm/filming of brittle materials as part of the CUNY/NYS Library Coordinated Preservation Grant. Duties include preparing materials for reformatting, collation, target preparation and quality control; may also participate in other conservation activities including minor repair and making protective enclosures in damaged books. Mon-Fri, 20 hrs pr wk. Until 3/31/93.  
**Requirements:** HS diploma or equivalent combination of education and experience required. Associate's preferred. Microcomputer and previous library experience desirable. Experience with microfilm, bibliographic searching and book conservation desirable. Good interpersonal, organizational, and communication (oral) skills required to effectively work with filmings agent and other library departments. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Secretary, GR18 (C1608)**  
**Community and Rural Development Institute-Statutory**  
**Minimum full-time equivalent: \$529.35**  
Provide secretarial support for Associate Director of Institute. Heavy typing for research and extension activities. Process expense reports; conference organization; newsletter preparation. Other duties as assigned. Flexible, half days preferred.  
**Requirements:** HS diploma or equivalent. Some college coursework in Secretarial Science desirable. 1-2 years professional secretarial experience required. Experience with computer, word processor essential. Excellent communication and organizational skills. Heavy typing. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Administrative Aide, GR19 (C1709)**  
**SRC Microsciences and Technology Program-Endowed**  
**Minimum full-time equivalent: \$551.86**  
Handle daily operations of the SRC Microscience and Technology Program. Prepare quarterly and annual reports; draft correspondence; prepare and pay purchase requisitions and vouchers; maintain accounting files; handle daily activities of the Director. Mon-Fri 8am-12 noon.  
**Requirements:** HS diploma or equivalent. Some college coursework preferred. 2 years related experience. Computer experience necessary, knowledge of Excel, Wordperfect helpful. Familiar with CU accounting system also helpful. Medium typing.

**Senior Night Supervisor, GR20 (C1805)**  
**Circulation/Uris Library/CUL-Endowed**  
**Minimum full-time equivalent: \$575.30**  
Under the direction of the Administrative Supervisor, oversee the operation of the Circulation/Reserve desk and be responsible for the building during the evening hours. Supervise students and assist with desk duties. Assist with hiring, scheduling, training, and evaluating student assistants. 25 hrs pr wk. Evenings and weekends, hours to be arranged.  
**Requirements:** Some college coursework successfully completed. 2 years related experience. Ability to work well with a variety of people in a public setting and in a supervisory capacity. Strong organizational, interpersonal and communication skills desirable. Experience with student personnel helpful. Send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Senior Night Supervisor, GR20 (C1708)**  
**Circulation/Engineering Library/CUL-Endowed**  
**Minimum full-time equivalent: \$575.30**  
Under the general direction of the Administrative Supervisor oversee evening and/or weekend circulation and reserve functions. Responsible for building security at these times. Train and supervise student staff. Monitor usage of reserve items and other library material. Hours to be announced.  
**Requirements:** Minimum of 2 years college coursework successfully completed. Bachelor's preferred. Strong interpersonal skills. Supervisory and public service experience. Library background strongly desired. Familiarity with personal computers. Ability to function well under pressure. Strong organizational skills. Light typing. Send cover letter and resume to Esther Smith, Staffing Services.

**Transportation Service Representative, GR21 (C1602)**  
**Office of Transportation Services-Endowed**  
**Minimum full-time equivalent: \$599.73**  
To act as university representative in disseminating information concerning parking and traffic to the university community and visitors. Provide services and conduct transactions that insure the effective and efficient implementation of university policies related to parking, traffic and circulation on the Ithaca campus. Mon-Fri, Hours variable.  
**Requirements:** HS diploma or equivalent. Valid NYS driver's license. Excellent interpersonal and communication skills. Knowledge of data entry, ability to work with mainframe and micro-computer applications and programs. Light typing. CU employees send transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

## Office Professionals Temporary

In addition to posted positions, temporary opportunities occur in many occupational areas, including secretarial, word processing, accounting, and office administration. All individuals are encouraged to apply; experienced applicants with a typing speed of 45-60 wpm, knowledge of IBM-PC Word Perfect software and Macintosh word processing are in particular demand. Call Karen Raponi at (607) 255-2192 or 255-7422 for more information.

**Service Clerk (S1301)**  
**Lab of Ornithology**  
Assist with sales of the Crow's Nest Birding Shop on weekends and holidays. Cashiering, answer phones, respond to basic bird questions, feed birds. Open and close Lab. Hours negotiable-12 hours every other weekend. Casual 1 year appointment.  
**Requirements:** HS diploma or equivalent. Cash register experience helpful. Contact Karen Raponi, Staffing Services, EHP, 255-2192.

**Secretary (S1802)**  
**Nutritional Sciences**  
Typing correspondence, forms, reports and educational materials. Requires use of IBM compatible PC and laser printer using Wordperfect 5.1, including mail merge. Phones, requisition supplies, keep calendars, respond to requests for resources and information. Transcribe audio-tapes. Mon-Fri, 39 hrs pr wk for 4-6 weeks.  
**Requirements:** HS diploma plus secretarial training or 2-3 years equivalent experience. Should be familiar with CU procedures. Knowledge of dBase III helpful. Heavy typing. Send cover letter and resume to Karen Raponi, Staffing Services, 160 Day Hall.

**Secretary (S1803)**  
**Nutritional Sciences**  
Responsibilities include wordprocessing for manuscripts, correspondence, charts and tables. Mon-Fri, 5 hours per day (hours flexible between 8 and 5). 3 months.  
**Requirements:** HS diploma or equivalent. Must have well developed Wordperfect 5.0 skills. Good interpersonal and organizational skills. Heavy typing. Send cover letter and resume to Karen Raponi, Staffing Services, 160 Day Hall.

**Service Clerk (S1301)**  
**Lab of Ornithology**  
Assist with sales of the Crow's Nest Birding Shop on weekends and holidays. Cashiering, answer phones, respond to basic bird questions, feed birds. Open and close Lab. Hours negotiable. 12 hours every other weekend.  
**Requirements:** HS diploma or equivalent. Cash register experience helpful. Contact Karen Raponi, Staffing Services, EHP, 255-2192.

**Office Assistant (S1107)**  
**Physiology**  
Provide support in the areas of data entry and word processing utilizing IBM Wordperfect. Answer phones, copy, file. Attention to detail and accuracy is a must. Library searches for journal articles. Part-time flexible hours, 15-20 hrs pr wk. Send cover letter and resume to Karen Raponi, Staffing Services, 160 Day Hall.

**Secretary (S1500)**  
**Division of Nutritional Sciences/CFNPP**  
Provide back-up support to administrative staff and 2 researchers. Copy, word processing (Wordperfect); provide student/visitor assistance; prepare standard vouchers; provide telephone coverage for 10-12 people. Make on-campus deliveries. Make/arrange for off-campus deliveries. Order program supplies. Fill publication requests. Replenish publication inventory. Other duties as assigned. Until 9/5/90.  
**Requirements:** HS diploma plus secretarial training or equivalent work experience. Experience with word processing (Wordperfect preferred); able to coordinate a variety of activities; good interpersonal and communication skills. Familiarity with CU procedures is helpful. Send cover letter and resume to Karen Raponi, Staffing Services, 160 Day Hall.

## General Service

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

**Dispatcher, SO05 (G1901)**  
**Maintenance and Service Operations-Endowed**  
**Hiring Rate: \$6.88**  
Receive any trouble calls, relay messages and coordinate and dispatch appropriate tradespeople and material delivery personnel, or courier/cab service as requested. The Customer Service Center is the focal point of requests for repairs, maintenance and alterations, and information about the physical plant.  
**Requirements:** HS diploma or equivalent. Must possess and maintain valid NYS driver's license. Experience with mainframe and personal computers desirable. Training and/or experience in public relations, sales or service preferred. Must have excellent interpersonal skills. Ability to work well under pressure and strong decision making. Medium typing. CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

## General Service Temporary

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

**Custodian**  
**Building Care-Endowed/Statutory**  
**Temporary Rate: \$5.00**  
Continuous recruitment will be done in the department of Building Care for temporary custodians. Provide general custodial care of buildings and grounds in immediate vicinity of assigned area. Mon-Thur 6:00am-2:30pm, Fri 6:00am-1:30pm. Periodically 2nd and 3rd shift hours are available.  
**Requirements:** Basic reading and writing skills. Able to operate a variety of heavy power equipment, lift 50 pounds and climb a foot ladder. Contact Karen Raponi, Staffing Services, EHP, 255-2192 for an interview.

## Please submit materials for the following positions to 160 Day Hall.

**Groundswoker, SO04 (B0612)**  
**Plantations-Statutory**  
**Hiring Rate: \$6.58**  
Assist grounds maintenance staff in landscape maintenance and construction to include planting, mowing, weeding, mulching, watering fertilizing, pruning, policing of grounds, maintenance of equipment; maintenance of walls, steps, fences. Mon-Thur 7:30-4; Fri, 7:30-3. 7 months.  
**Requirements:** HS diploma or equivalent; valid driver's license required. 1-2 years work experience in park, arboretum, or botanical garden desired. Strong interest in horticulture and landscape construction required. Must be able to lift 100 lbs and willing to work during all weather conditions. Send letter, resume and employment application to Cynthia Smithbower, Staffing Services, 160 Day Hall.

**Temporary Field Assistant (B1701)**  
**Soil Crop and Atmosphere Sciences**  
**Hiring Rate: \$6.00**  
Perform general farm labor at Mr. Pleasant Farm. Drive tractor and perform routine maintenance. Mon-Fri, 8am-4:30pm 6 months.  
**Requirements:** Some related experience working on a farm. Some mechanical skills. Ability to lift 80 lbs (fertilizer bags). Send application materials to Cynthia Smithbower, Staffing Svcs, 160 Day Hall.

**Temporary Field Assistant (B1301)**  
**Plant Breeding**  
**Hiring Rate: \$5.75**  
Work on forage breeding project. Help plant harvest and care for forage plots both in the field and in the greenhouse. May 1 through November 10, 1990.  
**Requirements:** Must have NYS driver's license. Able to work independently, and be familiar with operating farm equipment. Send application materials to Cynthia Smithbower.

**Temporary Groundswoker (B0902)**  
**CU Golf Course**  
**Hiring Rate: \$6.00**  
Knowledge of tools, methods, and materials used in golf maintenance and construction. Ability to operate motorized equipment. Valid NYS driver's license required. Pesticide applicators license preferred or willing to obtain upon employment. 6 months; possible extension. Send cover letter, resume and copy of pesticide license to Cynthia Smithbower, 160 Day Hall.

## Academic

**Information Management Specialist (Assistant/Senior Assistant Librarian; Half-time, Temporary)**  
**Albert R. Mann Library**  
Assist in design and development of a curriculum in information access and management for Biological Sciences students and participate in providing workshops and classroom instruction. Participate in providing regular information services.  
**Requirements:** MLS or equivalent education; experience with user training; excellent interpersonal, written and verbal communication skills; familiarity with computerized bibliographic databases. Experience with classroom instruction and CAI development desirable. Review of applications begins May 15, 1990, and will continue until position is filled. Send cover letter, resume and three references to: Ann Dyckman, Personnel Director, 201 Olin Library, CU Library, Ithaca, NY 14853-5301.

**Research Associate III/Sex Pheromone Biochemistry**  
**NYS Agricultural Experiment Station**  
**Salary: Minimum salary \$21,000 based on qualifications and experience.**  
One year appointment in the Department of Entomology, Geneva, NY. Assume primary responsibility for ongoing research involving characterization of biosynthetic pathways in moths, and the isolation and identification of the sex pheromone of cockroaches. Available on or after June 14, 1990.  
**Requirements:** PhD in entomology or biochemistry required. Experience in rearing and handling moths and cockroaches, as well as experience with the pertinent techniques of electroantennogram assays, capillary GLS, mass spectrometry, microchemical reactions, radio- and stable isotope-labelling experiments, and liquid scintillation counting. Send curriculum vitae, publication list, and names of 3 references to: Dr. Wendell Roelofs, Professor of Insect Biochemistry, Department of Entomology, NYS Agricultural Experiment Station, CU, Geneva, NY 14456.

**Public Services Librarian**  
**Law Library**  
Coordinate circulation, reserve and interlibrary loan operations. Responsible for hiring, scheduling and oversight of training for student assistants. Offer reference service: prepare bibliographies; assist with current awareness services, advise on collection needs, and instruct users in legal research methodology (including LEXIS and WESTLAW) in both formal and informal settings. Participate in the 1st year legal bibliography course. Regular evening and periodic weekend reference assignments.  
**Qualifications:** Required: MLS or equivalent graduate degree; ability to communicate effectively and work well with faculty, students and staff; flexibility; good problem solving skills; knowledge of legal bibliography or ability to learn quickly.  
**Preferred:** experience in a public service position, preferably in an academic law library (JD may substitute for experience if other requisite characteristics are present); experience in teaching legal bibliography. Foreign language skills desirable. Applications due July 1, but accepted until position is filled. Send cover letter, resume, and list of 3 references to Ann Dyckman, Personnel Director, 201 Olin Library, CU, Ithaca, NY 14853.

## 1990 University Holiday Schedule

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