

# CORNELL Chronicle

Volume 22 Number 33 May 16, 1991

## Solving Mysteries of the Universe

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## Does It Cost Too Much To Attend Cornell?

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## 5,800 are to receive degrees at 123rd commencement

More than 5,800 students from the 11 schools and colleges in Ithaca will be eligible to receive degrees at the university's 123rd commencement on Sunday, May 26, at 11 a.m. at Schoellkopf Field.

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.

Diligent efforts have been made by deans and the administration to discourage champagne celebrations in the stadium,

where popping corks pose a safety hazard.

Two guests will speak prior to the commencement:

- David Drinkwater, former dean of students at Cornell who now is headmaster of Friends Academy on Long Island, will deliver the pre-commencement convocation speech on Saturday, May 25, at 1 p.m. in Bailey Hall. Drinkwater has been invited to give the address by the senior class.

- Timothy S. Healy, president of the New York Library, will speak at the baccalaureate service on May 26, at 8:30 a.m. in Bailey Hall.

Diplomas will be handed out during receptions at the schools and colleges 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 26, at 1 p.m. in Bailey Hall.

The Law School will hold a convocation ceremony on Sunday, May 19, at 2 p.m. in Bailey Hall. Speakers will include President Rhodes; Dean Russell K. Osgood; M. Carr Ferguson of the New York City law firm of Davis, Polk & Wardwell, who is a 1952 Cornell graduate, a 1954 graduate of the Law School and president of the Cornell Law Association; graduating student Tanya M. Ashley; and Professor Robert B. Kent.

The College of Veterinary Medicine will

hold a hooding ceremony on May 25, at 4 p.m. in the Statler Ballroom.

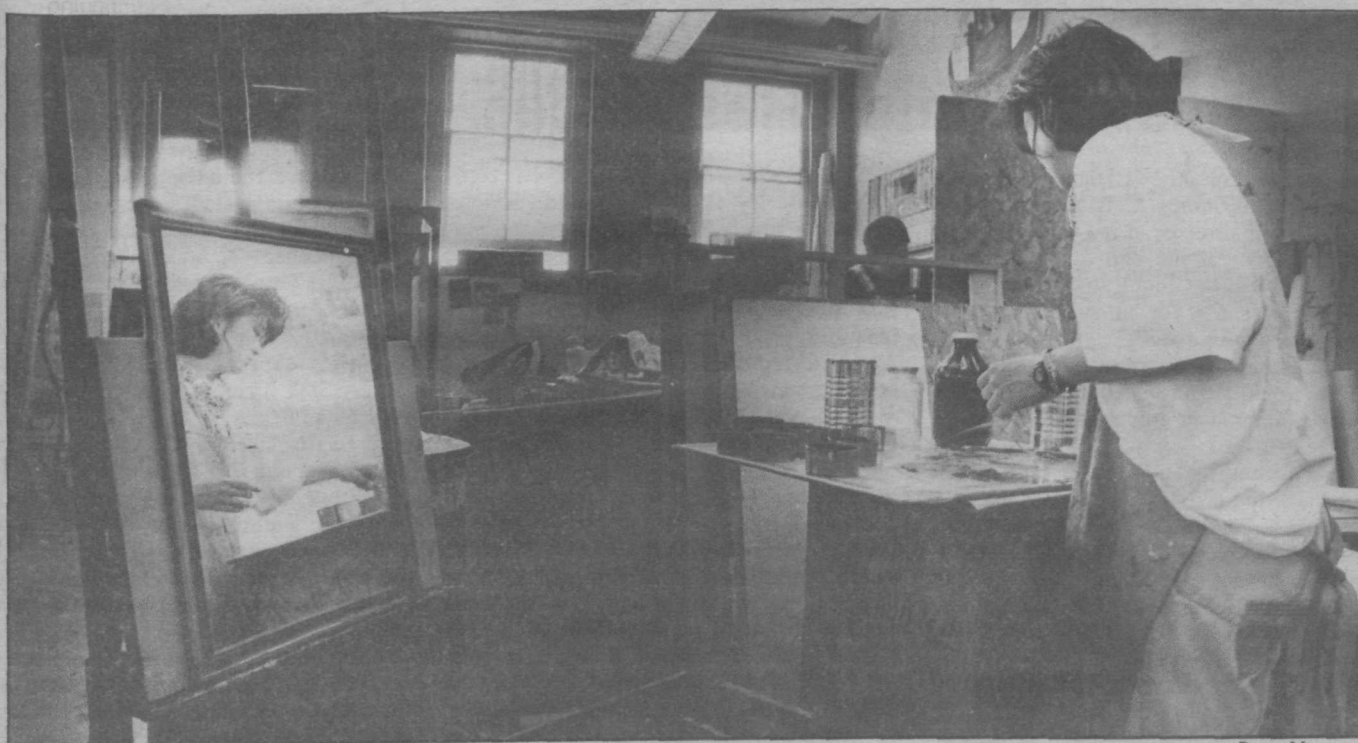
ROTC commissioning will take place on May 25, at 5 p.m. in Barton Hall. The commissioning will be conducted by U.S. Marine Brig. Gen. P. Drax Williams, a 1963 Cornell graduate.

The Medical College, located in New York City, will hold commencement ceremonies for its 147 graduates Thursday, May 23, at 3:30 p.m. in the Avery Fisher Hall of Lincoln Center. The speaker will be U.S. Surgeon General Dr. Antonia C. Novello.

Preliminary figures indicate that approximately 5,800 students are eligible for degrees at all levels, including those who

*Continued on page 2*

## Framed



Peter Morenus

Senior Michelle Kim of the College of Architecture, Art and Planning mixes paint in a Tjaden Hall art studio.

## In depressed job market, Hotel students turn to computerized recruiting by Marriott

With the job market depressed, fewer recruiters are visiting university campuses this year to interview graduating seniors.

But James Hume, 22, heard that a new recruiting tool had been set up at the School of Hotel Administration.

A computer system allows Hume and his classmates to explore career opportunities at Marriott Corp., a company involved in lodging and contract services.

With the click of a computer key, students can call up detailed descriptions of the corporation's operations and employment opportunities.

"It was neat," Hume said after he worked his way through the computer system. "I could call up a particular job description, and an address would pop up on the screen along with a map that pinpointed where the job was located."

Hume said he could research a future in Marriott "in private without someone looking over my shoulder. It was fascinating to go through the history of the company, how it developed, what its philosophy is and even to see what the executives look like."

Peggy Wedd, 27, wandered into the placement office to research hotel companies the old-fashioned way — by poring

through brochures, pamphlets and other literature issued by companies. Now in the Hotel School's graduate program, she will complete her studies next year.

"I wasn't looking to Marriott as an opportunity, but its computer system caught my eye," Wedd said. "I found that it was a fantastic marketing tool that perked my interest in the company."

Paul Diamond, 21, a junior, said: "It's an impressive system that will save us time. When looking for employment opportunities, we have had to flip through many brochures searching for the right sections."

Looking for work in a corporation as widespread as Marriott is a daunting challenge. Its 209,000 employees make Marriott one of the largest employers in the United States. How in the world can a university graduate find the right professional opening in so vast an organization? To answer that question, Marriott developed a multimedia software recruiting program.

In text, graphics and color video, the software package, "Explore the World of Marriott," covers all aspects of employment in each of the company's divisions.

Students with questions can enter their name and question in the computer and re-

ceive a personal answer from corporate headquarters in Washington, D.C.

Doug Price, Marriott's vice president for national employment marketing, came to campus in May to announce the new recruiting tool that Marriott says is "the first of its kind in our industry."

"One problem that we have found when graduates come in for job interviews is that some of them have not done their homework," Price said. "Often, they research a company by reading its annual report. But annual reports are written for stockholders, not for prospective employees."

Fred Antil, director of career planning in the Hotel School, echoed Price's comment by pointing to several shelves of brochures and other literature describing corporations.

"Printed material is out of date almost as soon as it is published," Price said. "Our recruiting software will be kept current."

Marriott's computers were installed at Cornell, Howard and Purdue universities and California State Polytechnical University-Pomona. They will be offered later this year at Penn State and Michigan State universities, the University of Wisconsin-Stout and the University of Houston.

—Albert E. Kaff

## Bacteria help fight water pollutants

Cornell microbiologists have developed a methodology that for the first time provides compelling indirect evidence that bacteria deep underground are actively degrading organic pollutants in groundwater.

Reporting their work in the May 10 issue of *Science*, Eugene Madsen, William Ghiorse and James Sinclair used an array of indicators to show that groundwater bacteria near a buried coal-tar waste site actively break down the pollutants that have leached into a nearby aquifer.

A key finding of their work was that measurements of levels of protozoa, which feed on bacteria, could indirectly measure bacterial activity and growth.

Their work provides renewed hope that environmental scientists could learn to predict and manage indigenous underground microbiological processes as an inexpensive means of purifying groundwater. Cleaning up groundwater aquifers after buried wastes have been removed is seen as vital since groundwater, the source of 50 percent of the drinking water in the United States today, is threatened by thousands of such buried sources of pollution.

Coal-tar sites are a legacy from the turn-of-the-century gas light industry, said Ghiorse, an associate professor of microbiology. He suspects that probably every city in the Northeast and many cities in other regions have such a site.

As microbiologists learn more about the capabilities of indigenous bacteria to metabolize pollutants underground, they will be able to collaborate with hydrologists and geochemists to predict the amount of biodegradation in progress.

Microorganisms are known to be the workhorses in decomposing and recycling organic matter — thereby completing the cycle of carbon begun when plants create carbon compounds by photosynthesis. Previous work has shown that bacteria can successfully break down organic pollutants in soil, surface water and in laboratory tests using environmental samples. However, scientists have had few clues to indicate whether bacteria were metabolizing organic pollutants in the harsh conditions found 30 to 100 feet underground.

"Until now, the severe methodological limitations have prevented studies of the activity of underground microorganisms," said Madsen, the principal author of the *Science* paper and a senior research associate in the section of microbiology in the College of Agriculture and Life Sciences.

Confounding such studies have been problems of groundwater migration, dilution, evaporation and the interactions of the

*Continued on page 6*



## Meet the press



Jan van Breda Kolff answers questions from the news media after being introduced as Cornell's new basketball coach on May 8. He joins Cornell after serving as an assistant coach at Princeton since 1985, and he replaces Mike Dement, who resigned in April to become the basketball coach at the University of North Carolina-Greensboro.

Peter Morenus

Graduates *continued from page 1*

completed their degree work last August and January.

Among the graduates will be 2,047 who will receive master's or doctoral degrees, including 1,515 from the Graduate School, 186 from the Law School, 264 from the Johnson Graduate School of Management and 82 from the College of Veterinary Medicine.

At the undergraduate level, approximately 3,660 are eligible for degrees, including 916 in the College of Agriculture and Life Sciences; 145 in the College of Architecture, Art and Planning; 1,175 in the College of Arts and Sciences; 626 in the College of Engineering; 203 in the School of Hotel Administration; 396 in the College of Human Ecology; and 199 in the School of Industrial and Labor Relations.

If there is high winds or lightning in Ithaca on May 26, two ceremonies will be held in Barton Hall — for candidates from Veterinary Medicine, Johnson Graduate School of Management, Agriculture and Life Sciences, and Arts and Sciences at 10:30 a.m., and for all other candidates at 1 p.m. The decision will be announced on local radio stations starting at 8 a.m.

Special routing of traffic on and near campus will be in effect Sunday morning, May 26. Residents and visitors are urged to watch for special detours and signs.

Ithaca radio station WHCU (870 AM) will broadcast the commencement ceremony. New this year will be a telecast of the ceremony on Cable Channel 13.

## Lentini named acting director in Office of Human Resources

Allan A. Lentini, assistant to Senior Vice President James E. Morley Jr., will become acting director of the Office of Human Resources at the end of May, when Lee Snyder leaves Cornell to become associate vice president for human resources at Georgetown University.

In announcing the arrangement, Morley said he would begin a national search for Snyder's permanent replacement in about two weeks.

"I'm pleased," Morley said, "that Allan will be able to make time to provide general management continuity to the operations of Human Resources. His knowledge and management style will maintain coordination within this vital university function and continued progress in specific projects already under way."

Among those projects are the job-classification review, which is examining 6,000 positions for accuracy of their descriptions and classification category and the equity of pay across the university. The project to improve the campus' Human Resources information system is also a high priority.

The job study, which has had the assistance of an outside accounting firm, is expected to implement any recommended revisions in job classification by next fall, Morley said.

Snyder, who came to Cornell eight years ago after holding senior personnel jobs at

Indiana and Penn State universities, is credited by Morley for "having made Human Resources much more effective at communicating and delivering its services."

Others note that Snyder moved the office from a predominantly passive role of handling paperwork to one that actively sought to represent employee issues to the central administration.

"Lee has made great strides in career-development programs, in widening employee benefits such as the degree program, and in improving two-way communication between employees and the administration," Lentini said. "As an interim steward, I hope I can help continue that progress."

Marge Swiercz Clark, Snyder's manager of staff relations and development, herself benefitted from the employee-degree program by earning a master's degree at the School of Industrial and Labor Relations.

Swiercz Clark, who came to Cornell six years ago from a personnel position in a Michigan hospital, will leave Cornell at the end of May to become human-resources manager for New York State Electric and Gas' four Ithaca locations.

"My time at Cornell has been stimulating and has greatly broadened my perspective on human-resources issues," she said. "It should be a great foundation for this new challenge."

— Sam Segal

## NOTABLES

Dr. David P. Hajjar, professor of biochemistry and pathology at the Medical College, has been named the 1991 recipient of the Warner-Lambert/Parke-Davis Award, presented annually to a basic-research scientist for meritorious work in experimental pathology. The award, administered by the American Association of Pathologists of the Federation of American Societies for Experimental Biology, recognized Hajjar for his accomplishment in the field of experimental biology and biochemistry. His research focuses on the role of viral infections in the development of atherosclerosis, specifically on how herpes virus contributes to atherosclerosis by causing cholesterol to accumulate in blood vessels.

## BRIEFS

■ **Commencement ushers:** Volunteers are needed to serve as ushers for Cornell's 123rd commencement on Sunday, May 26. Ushers help guide students, trustees, parents, faculty and staff at various points around campus. Employees who volunteer will be granted compensatory time-off equivalent to their standard work day. To volunteer or for more information, contact the Commencement Office, B-25 Day Hall, telephone 255-9541.

■ **Money raised:** A charity run to benefit a proposed public-service center at Cornell to help coordinate the public-service and outreach efforts of faculty, staff and students has raised \$5,220 for the center. Mobil Oil Corp. contributed \$10 for every runner in 5- and 10-kilometer races held April 27.

■ **Holidays:** The university's 1991-92 holiday schedule includes the following days off for employees: Memorial Day, May 27; Independence Day, July 4; Labor Day, Sept. 2; Thanksgiving, Nov. 28 and 29; winter holiday, Dec. 25 through Jan. 1.

■ **Safety shoes:** The visit of the Lehigh Safety Shoe Truck has been changed to Friday, June 7. A selection of safety shoes will be displayed at the Life Safety building, 201 Palm Road (east of the Orchards off Route 366) from 7:30 a.m. until noon and from 1 to 3 p.m. Employees eligible to receive department reimbursement for safety shoes should use an L order. For information, call Life Safety at 255-8200.

■ **Bus service:** Evening Blue Light and evening East Ithaca bus service will cease operation for the summer at the end of their runs on Friday, May 17.

■ **Electronic Gradebook:** Upgrades for MacRegistrar 1.1 and PC-Registrar 1.5 are available to faculty at the Campus Store. These are maintenance releases that provide printing control and resolve all reported bugs. Users should bring master disks for a free disk swap. Copies for new users are on a cost-of-materials basis and must be billed to a university account. For information, contact Professor J. Robert Cooke.

## 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, sexual orientation, age, or handicap. The university is committed to the maintenance of affirmative-action programs that will assure the continuation of such equality of opportunity. Sexual harassment is an act of discrimination and, as such, will not be tolerated. Inquiries concerning the application of Title IX may be referred to Cornell's Title IX Coordinator (Coordinator of Women's Services) at the Office of Equal Opportunity, Cornell University, 234 Day Hall, Ithaca, N.Y. 14853-2801 (telephone 607 255-3976).

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

## GRADUATE BULLETIN

**May degree:** May 17 is the deadline for completing all requirements for a May degree; Aug. 23 is the deadline for completing all requirements for an August degree.

**Summer registration:** Students must register at the Graduate School by May 20 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 need to be registered for summer study. Student ID is required. Students registered for a regular semester during the preceding academic year do not pay tuition for non-credit summer registration. Tuition must be paid for summer courses.

**Reception:** A commencement reception will be held for all graduate-degree recipients, families and friends at The Henry Sage Graduate Center, immediately following the May 26 commencement exercises.

**Diplomas:** Diplomas will be available at the reception for May 1991 degree recipi-

ents who completed requirements by mid-March (bring ID). Diplomas will be mailed to other recipients.

**Volunteers:** Graduate advisers are needed for orientation programs from Aug. 23 through 30, to assist incoming graduate students in adjusting to Cornell. Contact the Dean of Students Office, 103 Barnes Hall, 255-6839.

**Faculty:** There will be a faculty meeting Friday, May 24, at 4 p.m. in the Sage Graduate Center, to vote on May degrees.

## CHRONICLE SCHEDULE

The May 23 Chronicle will be the last weekly issue of the academic year. The summer schedule will include issues on June 6 and 20, July 11 and 25, and Aug. 8. The weekly schedule will resume Aug. 29.



## Barker to lead Center for the Environment

Robert Barker, Cornell's first and only senior provost, will close out that strategic-planning position at the end of the term, take a break, then begin creating another key university position, that of director of the Center for the Environment.

By action this spring of the Faculty Council of Representatives, the Center for the Environment is a reorganized version of the Center for Environmental Research, whose mandate has been broadened to include teaching and a broader portfolio for research and extension. It has been officially operating, for about a month, under an acting director, Professor Emeritus Gilbert Levine.

According to a report by a provost's committee, the reorganized center is to bring together faculty in the biological, agricultural, physical and chemical sciences. It will also involve social scientists working on issues of environmental policy and management.

"The first task — aside from establishing the governing board and steering committee — will be to give a much higher level of specificity and narrower definition of priorities than was contained in the broad language of the committee report," Barker said this week.

"I will also be involved," he added, "in meshing the interdisciplinary activities of the center with other university activities that may be related but not formally connected."

"And I will be trying to make things happen that are part of the faculty report — such things as working with deans to raise funds for endowment and facilities."

The main activities of the center now take place in Hollister and Wing halls, and a refurbished Rice Hall is one site that might eventually provide a new home.

Providing teaching is one of the chief differences between the new and old centers, and Barker says a specific near-term concern will be developing plans for a professional master's degree that could be introduced in the fall of 1992.

## Takeoff



Peter Morenus

Freshman Brian D. Williams takes advantage of the summerlike weather and launches a kite behind Clara Dickson Hall. Seniors are hoping for the sunshine to continue as they look forward to a Senior Week (May 19 through 25) filled with white-water rafting, winery and brewery tours, a champagne brunch, a golf tournament, horseback riding, a fun-in-the-dusk party, a twilight cruise, the annual concert by the Glee Club and Cornell Chorus and other activities. For more information, contact the Senior Week co-chairwomen Letitia Dodd at 277-4158 or Ellen Hegener at 272-2885. Some events require the purchasing of tickets in advance.

## Tomorrow is deadline for space contest

A reminder to all creative Cornellians: the deadline is tomorrow, May 17, for the Cornell-in-Space contest to suggest a Cornell memento to be launched aboard the space shuttle Atlantis.

The challenge for members of the Cornell community is to come up with an object that embodies the spirit of Cornell. Thanks to astronaut and Cornell alumnus G. David Low, the winner will have the satisfaction of seeing that object lofted into space when Low flies aboard Atlantis, scheduled for launch July 25. The winner will represent Cornell to receive the memento when Low returns it here.

Judges for the contest will be President Frank H.T. Rhodes, Graduate School Dean Alison Casarett, University Archivist Gould Colman, Board of Trustees member Ezra Cornell and Astronomy Department Chairman Yervant Terzian.

Contestants should submit their suggestions for the Cornell shuttle memento to the Cornell News Service, Village Green, 840 Hanshaw Road. The envelope, which can be sent through campus mail, should be addressed to the Cornell-in-Space Contest. Entries may also be faxed to 257-6397.

As he did last year, Low has offered to fly mementos from the university and from its Sibley School of Mechanical and Aerospace Engineering aboard the Atlantis flight. Low is a 1980 graduate of the Sibley School. In January 1990, Low carried into space aboard the Columbia founder Ezra Cornell's 159-year-old wedding socks, 125 of the microscopic gold Cornell crests created by the National Nanofabrication Facility, an IBM Corp. supercomputer circuit board for the Theory Center and a banner from the Sibley School.

NASA allows flags, banners, emblems, decals, seals, patches, medals and medallions on the shuttle. It does not allow glass or other breakable objects, books, wood, large metal objects, or any other object that cannot be sealed in a plastic vacuum pouch, or any items with commercial value that might be enhanced by the trip to space.

## Tiffany Norwood: JGSM class opens door to marketing success

Tiffany Norwood was fooling around in New York City on a Saturday afternoon — a rare event for a woman who works 60-plus hours a week doing financial analysis — and she stopped into City Cycles, an athletics store on lower Broadway, just to see one of her favorite purchases: the ToPAQ one-strap backpack.

"I had this great feeling of being excited and proud," said Norwood, who helped found the Ithaca-based company marketing the backpack in 12 outlets nationwide.

The ToPAQ — a backpack designed to be properly balanced when it's slung over one shoulder — started as a class project in Professor David BenDaniel's "Entrepre-

neur, that class is a great place to start because you gain so much experience of what it's like," Norwood said.

"If people think it's really glamorous to be an entrepreneur and run their own company they should realize before they go into it that it isn't; it's a lot of hard work. But I loved it," she said.

A former economics major, Norwood had to balance the demands of a business and class work, including writing a thesis on the economic effects of the legalization of drugs. "Professors are more understanding than manufacturers and clients, so the business usually came first," she said.

Cornell's financial aid office was also cooperative. "They'll let you defer your loans if for some reason, such as taking a low-paying job, you're unable to start paying them back straight out of school," Norwood said.

As a student she was also a Cornell Tradition fellow, one of 600 students a year given grants instead of loans to reduce the self-help portion of their financial aid, in recognition of their work to earn money for college.

After graduating in 1989, Norwood stayed in Ithaca to launch ToPAQ, supporting herself by working a few part-time jobs. She later went on to become a research analyst with First Manhattan Consulting Group, a prestigious Park Avenue consulting firm for the financial industry. She intends to work for a few more years and then go to business school to learn enough to start another company.

ToPAQ has sold more than 1,200 backpacks through its U.S. outlets and a few buyers overseas. Cornell's campus store is the biggest outlet, and this year the store sold more than 250 packs, at \$39.95 each, in the first weeks of the fall semester.

When Norwood, the daughter of a U.S. Department of Commerce economist and Defense Department scientist, arrived at Cornell from Camp Springs, Md., she had intended to become a gynecologist. She

said she chose Cornell because of the excellence of its liberal arts and sciences and because of the beauty of the campus and the reputation of its medical school in New York City. She took pre-medical courses as an undergraduate in the College of Engineering and worked at Cornell Medical School in the summer following her freshman year.

"But I just didn't want to wait so long to start a career," Norwood said. She felt too restricted and transferred to the College of Arts and Sciences and an economics major, where she could take French to satisfy a requirement, instead of trying to fit it into her schedule as an elective. To gain the

cultural experience of living in another country, she worked at CitiCorp Investment Bank in London for two summers.

Last summer, Norwood moved to New York City.

"And I love it," she said of her work there. "I'm addicted to the schedule because I love to be under pressure. But I always go out on Friday and Saturday nights, even if I don't get off work till midnight."

She also makes time for jazz-dancing classes several evenings a week, carrying her dance clothes in — what else? — a ToPAQ.

—Carole Stone

**CORNELL**  
*People*

neurship and Enterprise" class.

The only Cornell business-school course open to undergraduates, "Entrepreneurship" requires students to draw up a business proposal. Besides doing case studies of actual businesses, students are asked to submit a plan for a business.

Architecture student Phillip Straughan asked Norwood and another classmate, Oliver Pfeffer, to join him in marketing a new backpack designed by a friend in Great Britain. They settled on the name "ToPAQ" for Tiffany, Oliver, Phillip, Anthony (the designer) and quality.

Their proposal won the \$5,000 Mariani Award for the best proposal in the class, and the partners decided to go ahead with their plan by organizing a company, applying for a patent, lining up manufacturers and getting their product into stores.

"BenDaniel is very supportive, and for anyone interested in becoming an entrepre-



Tiffany Norwood with a ToPAQ in London.



# CALENDAR

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

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

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

## DANCE

### Cornell International Folkdancers

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

Balkan Dance Workshop for experienced dancers, by Ed Abelson, May 19, 6:30 to 7:30 p.m.; instruction and requests, 7:30 to 10:30 p.m., location to be announced.

### 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.

"Made to Remember: American Commemorative Quilts," an exhibition featuring 29 quilts from public and private collections throughout the United States, will be on view through June 9.

## FILMS

Films listed below are sponsored by Cornell Cinema unless otherwise noted and are open to the public. All films are \$3.50 except weekend films (Friday and Saturday), which are \$4.50 (\$4 for students). All films are held in Willard Straight Theatre except where noted.

### Thursday, 5/16

"Awakenings" (1990), directed by Penny Marshall, with Robin Williams and Robert DeNiro, 7:15 p.m.

"Brazil" (1985), directed by Terry Gilliam, with Jonathan Pryce and Robert DeNiro, 9:50 p.m.

### Friday, 5/17

"Return of Martin Guerre" (1983), directed by Daniel Vigne, with Gerard Depardieu and Natalie Baye, 7 p.m.

"Awakenings," 9:30 p.m.

"Brazil," midnight.

### Saturday, 5/18

"Return of Martin Guerre," 7 p.m.

"Awakenings," 9:30 p.m.

"Brazil," midnight.

### Sunday, 5/19

"Return of Martin Guerre," 8 p.m.

### Monday, 5/20

"Ryan's Daughter" (1970), directed by David Lean with Robert Mitchum and Sarah Miles, 8 p.m.

### Tuesday, 5/21

"When Harry Met Sally..." (1989), directed by Rob Reiner, with Billy Crystal and Meg Ryan, 7:20 p.m.

"Awakenings," 9:30 p.m.

### Wednesday, 5/22

"Animal House" (1978), directed by John Landis, with John Belushi and Tim Matheson, 7:15 p.m.

"Brazil," 9:45 p.m.

### Thursday, 5/23

"When Harry Met Sally..." 7:30 p.m.

"The Graduate" (1967), 9:50 p.m.

## MUSIC

### Bound for Glory

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

## RELIGION

### Sage Chapel

There will be no service May 19.

### Baha'i

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

### Catholic

Masses: Saturday, May 18, 5 p.m.; Sunday, May 19, 10 a.m. only, Anabel Taylor Auditorium. Masses: Saturday, May 25, 5 p.m.; Sunday, May 26, 8:30 a.m. only. Daily masses, announced on a weekly basis.

### Christian Science

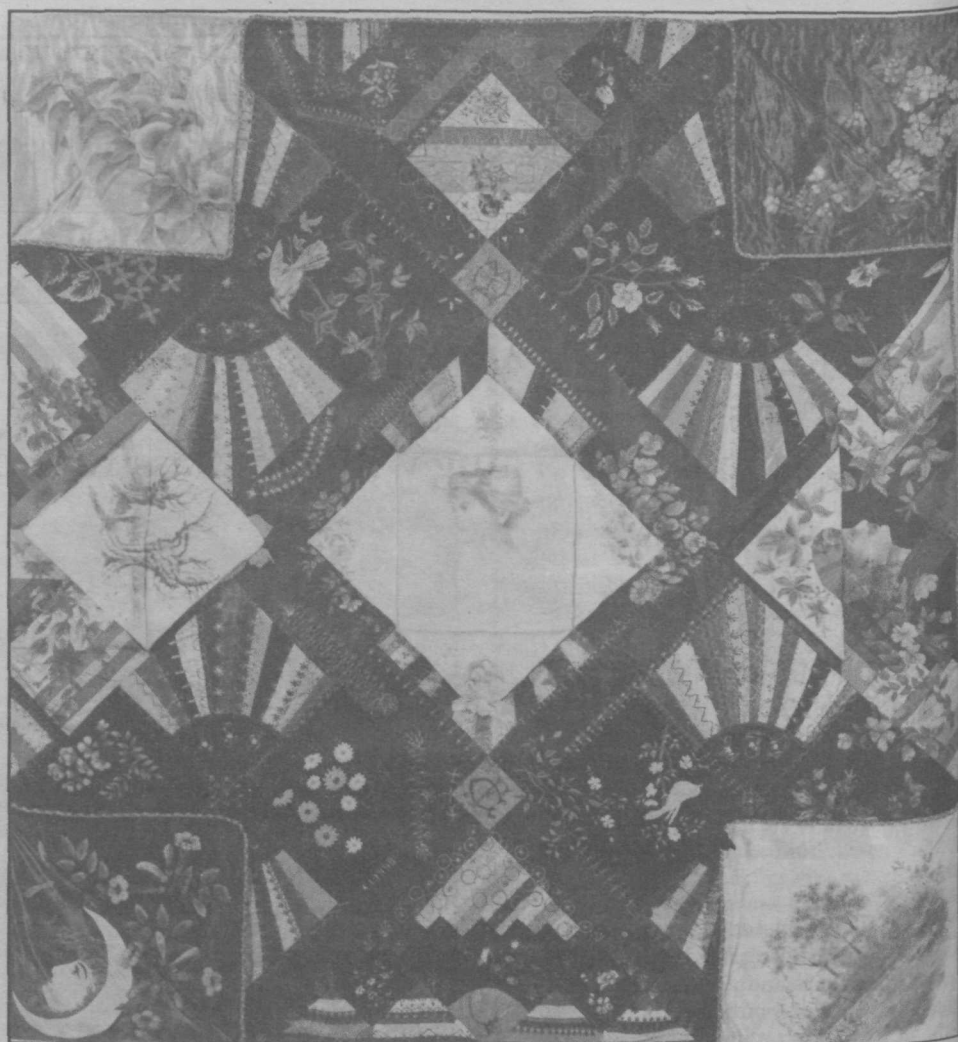
Testimony meetings, Thursdays, 7 p.m., Founders Room, Anabel Taylor Hall.

### Episcopal (Anglican)

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

### Friends (Quakers)

Sundays, 10 a.m., adult discussion; 11 a.m.



Emil Ghinger

One of the 29 commemorative quilts on view at the art museum through June 9.

meeting for worship, Edwards Room, Anabel Taylor Hall.

### Jewish

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

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

### Korean Church

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

### Muslim

Friday prayers, 1 p.m., Edwards Room, Anabel Taylor Hall; Friday discussion dinner, 7:30 p.m., 218 Anabel Taylor Hall; Sunday Qur'an Study, 12:30 p.m., 218 Anabel Taylor Hall.

### Protestant Cooperative Ministry

Sunday worship, 11 a.m., Anabel Taylor Chapel; Taize Prayer, Tuesdays, 5:30 p.m., Anabel Taylor Chapel; Bible study, Thursdays, noon, G-7 Anabel Taylor; Celebration, Fridays, 5 to 8 p.m., 401 Thurston Ave. Call the Rev. Barbara Heck, chaplain, 255-4224, for information.

### Seventh-Day Adventist

Student association, Fridays, 7:15 p.m., 314 Anabel Taylor Hall.

### Zen Buddhism

Zazen meditation every Tuesday at 7 p.m.

and Thursday at 5:10 p.m. in Anabel Taylor Chapel. Beginner's instruction Thursdays at 4:30 p.m. in the chapel. For more information call Jon Warland at 272-0235.

## SEMINARS

### Biochemistry

"Cell Cycle Arrest in Yeast: A Tale of Two Kinases," Gerry Fink, Whitehead Institute, May 17, 4 p.m., Large Conference Room, Biotechnology Building.

### Chemical Engineering

"Molecular Simulation of Fluids and Materials," May 21, 9:30 a.m., Conference Room, Olin Hall. Registration will begin at 9 a.m. in 128 Olin Hall. The seminar will feature presentations by faculty of the School of Chemical Engineering working on a variety of problems in molecular simulation; two speakers from industry, David Savage, program manager, separation advancement, Exxon Research and Engineering Co., and Solomon Jacobson, Hoechst Celanese's R.L. Mitchell Technical Center.

### Genetics & Development

"Evolution of *hobo* Transposable Elements in *Drosophila*," Gail Simmons, City College of New York, May 20, 4 p.m., Conference Room, Biotechnology Building.

### Microbiology

"Multiple Roles of T7 RNA Polymerase," F. William Studier, Brookhaven National Laboratory, May 16, 4 p.m., Conference Room, Biotechnology Building.

### Plant Biology

"Utilization of Elements from the Rice Actin 1 Gene for Foreign Gene Expression in Transgenic Rice," David McElroy, botany, May 17, 10 a.m., G01 Biotechnology Bldg.

"Red Spruce and Acid Rain: Science and Politics," Jean Fincher, Boyce Thompson Institute, May 17, 11:15 a.m., 404 Plant Science Building.

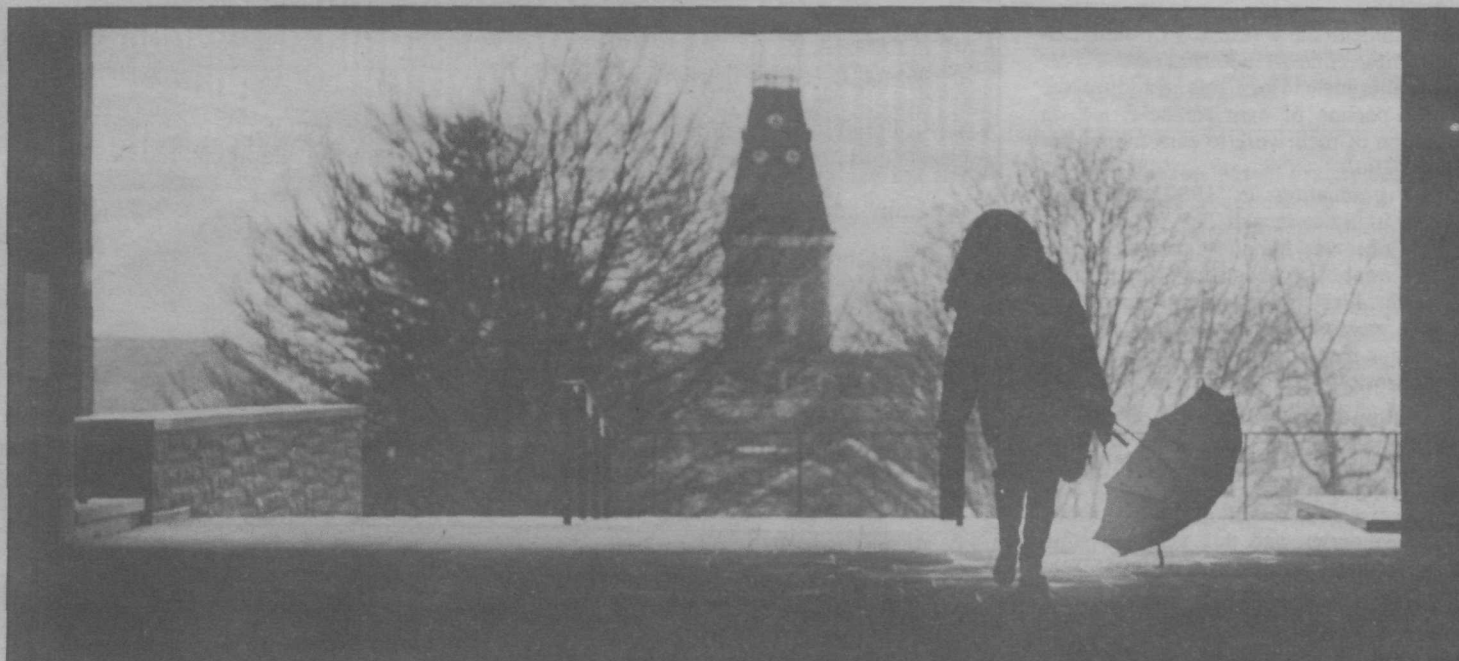
## MISC.

### Annual Giant Yard Sale

Student families from Hasbrouck Apartments on Pleasant Grove Road will be holding a sale of clothing, furniture, toys, food and crafts, all with an international flavor, on May 18, 9 a.m. to noon.

### CUSLAR

The Committee on U.S.-Latin American Relations will meet on May 20 at 5:15 p.m. in the Commons Coffeehouse, Anabel Taylor Hall. For further information, 255-7293.



Peter Morenus

Elena Traiger, a communications major from New City, N.Y., walks through the underpass at Clark Hall one recent rainy day.



## Midori and Mintz are among performers set for next year

Two remarkable violinists will perform on the stage of Bailey Hall next season as Cornell's Faculty Committee on Music presents its 88th season of Bailey Hall concerts.

The 18-year-old Midori, a Japanese musician who made her 1982 debut with the New York Philharmonic and has been hailed by critics for the extraordinary maturity of her playing, will make her first appearance in Ithaca on Monday, March 2, 1992.

Shlomo Mintz, who has performed with virtually every prestigious orchestra on five continents and is a three-time winner of the Grand Prix du Disque, will be conductor and soloist with the Israel Chamber Orchestra on Wednesday, April 1, 1992.

Cellist Yo-Yo Ma will give the first concert of the 1991-92 season, performing on Wednesday, Sept. 25, with the Junge Deutsche Philharmonia, a prize-winning symphony orchestra from Germany consisting of musicians whose average age is 23.

The Canadian Brass, an ensemble known for a repertoire ranging from Bach to Gershwin, will perform on Monday, Nov. 18. Soprano Kathleen Battle will visit Bailey Hall on Friday, Jan. 31, 1992.

The university's chamber music series will return to its original home in Statler Auditorium next season for a festival of string quartets. The Tokyo String Quartet will perform on Friday, Oct. 18; the Alban Berg Quartet of Vienna will play on Friday, Feb. 21, 1992; and the Juilliard Quartet will perform on Saturday, April 25, 1992.

Series subscriptions at considerable discounts are on sale at the Lincoln Hall ticket office. Subscription prices for the Bailey Hall series are \$85 to \$136 for the general public and \$72 to \$115.50 for students, depending on seat locations. In Statler Auditorium, tickets are \$33 to \$55 for the general public and \$28 to \$47 for students.

Tickets can be reserved over the summer with a non-refundable deposit of \$25 per series ticket, with the balance due by Sept.



Midori, an 18-year-old violinist, will perform at Cornell next year.

9. Visa, MasterCard and Cornellcard are also accepted.

For more information, call the Lincoln Hall ticket office at 255-5144, Monday to

Friday between 9 a.m. and 1 p.m. The ticket office will be closed for the summer from Monday, June 26, to Monday, Aug. 26.

## Engineering degrees led this alumnus to an investment career

Brian F. Wruble, a Cornell engineering graduate who manages \$35 billion in assets for institutional investors, sees the 1990s as a decade of pessimism but with opportunities.

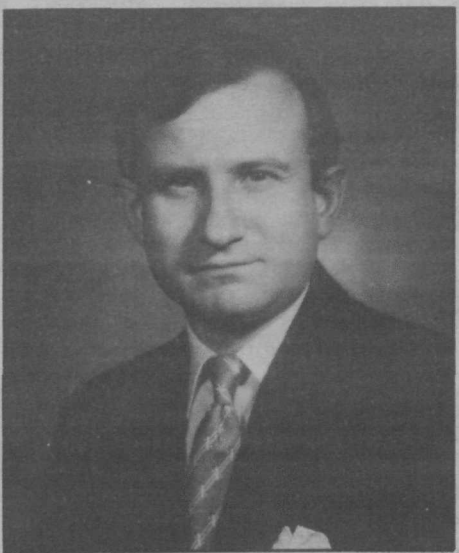
"To date, my life has been lived in a period of bias toward optimism," said Wruble, 47, president and chief executive officer of Equitable Capital Management Corp. "But in the 1990s we will see a bias towards caution and pessimism, eliminating the greed and speculation of the 1980s."

"The '90s will most resemble the '30s [the decade of the Great Depression], but that does not mean that there will be no opportunities to make money."

In an interview in his office in New York City, Wruble said the changes he expects in the 1990s "will not be unhealthy. We have built too many houses and buildings; we have borrowed too much; we are overextended. Now we have to start over again. Every 50 years or so, we need a period of creative destruction."

Listing priorities, the investment manager said, "We had to win-in the Middle East, but watch the troubles in Eastern Europe carefully. What takes place in the Baltic republics is critical."

Two degrees in electrical engineering and work in helping develop one of the U.S. Navy's most advanced nuclear submarines eventually led Wruble into managing investments for pension funds, insurance companies, universities (including Syracuse) and retirement funds for the



Bachrach

Brian F. Wruble

states of New York, Colorado, Wisconsin and Massachusetts.

At Cornell, Wruble earned his bachelor's degree in 1965 (the last class of five-year engineers) and his master's degree in 1966, both in electrical engineering. But, ironically, an aptitude test told him that "the last thing I should be is an engineer and that instead I should go into work related to people."

After university, he spent four years as a civilian engineer on the team that devel-

oped and manned the NR-1, which he described as the most automated submarine in the world and which searched the bottom of the sea for wreckage of the Challenger spaceship. The NR-1 was developed during the Vietnam War. Wruble served aboard her during the early missions.

After his naval work, Wruble, who also earned an M.B.A. degree with distinction at New York University, spent 10 years on Wall Street before joining Equitable Capital.

Relations between engineering and finance are "absolutely fantastic," he said. "Finance is highly mathematical. Both finance and engineering require an orderliness to the thought process, searching out the right answers and implementing them. Cornell taught me how to work. Success today involves doing a lot of things you don't necessarily want to do and spending long hours at it."

But Wruble, an opera fan ("Fidelio is my favorite") and collector of contemporary English paintings, said that he has one regret about engineering studies. "I missed classical studies. That was the price I paid."

Two of his children are making up for his loss. Daughter Amy, 20, is an English literature major at the University of Pennsylvania. Son Jordan, 17, a high-school senior, also plans to study liberal arts, and he mailed his application to Cornell in January.

"I envy my children because they are re-

ceiving a broad education. Jordan plans to go into business, but his education should include more than just his specialty." His third child is Henrietta, 2.

Wruble and his second wife, Kathleen Bratton, a lawyer who manages a family of mutual funds, live in an apartment in Manhattan. They own 19 paintings done by Leonard Rosoman, a member of the Royal Academy of London. Wruble believes that theirs is the largest Rosoman collection in the United States. One Rosoman painting was done of the Wrubles, relaxing on a veranda in their vacation home in Georgetown, Md., on the eastern shore of Chesapeake Bay.

The Wrubles spend nearly every weekend in Georgetown, where he catches crabs off his dock, sails, and, from his ham-radio station, talks with other ham operators around the world. In winter, they fly to Steamboat Springs, Colo., to ski. Until he injured his knee, he ran marathons.

The son of a Ph.D. research scientist at Upjohn Co., Wruble grew up in Kalamazoo, Mich., building amateur radio sets in his basement and being "fascinated by science and technology."

He said one of the engineering professors he most admired at Cornell was Joseph L. Rosson, now an emeritus professor.

"Joe Rosson was a good guy and a great teacher, a classic professor that everyone would like to be like. In those days we had a club called the Delta Club, faculty and students who got together every Friday in Phillips Hall to drink beer. Joe was one of the most regular attendants and we all came to admire him."

Wruble said he will never forget one of Rosson's kindnesses. After receiving his bachelor's degree, Wruble turned down Cornell's acceptance for his graduate studies in favor of a biomedical engineering program at Pennsylvania. But with financial problems created by the death of his father, Wruble couldn't afford Penn. He telephoned Rosson for help.

"He made me an instant commitment that he probably did not have the authority to make," Wruble said. "Joe said, 'Come back and I'll get you financial support.' " It worked. Wruble shared a teaching assistant's post with another student, "which was just enough for me to squeak by on, and I'll never forget Rosson for that."

Told of Wruble's comments, Rosson said that he remembers Wruble well. "He was a pretty good student, and to be remembered that way is one of the joys of teaching," the retired professor said.

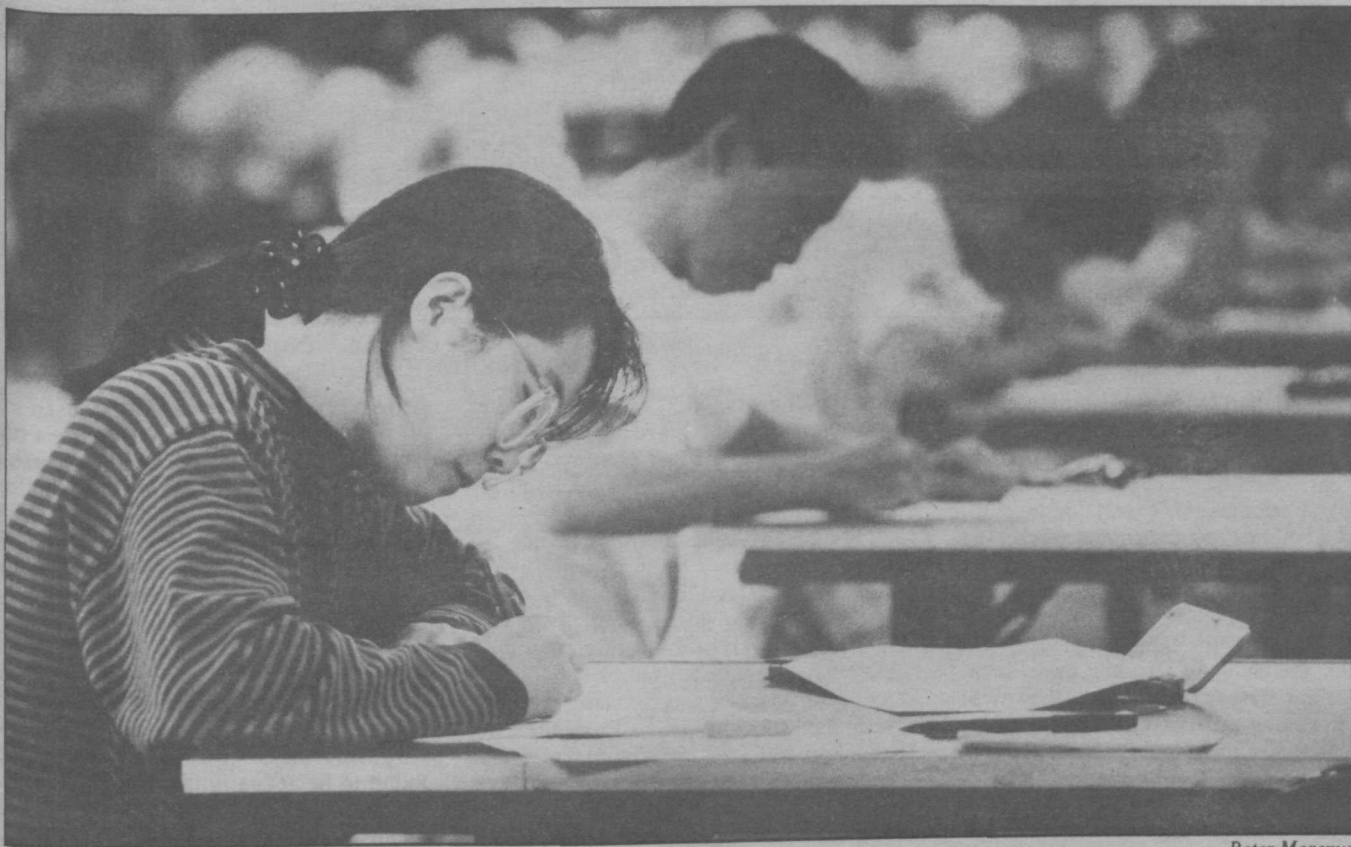
For an executive who manages billions of dollars, Wruble works in a relatively modest office, 15-by-18-feet, on the 19th floor of the Paine Webber Building on New York's Avenue of the Americas.

Three paintings that he calls "geometric art, nothing like the British art I collect" hang on the walls. On his desk sits a sign reading: "Get the Spectators off the Field."

Wruble, who also writes for investment magazines, offered one key for success in an article published in *Investment Age* — "To succeed, one must plan; and to plan, one must have opinions about the future and understand the past."

— Albert E. Kaff

## Dollars and sense



Peter Morenus

Sophomore Bing Fun Cheng takes her final exam for Economics 101 on May 6 in Barton Hall.



# Finding may help reduce organ-transplant complications

Chemists from Cornell and Harvard universities have determined the atom-by-atom shape of the complex of a powerful immunosuppressive drug, FK506, and the cell protein, called FKBP, to which it binds.

The protein-drug complex structure, reported in the May 10 issue of *Science*, could lead to improved versions of FK506, engineered to better prevent rejection of organ transplants.

FK506, which is derived from a soil-borne fungus and has yet to be approved for clinical use, is proving far more effective than currently available immunosuppressants for controlling the body's rejection of transplanted organs, according to surgeons and researchers.

Unraveling how FK506 works has been a major goal of this work. FK506 is believed to work by binding to the FKBP protein of T-cells — the immune system's sentries that detect and destroy foreign cells — and interrupting their reproduction.

Knowing exactly what happens when a drug binds to a cell protein will also help molecular biologists understand signal transduction — the message-transmitting process between an outside chemical and the nucleus of a cell, according to Cornell's Jon Clardy, a professor and chairman of the Department of Chemistry. Working at Cornell's Biotechnology Institute, Clardy, Gregory D. Van Duyne and P. Andrew Karplus conducted an X-ray crystallographic study of the FKBP-FK506 complex to determine its atomic structure.

Van Duyne is a postdoctoral researcher in the Cornell Department of Chemistry, and Karplus is an assistant professor of biochemistry, molecular and cell biology. They credited co-authors Robert F. Standaert and Stuart L. Schreiber of the Harvard University Department of Chemistry with providing the study's FKBP, which the Harvard scientists had previously discovered and cloned. The structure of FKBP is reported by Harvard scientists in the same issue of *Science*.

"This is an extremely competitive field of research, in part, because immunosuppressants have the potential of becoming a multibillion-dollar market," said Clardy, noting that at least two major pharmaceutical laboratories were also trying to find the FKBP-FK506 structure.

Information on the FKBP-FK506 structure, which is expressed as a list of several thousand numerical coordinates,

will be deposited in the Brookhaven Protein Data Bank and will be freely available to all researchers, as will the coordinates of FKBP. The Cornell study was funded by the National Institutes of Health and was conducted with equipment that is supported, in part, by the National Science Foundation.

"The coordinates of the FKBP-FK506 complex are like details of the blueprint for a large office building; they describe exactly where all the rooms are located and how they are related," Van Duyne explained.

"The binding protein is something like a socket wrench that fits over a bolt, which is the molecule of the drug," Van Duyne continued.

"Together, the complex of protein/wrench and the drug/bolt makes something that works — it interrupts reproduction of the cell — but we still don't know what the protein alone does. It clearly plays an important role in signal transduction."

Until the Harvard chemists isolated FKBP, little was known about the ubiquitous message-carrying protein, which is found in virtually all animal cells, Van Duyne said. Studies of FK506 intensified in the past three years and are leading to greater understanding of the biology of the human cell, according to Harvard's Schreiber.

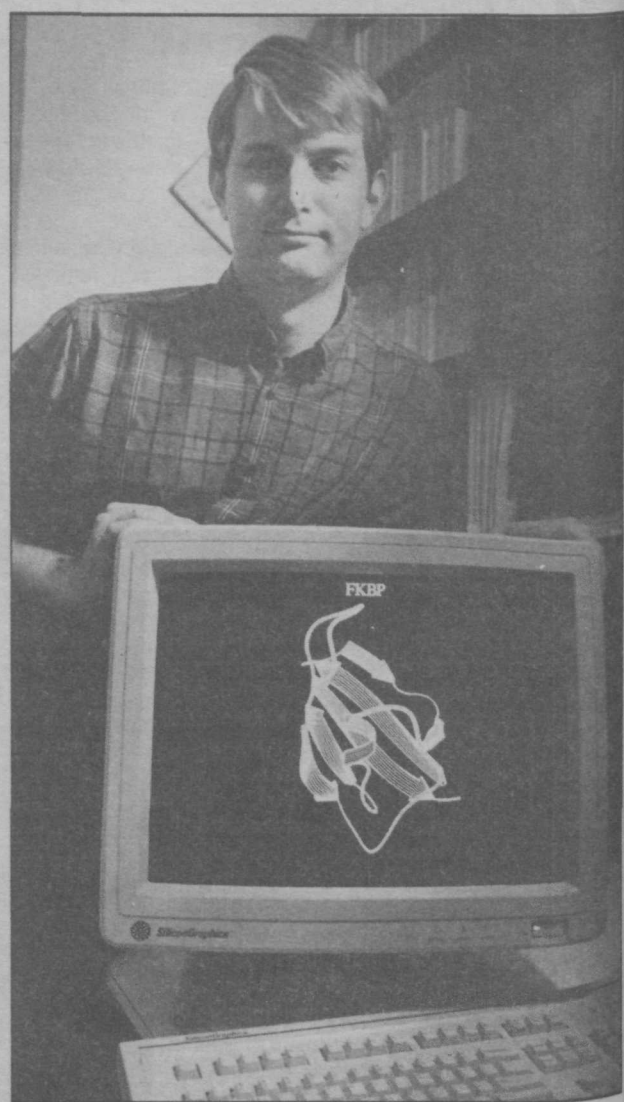
FK506 is produced by Fujisawa Pharmaceutical Co., whose scientists found the chemical formula in 1984 during screening tests for immunological activity of microbes from the soil of Japan's Mount Tsukuba.

The drug was first used in humans by organ-transplant pioneer Dr. Thomas Starzl at the University of Pittsburgh Medical Center. There it has proved to be far more effective than the current drug of choice, cyclosporine, in controlling rejection of transplanted organs, and with fewer side effects.

While considering approval for general use, the U.S. Food and Drug Administration (FDA) has permitted clinical trials of FK506 for organ transplants at two other medical centers.

Based on the successful transplants in humans and on animal tests, the drug is believed by some researchers to have even wider application in the control of autoimmune diseases, in which the immune system malfunctions and damages the body's own healthy organs.

—Roger Segelken



Gregory D. Van Duyne with a monitor showing the atomic structure of the FK binding protein.

## 11 high-school teams win supercomputing contest

By proposing supercomputing projects on topics from dinosaur extinctions to traffic jams, 11 high-school supercomputing teams from across the country have won SuperQuest 1991, the only national computational science competition for high schools in the United States.

The winning teams of three or four students and a teacher-coach will mount supercomputer studies of topics including how the dinosaurs became extinct, whether traffic jams are predictable, making music from natural patterns, preserving organs at low temperatures and the effects of farm runoff on wetlands.

The sophisticated projects also include such complex technical subjects as "The Initiation of Reductive Trigger Waves in a Marginally Stable Ferrioxal-Catalyzed Belousov-Zhabotinskii Solution" and "Fractal Structures Produced by Generalized Diffusion Limited Aggregation."

SuperQuest is sponsored by the National Science Foundation's Division of Advanced Scientific Computing, Education and Human Resources, and other NSF programs, including computer networking.

"The NSF's support of SuperQuest is consistent with the recent Federal High Performance Computing and Communication Initiative, currently under Congressional consideration," said Peter Siegel, director of the Cornell National Supercomputer Facility at the Theory Center.

"This initiative focuses on advanced scientific computing, education, and the networking infrastructure to serve the national research and education community," said Siegel. "The NSF's support of SuperQuest is a working model of the capabilities of such an initiative as demonstrated by these future leaders."

For the third year in a row IBM Corp. is supporting the Cornell program, with the donation of workstations to the winning high schools.

The program has expanded to include Summer Institutes at the National Center for Supercomputing Applications (NCSA) at the University of Illinois, the University of Alabama in Huntsville and the Alabama Supercomputing Center. Besides NSF and IBM, other sponsors include Cray Research Inc. and Boeing Computer Services.

Three sets of winning teams and their teacher-coaches were named to attend an expenses-paid SuperQuest Summer Insti-

tute, where they will learn supercomputing and develop their programs.

Winners who will attend the Summer Institute at the Cornell Theory Center are from the Bronx High School of Science, Bronx, N.Y.; Marlboro Central High School, Marlboro, N.Y.; Montgomery Blair High School, Silver Spring, Md.; and Thomas Jefferson High School for Science and Technology, Alexandria, Va.

The winning teams were selected by a committee of scientists and educators. The students' proposals were judged on their scientific content, effectiveness of computational approach, creativity and clarity.

"The quality of the entries was absolutely remarkable," Cornell Theory Center Director Malvin H. Kalos said in announcing the winners. "Their ingenuity and breadth made it extremely difficult to choose the winners. Supercomputing is fundamental to advancing almost every field of science and technology and is critical to maintaining our international industrial competitiveness."

"Thus, we see these talented young people as crucial to the progress of our technological society, and we are extremely pleased to be able to offer these promising students this intellectual challenge."

Back at their high schools, the students will perform their research by remotely accessing the three centers' supercomputers using workstations donated to the schools. The equipment also will be used to support advanced computing courses at the schools.

At the summer training institutes, the SuperQuest teams will receive training in basic supercomputer usage, programming languages, computer graphics and basic numerical methods. They also will be aided by supercomputer experts in developing and implementing their programs on the centers' supercomputers.

The teams also will receive technical assistance to set up their remote computing sites for accessing the supercomputers.

After the student winners have completed their research projects, they will compete among themselves in the Best Student Paper Competition, with the winner receiving a \$1,500 scholarship and the second-place winner receiving a \$1,000 scholarship. The students also will deliver scientific talks on their projects at professional scientific meetings.

—Dennis Meredith

## Earthquake engineering center awarded \$21 million by NSF

The National Center for Earthquake Engineering Research, a consortium of universities that includes Cornell, has received a five-year, \$21-million renewal of its support from the National Science Foundation.

The center was established in 1986, with matching funds from the state of New York and other sources.

Under the new grant, Cornell engineers expect to continue research in such areas as protecting "lifelines," including gas, water and electric-power lines, from earthquake damage and evaluating how resistant existing buildings are to earthquake damage.

The engineers will also launch new studies of the effects of earthquakes on masonry buildings and bridges and methods to make such structures more earthquake resistant.

"Cornell researchers have been among the strongest participants during the first five years of the center," said Peter Gergely, professor of civil and environmental engineering and one of the principal investigators for the center.

Other Cornell faculty involved in the center are structural engineers John Abel, Greg Deierlein, Mircea Grigoriu, William McGuire and Richard White; geotechnical engineers Thomas O'Rourke and Harry Stewart; and city and regional planner Barclay Jones.

"Our studies have included such diverse

problems as soil liquefaction during earthquakes, seismic effects on lifelines and the response of the vulnerable concrete buildings that are typical in the East," said Gergely. Cornell and other NCEER members also inform legislative leaders about regional and national earthquake risk and provide educational services to engineering and civic groups on reducing earthquake damage, he said.

"The research and outreach work at Cornell and the other member institutions has already led to practical applications and approaches to reducing seismic risk, especially in the Midwest and the East," he said. Gergely cited the fact that Eastern states and cities such as New York are considering earthquake-resistant design regulations for new buildings, based in part on NCEER work. For example, Gergely has joined a committee to develop a seismic building code for the state of New York, including such earthquake-prone areas as the St. Lawrence Seaway, the Adirondacks and the New York metropolitan region.

Headquarters for the NCEER are at the State University of New York at Buffalo. Other consortium members include the Lamont-Doherty Geological Observatory of Columbia University, Princeton University and Rensselaer Polytechnic Institute.

—Dennis Meredith

### Bacteria continued from page 1

organic pollutants with soil and aquifer sediments. Scientists have also had difficulty determining whether observed pollutant disappearance was due to bacterial activity or non-biological processes.

"Less than 10 years ago, few people believed that subsurface bacteria could live in the low-nutrient conditions underground," said Ghiorse, who was among those who developed methods of extracting microbiologically uncontaminated samples.

Ghiorse, Madsen and Sinclair, currently a scientist with Mantech Environmental Technology in Oklahoma, found that counts of protozoa which prey on bacteria could be used as an index of the metabolic activity and growth of underground contaminant-adapted microorganisms.

"The population density of protozoa reflects the rate at which they are able to

graze on their bacterial prey," Madsen said. "If the numbers are high, the bacteria must be flourishing, actively feeding upon and breaking down the pollutants. And, indeed, we found that in the most contaminated site, protozoa numbers were almost 400 times greater than in pristine areas. Such high population densities are comparable to those found in sewage treatment plants."

While the bacteria in the contaminated water zone adapted to rapidly breaking down the coal-tar pollutants, the scientists found, those in more pristine areas did not. However, these "pristine" bacteria were found to be active in that they metabolized a common plant-derived substance. Ghiorse speculated, however, that the pristine bacteria, too, would adapt if exposed to the pollutants for a longer period of time.

—Susan S. Lang



# Astronomers study universe's mysteries at Palomar

From the orbital dance of snowball-like moons whirling about Saturn to the ponderous rotation of distant galaxies of billions of stars, some of the most exquisite mysteries of the universe have opened to the scrutiny of Cornell astronomers over the past year.

Their new explorations — which also include colliding galaxies, the birth and death of stars and superdense spinning stellar corpses called pulsars — have arisen from Cornell's agreement to use the 530-ton Hale Telescope of Palomar Observatory, considered one of the greatest scientific instruments in history.

Dubbed "The Big Eye" for its giant 200-inch main reflecting mirror, the Hale Telescope near San Diego is considered one of the finest in the world for deep-space astronomy.

The agreement with the telescope's owner, the California Institute of Technology, began in January 1990, and with more than a year of observations accomplished, the Cornell astronomers are delighted with the wealth of scientific data streaming from the telescope.

Under the agreement, Cornell astronomers use the telescope for 25 percent of its observing time, in return for paying one-fourth of the operating costs and the costs of new detecting instruments, for a total contribution of about \$500,000 per year. Support for Cornell's participation comes from the university, federal agencies and private donors.

"This extraordinary opportunity has changed our lives at Cornell to a significant degree," said Astronomy Department Chairman Yervant Terzian. "Cornell astronomers can now ask some of the fundamental questions in astronomy, with the confidence that they will have enough observing time on a major telescope to try to answer them." Terzian also emphasized the giant telescope's value for students.

"It's a great thrill for the students to use this world-famous instrument," he said. "It's certainly critical for those graduate students applying to Cornell to know that they can use Palomar to do significant research in astronomy."

Terzian noted that with such advanced detecting instruments as those being built by Cornell, the Hale Telescope will continue to produce important scientific discoveries, even after larger telescopes begin operation.



Chris Hildreth

Graduate student Tom Megeath examines one of the first images astronomers here obtained with the giant Palomar Telescope, under Cornell's agreement to use the instrument. The image shows a region of the galaxy where stars are being born. The bright glow comes from a young star some seven times hotter than our sun, lighting up the gas and dust around it like a neon tube.

different physical phenomena.

For example, Palomar and Arecibo observations by Terzian and his colleagues of strange galaxies with binary nuclei show just this kind of synergy between the two instruments. He and his graduate student are mapping the structure of such double-nuclei galaxies at radio wavelengths using the Arecibo giant.

Then, they can use the Hale Telescope to observe infrared radiation from the same galaxies, obtaining different insights into the galaxies. Such infrared studies will help them determine whether the binary galaxies are two bodies coalescing in an act of cosmic cannibalism or a single galaxy rending apart. Comparisons of the spectrum of light from the galaxies could also reveal if the stars within their binary nuclei were moving at different average velocities, a sure sign of two distinctly different galaxies merging.

Using the Hale Telescope, Professor James Houck is poring over data from the telescope on infrared light from still another strange class of galaxies — those that are faint at visible wavelengths but that glow almost helishly in the infrared. Houck is trying to determine whether such galaxies, first discovered by the Infrared Astronomical Satellite, glow because of bursts of star formation or because of a central black hole that heats surrounding dust clouds.

Other galactic studies at Palomar are allowing Cornell astronomers to delve into some of the most monumental questions of the cosmos. For example, Associate Professors Martha Haynes and Herter are just beginning an effort to discover whether the universe is expanding at the same rate everywhere. Understanding this expansion, which has been going on since the Big Bang that began the universe, is fundamental to understanding the large-scale structure of the universe. Basically, the astronomers are establishing precise distances to clusters of galaxies by studying the light from the galaxies. Analysis of the light also tells the scientists how fast the galaxies are receding as the universe expands. Combining the distance and speed information yields a precise measure of the rate of expansion at different points in the universe.

Herter is also using the telescope to search for elusive, almost mythical, objects in our own galaxy called brown dwarfs. These peculiar objects are much larger than planets, at least 10 times the mass of Jupiter, but too small for their gravitational squeeze to ignite them in the thermonuclear fires of stars. Thus, brown dwarfs would merely glow faintly in the infrared. So far, no brown dwarfs have been confirmed, but Herter and his colleagues seek them, because they could yield insights into the formation of stars and planets and into the dark matter in galaxies.

In another piece of stellar research, Terzian and his colleagues are also studying the bubbles of gas and dust, called planetary nebulae, wafting away from dying stars. Astronomers could learn much about the "weather" and chemical makeup of the region above such "novae" by studying the emanations from such bubbles.

Still more exotic dying stars are the pulsars — those that, after dying in an immense supernova explosion, collapse into a small whirling sphere of incredible density. Such pulsars sweep the sky with staccato machine-gun-like bursts of energy as they spin like ultra-fast lighthouse beacons. While pulsars are usually detected by their radio emanations, Professors James Cordes and Steven Beckwith are using the Hale Telescope's infrared abilities to seek them out. Since infrared radiation penetrates the gas and dust of the center of our galaxy, the two astronomers hope to see pulsars at the galactic cen-

ter, where none have been resolved before.

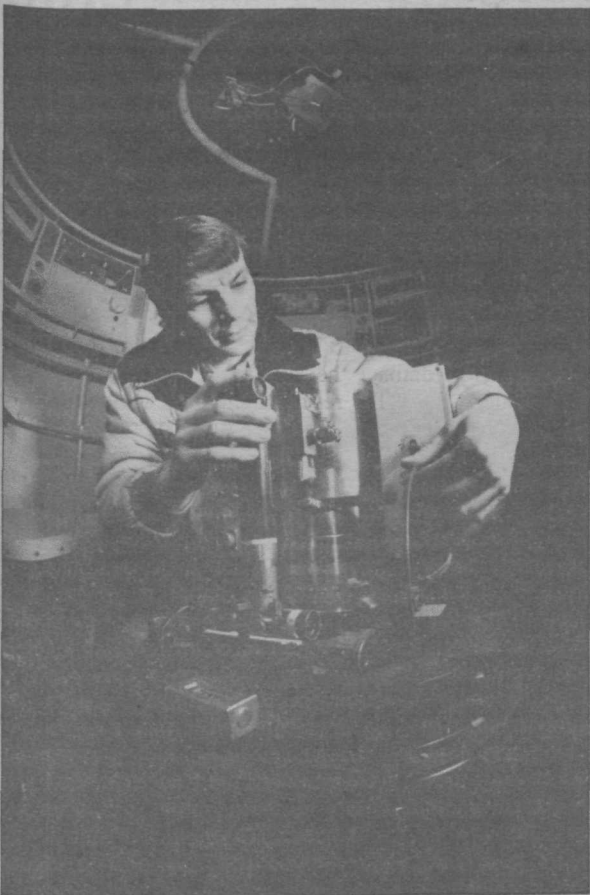
The Hale Telescope has also proven valuable in exploring our own cosmic neighborhood, the solar system. For example, Associate Professor Philip Nicholson is studying what might be termed "the dance of the giant snowballs" around Saturn. Nicholson has studied the interactions of the tiny moons Janus and Epimetheus that circle the planet just outside the planet's intricate concentric ring system. The two 50-kilometer-diameter moons occupy nearly the same orbit and periodically swoop near one another, each altering the path of the other.

The supersensitive Hale Telescope has allowed Nicholson to observe the two moons as they swerve near one another. Measuring the orbital gyrations of the two moons allowed him to determine their mass and density — about that of a hard-packed snowball. Such insights will enable astronomers to understand how the icy ring particles may coalesce into larger moons, and how those moons relate to the large, denser moons of Saturn. The studies can also yield insights into the complex gyrations of moons and rings as they sweep around the planets. Thus, Nicholson plans other studies of Saturnian rings and moons, as well as those of Neptune.

This panoply of research is only a sampling of the studies being conducted with the giant telescope. New Cornell-built instruments, such as the infrared camera/spectrograph to be installed for testing this spring, will open still more vistas to the astronomers.

And, no doubt, the answers such instruments yield as they capture ancient starlight will raise even deeper questions about the machinery of the cosmos.

—Dennis Meredith



Chris Hildreth

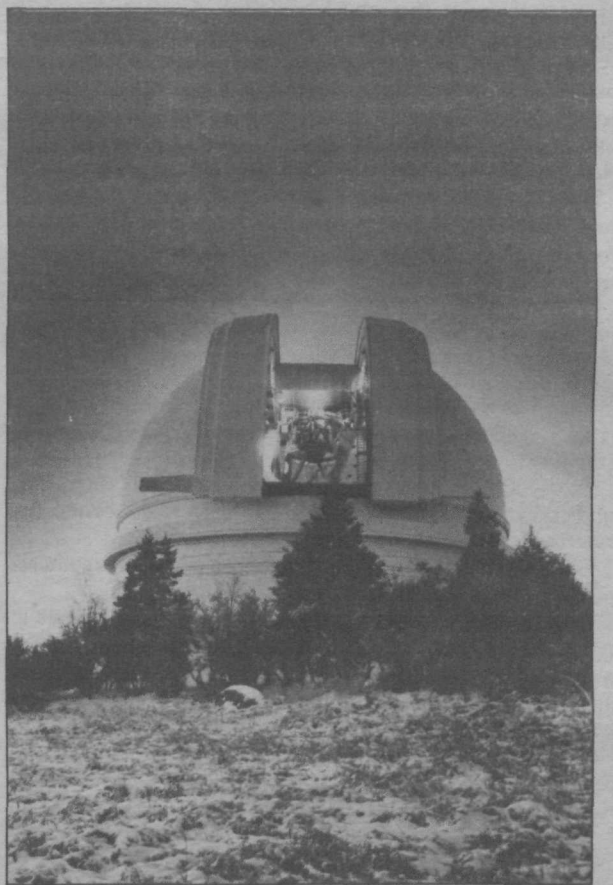
Terry Herter sets up an electronic light detector on the Palomar telescope. He used the detector to search for faint objects known as brown dwarfs.

One such telescope is the multimirror, 396-inch Keck Telescope, now being completed in Hawaii by Caltech and the University of California.

The Cornell astronomers have unanimously pronounced the Cornell-Palomar partnership an outstanding success and the telescope a magnificently well-maintained and upgraded scientific instrument.

As Associate Professor Terry Herter describes the quality of the 40-year-old telescope: "A telescope like that would never be built today. We were all extremely impressed, not only with the instrument, but also with its operation by the dedicated staff." Herter was the first to use the telescope under the agreement, performing observations since Jan. 1, 1990.

The Hale Telescope is one part of a broad scientific strategy by the Cornell scientists. For example, the telescope can be complementary to the other giant "eye" used by Cornell's astronomers — the 20-acre Arecibo radio/radar telescope in Puerto Rico. By studying the same object at different wavelengths — visible and infrared at Palomar, radio at Arecibo — astronomers can observe



Chris Hildreth

The 135-foot dome of the Hale Telescope open to the sky.



## COMMENTARY

## Access to a Cornell education is in jeopardy

by J. Robert Cooke

Ezra Cornell's vision of offering instruction in "any study" enabled agriculture and engineering to find a legitimate place among traditional scholarly studies; offering instruction to "any person" enabled talented men and women who traditionally might have been excluded from higher education to seek personal fulfillment and to better serve society. Sadly, after 125 years, I believe that Cornell's vision is now gravely at risk.

Broad access to higher education at New York's land-grant university is in jeopardy because of a fundamental clash between expectations and resources. It took 100 years for endowed tuition and fees at Cornell University to reach \$1,950, in 1966; 10 years later, that figure had doubled to reach \$4,110. Since 1982, average annual tuition increases of \$904 have brought tuition to its current level of \$16,214!

If we continue the merciless budget reductions of recent years and manage to maintain the 10-year trend, by the end of the decade the annual tuition, fees, and room and board extrapolates to \$31,447 for endowed students, \$25,263 for statutory non-resident students and \$16,714 for statutory resident students. Shall we allow the price of the freshman year in Ithaca to exceed the price of a year at the Cornell University Medical College in New York City? How many high-school graduates are likely to have the temerity to undertake four years at this awesome level of indebtedness and follow that with four or more years of graduate and professional studies?

Since 1981, the endowed tuition, fees, and room and board have risen more rapidly than per-capita disposable personal income. Something systemic and fundamental appears to have happened; our approach

to financing undergraduate education appears to be grossly inadequate.

Our national leaders, demonstrating only a superficial grasp of the problem, chastise higher education for its inability to respond to financial strangulation. Even local leaders erroneously believe that institutions of higher education are wealthy and should be taxed. They seem to be unaware that such institutions already contribute to society and to the local communities, but in a fundamentally different and more appropriate and important way.

Government leaders are not the only people who have failed to notice that undergraduate education is headed into deep crisis. Although the Cornell Board of Trustees and administration have responded by organizing the largest endowment-building campaign in the history of higher education, we are not out of the woods. Even doubling our endowment, as amazing as that would be, will not avoid the crisis. The trustees have given financial aid high priority, but not high enough. More important, they have not treated the broader issue of financing undergraduate education as a strategic issue. Neither they nor the administration has come forth with a plan that might preserve broad access to a Cornell undergraduate degree.

The recent disruption of the administration building might have been unnecessary (and possibly not have occurred) if there had been a community dialogue about efforts to deal with the increasing cost of undergraduate education. The protest was probably misdirected, because the problem is not just the reallocation of financial aid. Even with the current 15 percent of tuition going to financial aid, there is not and will not be enough to satisfy needs regardless of how it is sliced. We must use the existing resources wisely, but, more important, we

must enlarge and redefine our base of support.

The faculty has also been asleep at the steering wheel. During this academic year, more than one-half of the meetings of the Faculty Council of Representatives have either failed to garner a quorum or were canceled outright before the fact because no substantive issues worthy of debate had been identified! One resolution did suggest reducing the number of faculty, but that does not come close to solving the crisis. The debate must become far more soul-searching and deal with more fundamental issues. Just administratively tweaking the rate of tuition increases will not be enough. We need to come to grips with our predicament. We cannot afford to accept complacency by the faculty or by the administration. Having the important decisions flow from the top down without an opportunity for the rest of us to own the problem and to participate in its solution is not satisfactory, as has been amply demonstrated with less important matters.

Some of the necessary changes are fundamental and can be implemented only with faculty involvement and support. We need the courage to ask tough questions. Is basing tuition on price, rather than cost, a rational approach? In a crude sense, tuition is now set at the level required to balance all (not just undergraduate) expenditures in the budget. We don't even know what the real costs for undergraduate education are. In some ways, we co-mingle the budgets for teaching and research, so we don't know whether we can afford to be simultaneously a premier teaching and premier research university. We have trouble quantifying benefits that flow to undergraduates from the research enterprise, making it hard to say which non-teaching salaries and services can be recovered from student tuition.

tion.

Can we afford not to engage every member of this community, including students, in cost-saving efforts? I am astonished by our carelessness in such little things as leaving a classroom lit after class has ended. Have we reached the point where budget reductions mean that we cannot continue to function as we have in the past? Do we have the courage to withdraw from activities that no longer have a source of support? For example, in the statutory colleges we have absorbed a 20 percent reduction in the number of state-funded positions in the past 20 years! The frantic scramble for adequate funding leaves the faculty frayed and over-extended, employee careers interrupted, and the university inadequately reimbursed.

The viability of the university research apparatus is at risk too. We may be simply living beyond our means. The national government focuses on perceived abuses of indirect costs and neglects the bigger issues of national needs in research and development. We concentrate on the obvious and ignore our long-range interests.

We have some hard choices ahead. We yearn for governmental leadership wise enough to understand that it can expect no "free lunch." Universities can be neither efficient nor truly effective when financially starved. The university faculty must reassert its leadership of this university. We should get on with our responsibility for leading a public debate about the future of undergraduate education at Cornell University. Are there others who care about this issue?

*J. Robert Cooke is professor of agricultural and biological engineering and a former member of Cornell's Board of Trustees.*

## Hotel stocks are first to benefit from Gulf War

Hotel stock prices improved more in February than did those of any other U.S. industry, including businesses that may benefit directly from Kuwait's rebuilding, according to research conducted here.

From Jan. 31 to Feb. 28, stock prices in the lodging industry increased by 33.3 percent, and the upward trend continued in March, reported Avner Arbel, a professor of finance in the School of Hotel Administration.

Last year hotels were the nation's worst performing industry on Wall Street. But in February, hotels outperformed companies that could win reconstruction contracts in the Persian Gulf region. The two industries immediately behind hotels in February price gains were heavy construction, up 26 percent for the month, and oil drilling, up 20 percent. Another industry expected to gain from Middle East contracts, oil-field equipment, was far behind hotels, gaining only 14 percent in February.

Defense industries did not even rank among the top 30 categories of industries in February price gains, said Arbel, who compiles his studies from a data base of 2,000 U.S. corporations.

"The turnaround for hotels is particularly significant, because last year they were the worst-performing industry," Arbel said. "In the 12-month period ending last August, market price of hotel stocks fell 55 percent. Hotel shares still have a long way to go to recuperate from last year's losses. At the end of February, their prices were about 30 percent below a year ago."

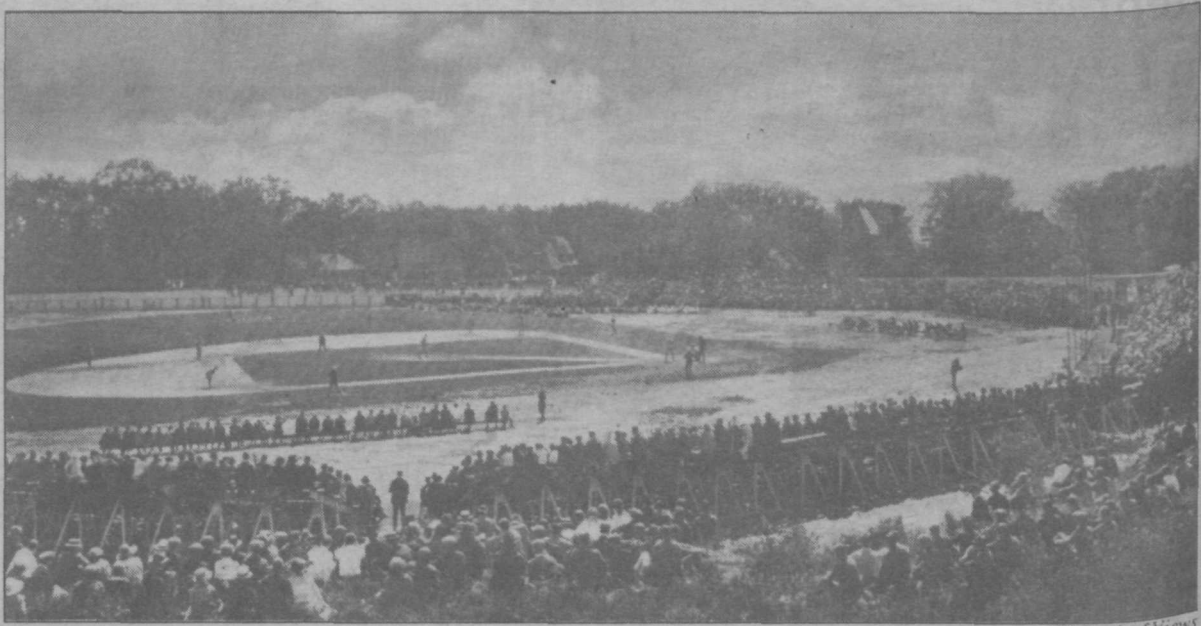
Nearly all hotel companies, large and small, gained during February. Arbel sees them as good investments, because he expects them to continue their recovery.

With the Gulf War ended, Arbel gave several reasons for optimism on hotel shares:

- "Energy costs are down and are expected to continue to decline. For all practical purposes, the capital of OPEC now is located in Washington, and most oil-producing countries, including eventually Kuwait and Iraq, are cash-hungry and highly motivated to sell their production."
- "Probability of a severe recession now has declined, and some economists are predicting no more than a mild recession and perhaps no recession at all."
- "The worst enemy to tourism is terrorism, and the threat of terrorism is expected to decline in the face of President Bush's peace initiatives."
- "Interest rates are low and are expected to remain low, benefiting real estate which is a major component of the hotel industry."

— Albert E. Kaff

## Double take



1925 Book of Views



Peter Morenus

Cornell baseball at Hoy Field today (bottom photo) is still exciting and, judging from this year's 23-17 mark under first-year head coach Tom Ford, relatively successful. The landscape surrounding the field, though, has quite a different look.



# CORNELL EMPLOYMENT NEWS

Including Job Opportunities

Volume 3, Number 18

May 16, 1991

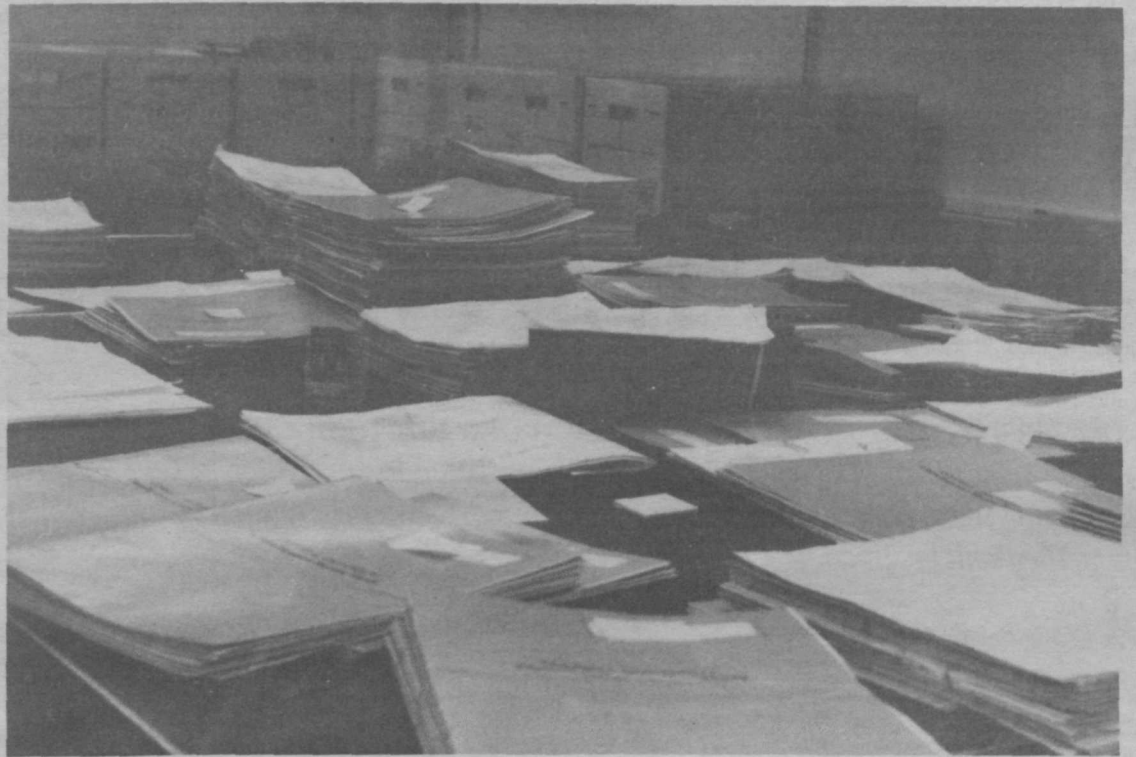
## CLASSIFICATION REVIEW STUDY

### Here's What's Happening with the Classification Review Study

#### Nonexempt Review

- Positions have been placed in broad categories based on similarities of duties and responsibilities.
- The marketplace analysis is underway. Market data is being taken from various wage surveys and analyzed with current actual wages for the purpose of setting wage ranges.
- The Steering Committee meets today with Coopers & Lybrand (C&L) consultants regarding the nonexempt classification system (this system will be used to "plug in," or place, the actual positions within their own classification and relative to each other within a hierarchy).
- Evaluation Committee meeting dates have been set up. The Evaluation Committee will meet to begin the process of classifying positions, using the approved nonexempt classification system referred to above. Positions will be placed into a hierarchy similar to the exempt one and this hierarchy will be presented to the Steering Committee for approval.

#### After Hours ...



#### Exempt Review

- Market analysis is being continued by consultants.
- The review/approval of the exempt hierarchy is still under way by the Steering Committee.

## Attention Select Benefits Medical Reimbursement Account Participants On Leave Without Salary

(reprinted from last week's Cornell Employment News)

If you are going on a leave without salary, you need to be aware of how this change in status affects your Select Benefits Medical Reimbursement Account:

1. Medical expenses incurred prior to your date of leave may be submitted for reimbursement through the end of the plan year.
2. Medical expenses incurred while you are on leave may be submitted for reimbursement under a medical reimbursement account **if you continue to participate in the Select Benefits program by making after-tax contributions.** This means that if you do not elect to make after-tax contributions, expenses incurred during the period of your leave are not eligible under the Select Benefits plan.

3. If your leave ends and you return to work at Cornell during 1991, your medical care account contributions will automatically begin again at the same amount you were contributing prior to your leave. Under IRS regulations, you can only enroll in a Select Benefits account once each calendar year.

Endowed employees should call Donna Bugliari (255-6886) or Pat Cooke (255-6886) if you have any questions or need additional information. Statutory employees can contact Midge Kelsey at 255-4455.

## Workshops and Seminars Offered by Staff Relations and Development

We'd like to remind you about the following workshops: **Coping with Change**, **Habit Breakthrough**, and **Interpersonal Skills**.

**Coping with Change** will be held on May 21 from 9:00-4:00. Change is one thing that is constant in our home and work environment. This course explores what we can do to cope with the changes that constantly impact on our lives. We will examine the influence of change on employees and methods of influencing, reacting to and more effectively handling change. This one-session program is led by Joe Lomax. There is a \$25 charge to the department.

**Habit Breakthrough** will be held on May 29; June 5, 12, 19, 26; July 10, 17, 24 from 1:00-3:00. This program will greatly enhance your ability to uproot those habitual patterns, including smoking, which can make you feel unproductive and ineffective on the job. The focus is on both the symptoms of the habit as well as the source of the

habit. Breaking typical habits like procrastination become much easier once the habit breakthrough process is assimilated. This is an eight-session program led by Mitch Bobrow. There is a \$55 charge to the department.

**Interpersonal Skills** will be held on May 31 from 9:00-4:00. Learn successful principles and strategies for interacting more skillfully and working more effectively with others. Apply guidelines that empower you to understand and handle interpersonal problems and emotional reactions with one another. Enhance your ability to accept yourself and other people and build confidence in your overall interpersonal effectiveness. Let Davidson lead this one-session program. There is a \$45 charge to the department.

To register, please complete the registration form and send it to 130 Day Hall. For additional information, please contact Staff Relations and Development at 5-7170.

### Program Registration Form

The following information is required to process your registration. Please type or print clearly and return this completed form to Staff Relations & Development, 130 Day Hall.

Program name: \_\_\_\_\_

Date and time: \_\_\_\_\_ Cost: \_\_\_\_\_

Account number to be charged: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Cornell ID# \_\_\_\_\_

Department: \_\_\_\_\_ Campus address: \_\_\_\_\_ Telephone: \_\_\_\_\_

Supervisor name: \_\_\_\_\_

Supervisor signature: \_\_\_\_\_

Supervisor campus address: \_\_\_\_\_

Department head name: \_\_\_\_\_

Department head (or designee) signature: \_\_\_\_\_



# 350 Commencement Volunteer Ushers Needed

(reprinted from last week's Cornell Employment News)

At the 123rd Commencement Ceremony on May 26, 1991, we will need 350 ushers to help guide students, trustees, parents, faculty, and staff in various places on campus. 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 are aware that it is a day that will be fixed in the memories of these students for the remainder of their lives.

Employees who VOLUNTEER will be granted compensatory time-off equivalent to their standard work day. Each volunteer is asked to attend one designated rehearsal, either Wednesday, May 23 or Thursday, May 24 at 3:00 p.m. in the Robison Hall of Fame Room, Schoellkopf Memorial Hall. The rehearsal will be approximately 1.5 hours long, and you will be informed of the session that you should attend. Approximately 5 hours of your time is required at Commencement. We hope you will consider helping us make Commencement a huge success.

To express his appreciation, President Rhodes will host a wine and cheese reception for ushers on Wednesday, May 29, 4:30 - 6:00 p.m. at his home. At the reception, we will continue our tradition of giving Commencement volunteers an attractive Cornell mug inscribed to commemorate the occasion.

If you would be willing to join us as a volunteer usher, please fill out the form below. We also ask for your supervisors' names so we can advise them of the compensatory time-off policy.

Please send the below form, as soon as possible, to the Commencement Office, B-25 Day Hall.

1991 Commencement Volunteer Form

I will be able to help as an usher at Commencement on May 26, 1991.

Name

Phone

Department

Campus Address

Supervisor's Name

Phone

Department

Campus Address

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

# JOB OPPORTUNITIES

THE UNIVERSITY, IN RESPONSE TO THE NEW YORK STATE BUDGET REDUCTIONS, is recruiting only for those vacant positions considered to be essential to the operation of the university. We continue to encourage, accept, and refer applications from Cornell employees and from external applicants for these positions unless noted otherwise in the individual listing. When qualified laid off employees are available for a particular vacancy, they will be given first consideration for that position.

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

Day Hall: (607) 255-5226

- 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.

East Hill Plaza: (607) 255-7422

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

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.

Manager of Information Systems (PT6403) Level 36

Statler Hotel-Endowed

Posting Date: 5/9/91

Responsible for the managerial, operational, and academic computer requirements of the Statler Hotel. Provide a "show case" computing facility for industry leaders, academia, and the School of Hotel Administration. Direct the overall functioning of the information systems department. Days and hours flexible; nights and weekends.

Requirements: A Master's or equivalent work experience; a minimum of 2 years experience in the hospitality industry as well as computing, including supervisory, project management and systems development experience. A working knowledge of hotel operation and computing systems. Knowledge of programming techniques and systems analysis. Send cover letter and resume to Sam Weeks.

Application Programmer/ Analyst II (PT5502) Level 33

Financial Systems Development-Endowed

Posting Date: 2/28/91

Design, develop, modify and document straight forward applications systems software supporting a major administrative system. Analyze functional and performance requirements and develop software improvements in usability and efficiency. Diagnose problems in production system software and make emergency repairs. Write production procedure, JCL and user manuals. Provide users with conceptual and technical help. Maintain a working knowledge of two major commercial programming languages.

Requirements: Bachelor's or equivalent with computer courses. Knowledge of at least 2 languages: PL/I, NATURAL, COBOL. Knowledge of applications for interactive and batch administrative systems, database management systems, machine architecture, system utility programs, and VM/CMS. Send cover letter and resume to Sam Weeks.

Technical Controller (PT6604) Level 33

CIT/Consumer Services-Endowed

Posting Date: 5/16/91

Provide technical expertise on microcomputer/workstation systems, networks, and application software supported by CIT and used by the Cornell community. Primary focus is on pre-acquisition consulting which includes needs analysis, problem solving and follow-through with implementation.

Requirements: Bachelor's or equivalent. 2-3 years related experience with various PC platforms with emphasis on DOS and windows. Sales or marketing preferred. Send cover letter and resume Sam Weeks.

Applications Programmer Analyst II (PT6408) Level 33

CHESS-Endowed

Posting Date: 5/2/91

Serve as consultant for users of the CHESS computing system. Assist users and staff with computing problems. Help develop a user interface for data acquisition software.

Requirements: Bachelor's in computing, physics, or engineering. Programming experience with FORTRAN and C. Experience with VMS and UNIX useful. Send cover letter and resume to Sam Weeks.

Dean of Students (P6605) HRIII

Office of the Dean of Students-Endowed

Posting Date: 5/16/91

Principal spokesperson for student interests at Cornell. Support the educational mission of the University by helping the faculty, students and staff build systems of student services that enhance the overall educational experiences of students. This is a 5 year appointment.

Requirements: Ph.D. required. Must be able to become a member of the faculty. Extensive related experience. Excellent leadership and communication skills, demonstrated interest in students, and the ability to devise means of building a sense of community among the students, faculty and staff of Cornell's 7 schools and colleges with undergrad programs. Send cover letter and resume to Cynthia Smithbower before 6/21/91.

Editor I (PC6612) HRI

Media Services-Statutory

Posting Date: 5/16/91

Seeks manuscript editor for consumer and technical bulletins,

annual reports, admissions materials, and development brochures. Help clients develop copy, editing, and checking proof, galleys through blue-line. Works closely with clients, designers, and production coordinator.

Requirements: Bachelor's or equivalent. 2 years solid manuscript experience required. Must have excellent editorial skills and strong interpersonal and planning skills. Facility with personal computers essential. Ability to translate English to Spanish desirable. Submit cover letter, resume, and 3 editing samples by May 31, 1991, to Esther Smith, Staffing Services, 160 Day Hall.

Research Support Specialist (PT6609) HRI

Plant Pathology-Statutory

Posting Date: 5/16/91

Design, execute, and analyze experiments related to the study of soil microorganisms. Independent research will be conducted in the following areas: microbe-plant interactions, microbe-microbe interactions, isolation and analysis of root exudates, and biological control. Assist in the training and supervision of others in laboratory procedures.

Requirements: Bachelor's or equivalent, in Plant Pathology, Microbiology or related biological sciences. Master's desired. 2 years of laboratory experience in microbiology and training in biochemistry and recombinant DNA techniques required. Evidence of independent research skills required. Send cover letter and resume to Sam Weeks.

Research Support Specialist (PT6606) HRI

Laboratory Animal Services-Statutory

Posting Date: 5/16/91

Coordinate the activities of an active and sophisticated animal facility, Lab Animal Services (LAS). Work with LAS administrators, directors, faculty and staff to ensure proper management of lab animals. Oversee recruiting, interviewing, training and supervision of animal technicians. Assist in training courses and provide information for AALAS certification of technicians. Review protocols and ensure they are followed.

Requirements: AALAS certification required and Technologist certification desirable. Bachelor's or Associate's with 5-7 years experience also acceptable in lieu of Technologist certification. 7 years experience in supervision, training, developing technical skills, etc. Send cover letter and resume to Sam Weeks.

Marketing Communication Analyst (PA6604) HRI

Communication Strategies/University Relations-Endowed

Posting Date: 5/16/91

Work with diverse university clientele to analyze communication needs, undertake marketing research, and develop targeted marketing communication (brochures, catalogs, speeches, posters, slide shows, and advertisements) to meet determined needs.

Requirements: Bachelor's degree, Master's preferred. 2-3 years marketing experience (preferably survey research); excellent written and oral skills, ability to handle several projects simultaneously. Send cover letter and resume to Cynthia Smithbower.

Assistant Men's Basketball Coach (PA6603) HRI

Athletics-Endowed

Posting Date: 5/16/91

Assist in the planning and operation of the men's intercollegiate basketball program. Duties include coaching, recruiting, scouting and other administrative matters relative to the program.

Requirements: Bachelor's degree in Physical Education or equivalent. Credentials should reflect proven success in coaching basketball, recruiting and working with student athletes. Send cover letter and resume to Cynthia Smithbower.

Wellness Program Instructor (PA6602) HRI

Athletics-Endowed

Posting Date: 5/16/91

Administer and implement all health-screening, physical fitness testing, exercise prescription and consultations to all wellness participants. Oversee all program activities, scheduling and participant supervision in the fitness room.

Requirements: Bachelor's in exercise physiology or related field. ACSM Health Fitness Instructor certification preferred. At least 1 year experience in adult fitness or wellness setting. Send cover letter and resume to Cynthia Smithbower.

Executive Staff Assistant (PC6601) HRI

Vice President Programs and Campus Affairs-Endowed

Posting Date: 5/16/91

Provide executive staff support to the vice president for Academic Programs and Campus Affairs in coordinating a diverse range of tasks.

Requirements: Bachelor's or equivalent experience. 3-5 years in diverse administrative secretarial positions. Excellent editorial, writing, communication and interpersonal skills. Conceptual skills. Ability to work independently and coordinate multiple projects. Advanced word processing skills. Knowledge of CU helpful. Cornell employee preferred. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

Research Support Specialist (PT6607) HRI

Soil, Crop and Atmospheric Sciences-Statutory

Posting Date: 5/16/91

To provide technical support for the research program in low temperature biology, with primary responsibility for a) the isolation, purification and analysis of membrane lipids and b) studies related to the cryopreservation of both plant and insect germplasm. In addition, the individual will oversee and manage the day to day operations of the low temperature biology laboratories including the operation and maintenance of sophisticated analytical instruments and procurement of materials and supplies.

Requirements: Bachelor's or Master's in biochemistry or chemistry. Experience in the operation and maintenance of gas chromatograph/mass spectrometer, HPLC equipment and ultracentrifuges. A minimum of 5 years laboratory experience with a background in either plant or insect physiology/biochemistry. Send cover letter and resume to Sam Weeks.

Assistant Director (PA6601) HRI

University Development/Public Affairs-Endowed

Posting Date: 5/16/91

Share responsibilities with Director for developing proposals with donors for gifts of real estate. Develop activities and fund-raising efforts for the Cornell Real Estate Council. Activities include coordinating volunteer events for real estate professionals and involvement with the development of the real estate masters program.

Requirements: Bachelor's degree. 1 year related experience. Excellent written and oral skills, strong organizational and interpersonal skills. Computer literacy, experience in fund-raising, real estate, planned giving, marketing and public relations is desirable. Send cover letter and resume to Cynthia Smithbower.

Safety and Chemicals Manager (PT6502) HRI

Chemistry-Endowed

Posting Date: 5/9/91

Manage the department's safety program and the chemicals management program. Act as an advisor to the Safety Committee. Maintain the Safety Manual. Implement Safety Committee Policies. Train departmental staff in safe work practices. Inspect labs. Maintain safety library. Respond to emergencies. Design and implement a departmental management and inventory system for chemicals. Handle the disposal of chemicals.

Requirements: Ph.D. preferred. Requires Master's and 3 years experience or Bachelor's and 5 years experience in chemistry or chemical engineering or related field. Lab experience in organic and/or inorganic chemistry; computer skills; and ability to communicate effectively in person and in writing. Experience in lab safety; in hazardous waste disposal regulations and practices; and in computer programming desired. Send cover letter and resume to Sam Weeks.

Research Support Specialist (PT6504) HRI

Equine Drug Testing-Statutory

Posting Date: 5/9/91

Provide advanced technical support, operate HPLC and GC/MS for drug testing program. Under strict quality control, analyze biological samples providing documentation from receipt through final report.

Requirements: Bachelor's in organic chemistry or equivalent. 2-3 years experience with thin layer chromatography plus basic knowledge of drug metabolism. Send cover letter and resume to Sam Weeks.

Research Support Specialist (PT6506) HRI

Clinical Sciences-Statutory

Posting Date: 5/9/91

Direct and manage all aspects of the nationally conducted study of obesity in cats. Identify and solicit participation of private veterinary clinics. Coordinate and arrange for clinic visits. Manage routine activities of the study. Assist in design of an R-base program and maintain database on 1500 cats. Supervise staff.

Requirements: Bachelor's in management or equivalent. 2-3 years related experience. Must have supervisory experience and interpersonal skills to deal with practitioners, cat owners and other staff. Typing and computer skills essential. Ability to work independently. Previous experience in a Veterinary setting or experience through pet ownership. Send cover letter and resume to Sam Weeks.

Extension Support Aide (PT6505) HRI

Education-Statutory

Posting Date: 5/9/91

Distribute and maintain inventory of materials carried by Instructional Materials Service (IMS). Distribute IMS newsletter, Ag-Update. Assist in development of instructional materials. Supervise work study students and graduate interns.

Requirements: Bachelor's in agricultural education or agricultural field with education courses, or equivalent. Macintosh and Apple II experience. Skills in writing, publication design, desktop publishing and word processing essential. Send cover letter and resume to Sam Weeks.

Research Support Specialist (PT6103) HRI

Chemistry-Endowed

Posting Date: 4/11/91

Determine, in conjunction with client, the mass spectrometric method of choice, and subsequently carry out the analysis of research samples submitted to the Mass Spectrometry Facility. Day-to-day responsibility for the operation of the Facility.

Requirements: Bachelor's in Chemistry, Master's preferred. Minimum 1-2 years experience with operation of mass spec instrumentation highly desirable. Able to work with guidelines and use chemical knowledge/judgment in locating and selecting the most appropriate procedures for application. Send cover letter and resume to Sam Weeks.

Research Support Specialist II (PT6111) HRI

Division of Nutritional Sciences/CFNPP-Statutory

Posting Date: 4/11/91

Perform cleaning, management, documentation and analysis of a very large household survey data set from eastern Africa. Work with health and nutrition survey data following established procedures using the latest releases. SPSS and DBase. Perform management of functions including creation of new variables and data files; use of look-up tables; and merging files. Perform statistical analysis of data with attention to examining the biological causes of child malnutrition and its consequences for survival. Provide documentation of work done.

Requirements: Master's in nutrition or equivalent. 2-3 years related experience with maternal and child nutritional problems in developing countries strongly preferred. Demonstrated knowledge of basic statistics and ability to comprehend and apply more advanced statistics essential. Experience with management and analysis of large complex data sets using a variety of appropriate software and techniques required. Familiarity with nuances of household surveys, especially in Africa preferred. Demonstrate ability for self-direction and careful attention to detail. Send cover letter and resume to Sam Weeks.

Teaching Support Specialist II (PT6004) HRI

Plant Breeding and Biometry-Statutory

Posting Date: 4/4/91

Assist in teaching large courses in Statistics and Biometry. Organize labs; supervise teaching assistants; prepare exams and course materials; lecture when necessary; provide computing support; and develop computing instructional materials. Serve as a consultant for statistical computing on the mainframes and micro computers. Perform research in statistics or applications of statistics, and publish research articles.

Requirements: MS or equivalent in statistics or biometry. Statistical computing experience on mainframes and microcomputers. Teaching and research experience. Send cover letter and resume to Sam Weeks.

Professional Part-Time

Executive Staff Assistant (PC6101) HRI

Human Service Studies-Statutory

Posting Date: 4/11/91

Manage the administrative and financial details of the Empowerment and Family Support Project. Responsibilities include fiscal accountability of the project; monitor the project's account, develop and maintain postaward monitoring system; approve accounting transactions (vouchers and PO's) provide computer generated financial reports; reconcile monthly statements; develop budgets. Position until 12/31/92.

Requirements: Bachelor's or equivalent combination of education and relevant experience is necessary. Reasonable experience managing a program. Familiarity with accounting and knowledge of computers. Knowledge of word perfect, LOTUS, EXCEL, Word, and of Cornell accounting statements. Familiarity with grants and indirect costs. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

Professional Temporary

Technical Consultant I (PT5303)

Cornell Information Technologies-Endowed

Posting Date: 2/14/91

Provide support for faculty, staff, students, and potential users by delivering technical information on five supported platforms (IBM-PC, IBM mainframe, Macintosh, VAX mainframe, and telecommunications). Resolve problems concerning the technical aspects of a diverse set of hardware and software applications. Direct clients to services within Cornell Information Technologies and facilitate back line consulting services. Provide support via service on the



HelpDesk, group and individual contacts. Maximum 20 hours per week.  
**Requirements:** Bachelor's or equivalent. Course work in computer science, business, education preferred. 1-3 years of computing service delivery (consulting, instruction, or related client support services). Outstanding oral and written communication skills. Send cover letter and resume to Sam Weeks.

Professional Off-Campus

**Research Support Specialist (PT6602) HRI**  
**Food Science and Technology/Geneva-Statutory**  
**Posting Date:** 5/16/91  
Participate in a research project on the development of novel bioanalytical methods for measurement of agrichemicals based on immunologic recognition and liposome signal enhancement. Conduct research on design, construction and testing of immunoassay systems and devices. Assist in experimental design and preparation of reports.  
**Requirements:** Bachelor's required. Master's in chemistry or biochemistry or equivalent strongly desired. Minimum of 3 years experience. Research experience and good writing skills essential. Work with immunoassay methods, flow-injection analysis, and analytical chemistry desirable. Computer and mechanical (instrument fabrication) skills also helpful. Send cover letter and resume to Sam Weeks.

Technical

As a prominent research institution, Cornell University has a diverse need for laboratory, electro/mechanical and computer support personnel with backgrounds in computer science, biology, microbiology, chemistry, animal husbandry, plant science and medical laboratory techniques are encouraged to apply; applicants with ASCP or AHT licenses are in particular demand.  
All external candidates must have a completed signed employment application on file with 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 laboratory related positions.

**Technician, GR18 (T6605)**  
**Plant Breeding and Biometry-Statutory**  
**Minimum Biweekly Salary: \$542.89**  
**Posting Date:** 5/16/91  
Plant and harvest test plots for a small grains project. Clean, harvest and weigh seed. Maintain greenhouse and perform hybridizations. Package and prepare seed for planting. Maintain plots and draw plot maps.  
**Requirements:** Associate's in plant breeding, agriculture or related field or equivalent experience desired. NYS driver's license and pesticide applicator's license required. Experience with farm operation and ability to operate farm machinery. Legible handwriting and microcomputer experience desirable. Send cover letter and resume to Sam Weeks.

**Animal Technician, GR18 (T4707)**  
**Laboratory Animal Services-Statutory**  
**Minimum Biweekly Salary: \$542.89**  
**Posting Date:** 12/13/90  
Care, feed, water, clean and monitor research animals. Follow strict protocols for strike or disease control environments and for animal welfare. Maintain animal records. Assist vets in treating and vaccinating as needed. Some weekend and holiday coverage.  
**Requirements:** High School diploma or equivalent. Associate's in animal science desired. AALAS certificate helpful. Knowledge of a variety of lab animals and animal breeding required. 1 year experience. Ability to lift 50 pounds. Pre-employment physical, all necessary immunizations and NYS driver's license required. Send cover letter and resume to Sam Weeks.

**Technician, GR20 (T5605)**  
**Plant Breeding and Biometry-Statutory**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date:** 3/7/91  
Perform biochemical and genetic analysis of tomato tissue. Performance of standard molecular techniques including preparation, electrophoresis and hybridization of nucleic acids. operation of general lab equipment; maintenance of lab supplies; supervision of radiation work area.  
**Requirements:** Bachelor's in a lab-oriented biological area plus experience. Master's desirable. Previous related lab experience and demonstrated ability to work independently desirable. Send cover letter and resume to Sam Weeks.

**Technician, GR20 (T6608)**  
**Soil, Crop and Atmospheric Sciences-Statutory**  
**Minimum Biweekly Salary: 5/16/91**  
**Posting Date:** 5/16/91  
Assist in research on cryopreservation/vitrification of Drosophila embryos. Conduct studies and experiments on the procedures and assessment of post-thaw egg viability; conditions required for larvae development; identification of abnormal morphology; and genetic stability. Maintain colonies and population cages, collect eggs, and prepare media. Prepare eggs for cryopreservation including desiccation and permeabilization.  
**Requirements:** Bachelor's or equivalent in entomology. 1-2 years related experience including vitro culture of insects. Demonstrated initiative and decision making abilities. Send cover letter and resume to Sam Weeks.

**Animal Technician, GR20 (T6404)**  
**Clinical Sciences-Statutory**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date:** 5/2/91  
Provide technical support for hepatitis research project using the woodchuck as the animal model. General lab duties include blood collection, animal handling and restraint, inventory and harvesting of serum, and assisting in surgery and 1-2-3. Ability to lift 50 pounds. Some weekend work required.  
**Requirements:** Bachelor's in biology with experience or equivalent coursework in data handling using spreadsheet, graphing and word-processing software on IBM personal computers. 1-2 years laboratory animal experience including ability to restrain, examine and bleed small animals. Wild animal handling experience. Must have a valid NYS driver's license. Must have a pre employment physical. Send cover letter and resume to Sam Weeks.

**Technician, GR20 (T6305)**  
**Soil, Crop, Atmospheric Sciences-Statutory**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date:** 4/25/91  
Operate an analytical facility for determination of stable isotopes of carbon and nitrogen; and assist with analytical methodology development. Prepare and analyze soil, plant and other samples using combustion-mass spectrometry using a Europa Roboprep CN analyzer-Tracermass mass spectrometer system. Perform quality control procedures and equipment maintenance. Maintain supply inventory. Assist with development of analytical protocols and methodologies. Train grad students.  
**Requirements:** Bachelor's or equivalent in a basic or applied related field. General knowledge of lab operations and analytical procedures. 2 years lab experience preferred. Knowledge or experience in field of soil science, plant science and chemistry desirable. Send cover letter and resume to Sam Weeks.

**Production Controller, GR21 (T6601)**  
**CIT-Endowed**  
**Minimum Biweekly Salary: \$615.42**  
**Posting Date:** 5/16/91  
Setup, submit and verify jobs through the central computer systems. Maintain various control logs, tape and disk files and security backup procedures. Communicate with other staff and user departments. Continue production training and take job related courses. Test and implement new production procedures. Assist with problem resolution. Operate computer printers. Evenings and weekends.  
**Requirements:** Associate's in data processing or equivalent experience. Basic knowledge of MVS/JCL. Any experience with mainframes helpful. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T2808)**  
**Biochemistry, Molecular and Cell Biology-Statutory**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date:** 5/9/91  
Purify proteins for several laboratories in the Biotechnology Building. Operate HPLC on FPLC apparatus. Perform biochemical lab procedures. Depending on skills and work load, there may be an opportunity to pursue other experiments. 1 year appointment, possible extension.  
**Requirements:** Bachelor's or equivalent in Chemistry or Biochemistry required. 1-2 years experience, including protein purification. Experience with HPLC on FPLC system preferred. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T6501)**  
**Avian and Aquatic Animal Medicine-Statutory**  
**Minimum Biweekly Salary: \$615.42**  
**Posting Date:** 5/9/91  
Perform virological and immunological assays in a research lab. Initiate and maintain cell cultures; perform virus isolations and cell-mediated cytotoxicity assays; and prepare media and reagents. Handle and inoculate experimental animals (mainly chickens) and collect samples.  
**Requirements:** Bachelor's in immunology, microbiology or related field. Minimum of 2 years experience in a research lab, including handling of radioisotopes, cell cultures, and using sterile techniques. Experience with the following equipment: ultracentrifuges,

gamma and beta counters, spectrophotometers, and microscopes. Send cover letter and resume to Sam Weeks.

**Technician, GR21 (T6407)**  
**Fruit and Vegetable Science-Statutory**  
**Minimum Biweekly Salary: \$615.42**  
**Posting Date:** 5/2/91  
Provide research support in muckland vegetable program. Conduct field greenhouse and laboratory experiments, analyze data, maintain equipment, prepare reports, maintain lab and prepare library research reports. Travel required.  
**Requirements:** Bachelor's or equivalent in biological or agricultural science required. NYS certification for commercial pesticide use essential. Minimum 2 years experience in field research, able to operate farm equipment, use and handle pesticides safely and accurately, perform statistical analysis, greenhouse operations, and equipment repair. Send cover letter and resume to Sam Weeks.

**Technician, GR22 (T6306)**  
**Pharmacology-Endowed**  
**Minimum Biweekly Salary: \$641.92**  
**Posting Date:** 4/25/91  
Assist in physiological, biochemical and pharmacological research on the control of insulin release. The work will emphasize tissue culture of cloned and transfected B-cell lines for studies on insulin secretion, analysis of cell constituents and enzyme assays.  
**Requirements:** Bachelor's or equivalent in a biological science. 2-4 years related lab experience. Send cover letter and resume to Sam Weeks.

**Technician, GR22 (T6304)**  
**Pharmacology-Statutory**  
**Minimum Biweekly Salary: \$641.92**  
**Posting Date:** 4/25/91  
Participate in research on the control by serotonin of Na and Cl transport across intestinal epithelial cell layers. Perform experiments involving cell fractionation, enzyme assays, radioligand studies, gel electrophoresis, autoradiography and general biochemical and pharmacological techniques. Analyze experimental results. Handle rabbits and rats.  
**Requirements:** Bachelor's or equivalent in biochemistry. 2-4 years related lab experience. Send cover letter and resume to Sam Weeks.

**Technician, GR22 (T6203)**  
**Neurobiology and Behavior-Endowed**  
**Minimum Biweekly Salary: \$641.92**  
**Posting Date:** 4/18/91  
Participate in research using transmission and scanning electron microscopes for fine structure and autoradiography. Prepare cultures: tissue, cell and organ. Section tissue using ultramicrotomes. Prepare emulsions for coating sections.  
**Requirements:** Bachelor's or equivalent experience in biological science (neurobiology or biochemistry). 2-4 years related experience using electron microscopes (TEM and SEM), microtomes, and sterile techniques for cell culture. Send cover letter and resume to Sam Weeks.

**Chess Operator, GR24 (T6303)**  
**Chess-Endowed**  
**Minimum Biweekly Salary: \$701.22**  
**Posting Date:** 4/25/91  
Interact with user groups on technical and scientific problems. Implement Safety codes. Responsible for covering CHESS system malfunctions and software problems associated with instrument control. Assist in building new equipment. May assist in experimental programs. Some nights and weekends.  
**Requirements:** Bachelor's or equivalent in technical field such as engineering or physics. Experience not needed. Good mechanical and laboratory skills. Programming experience preferred. Send cover letter and resume to Sam Weeks.

**Lead Production Controller, GR24 (T4103)**  
**Finance and Business Services-Statutory**  
**Minimum Biweekly Salary: \$701.22**  
**Posting Date:** 10/18/90  
Responsible for processing administrative production applications through the central computer system. Prepare, submit, monitor, and verify the results of jobs processed. Perform tape/disk file management and security and make corrections. Maintain operational documentation. Provide training for production staff. Work scheduled shift changes to meet payroll, month-end, and year-end deadlines. Responsible for covering a rotating shift. Attend job related courses, seminars, and classes.  
**Requirements:** Bachelor's in computer science or equivalent. 3-4 years in production control or related experience. Thorough knowledge of administrative systems. Detailed and thorough knowledge/experience with MVS/JCL and VM/CMS. Send cover letter and resume to Sam Weeks.

**Technician, GR24 (T6107)**  
**Floriculture and Ornamental Horticultural-Statutory**  
**Minimum Biweekly Salary: \$701.22**  
**Posting Date:** 4/11/91  
Serve as chief experimental assistant to the Turfgrass Research Program Leader, 3-5 grad students, and the manager of the Turfgrass Water Quality Research Facility. Perform basic and applied research in lab, greenhouse and field conditions. Field sites are located in Ithaca and throughout the state. Organize; implement; collect and statistically analyze data; perform literature searches; and write research reports. Assist in experimental design; establish plots; manage the plot seeding, fertilization, pest control and irrigation; and apply treatment variables. Design and fabricate specialized instrumentation. Supervise 1-3 temporary workers in the summer.  
**Requirements:** Bachelor's in agricultural science or equivalent. Bachelors in turfgrass science desired. 2 years experience in turfgrass management practices and specialized equipment. Knowledge of computers, statistical design and data analysis. NYS driver's license and Pesticide Applicator's Certificate required. Send cover letter and resume to Sam Weeks.

**Accelerator Operator, GR24 (T6106)**  
**Lab of Nuclear Studies-Endowed**  
**Minimum Biweekly Salary: \$701.22**  
**Posting Date:** 4/11/91  
Operate a computer controlled accelerator system to provide high energy electron and positron beams for utilization by experimental groups. Investigate faults and take remedial action. Maintain accelerator log book documenting any modifications to the system, operating characteristics, or procedures. Carry out special projects to maintain and improve components of the system. Work alternate shifts, including holidays and weekends.  
**Requirements:** Associate's in electronics or equivalent training and experience. Bachelor's in physics preferred. 2-3 years experience in a lab or shop. Send cover letter and resume to Sam Weeks.

**Accelerator Technician, GR24 (T6110)**  
**Lab of Nuclear Studies-Endowed**  
**Minimum Biweekly Salary: \$701.22**  
**Posting Date:** 4/11/91  
Perform highly skilled work to maintain and improve the various components of accelerator ultra high vacuum systems consisting of a linear accelerator, an electron synchrotron, and storage ring. Use a linear accelerator, an electron synchrotron, and storage ring. Use techniques appropriate to various vacuum systems, particularly those for ultra high vacuum systems. Work with physicists to design, construct, and install new devices. Provide maintenance, handle malfunctions, and take corrective actions. Provide detailed documentation for the accelerator's master drawings and operating manuals.  
**Requirements:** High School diploma or equivalent plus at least 2 years formal training in ultra high vacuum technology. Work experience on such equipment with the demonstrated ability to assume responsibility for its maintenance. Ability to supervise other technicians. Send cover letter and resume to Sam Weeks.

Technical Part-Time

**Laboratory Technician, GR19 (T5709)**  
**Veterinary Microbiology-Statutory**  
**Minimum full-time equivalent: \$566.28**  
**Posting Date:** 3/14/91  
Provide assistance to faculty carrying out lab experiments in reproductive biology. Prepare culture media and do extensive tissue and cell culture work. Provide general lab and surgical area maintenance. Collect specimens from mice, rabbits and cattle. Schedule experiments, keep records, and compile data. Monitor radioactive waste and arrange for safe disposal.  
**Requirements:** Associate's or equivalent required. Additional coursework preferred. 1 year related experience in tissue culture, biochemistry and animal handling. Send cover letter and resume to Sam Weeks.

Technical Temporary

**Technician, (T6207)**  
**Biotechnology Program-Endowed**  
**Posting Date:** 4/18/91  
Become proficient and the dedicated user of new state-of-the-art instrumentation, a biosensor-based system for molecular interaction analysis. Develop various immunoassays. Full time for 3 months, \$8-10/hr.  
**Requirements:** Bachelor's in biological sciences required. Minimum of 2 years lab experience. Must have an aptitude for instrumentation and proficiency with Macintosh computers. Send cover letter and resume to Sam Weeks.

**Research Aide, (T6007)**  
**Entomology-Endowed**  
**Hiring Rate: \$6.25-\$6.75**

**Posting Date: 4/4/91**  
Assist in veterinary entomology research on dairy farms, involving year around field work on cattle pests. Assist with lab experiments. Maintain insect colonies. Sort and process field samples. Mount and identify insects. Collect data. Obtain supplies.  
**Requirements:** AAS or equivalent in entomology or animal science, BS preferred. 1 year experience in handling large animals. Entomological experience helpful. Pesticide applicator's license desirable. NYS driver's license required. Send cover letter and resume to Sam Weeks.

Office Professionals

Approximately half of all University openings are for Office Professionals. Individuals with secretarial, word processing (IBM PC, Macintosh, Wang, Micom), data entry, technical typing, or medium to heavy typing (45-60+ wpm) are encouraged to apply.  
All external candidates must have a completed signed employment 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 East Hill Plaza 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.

**Mail Clerk, GR17 (C6616)**  
**Agricultural Economics-Statutory**  
**Minimum Biweekly Salary: \$530.38**  
**Posting Date:** 5/16/91  
Responsibility for mailroom activities. Receiving, opening, distributing incoming mail, stuffing of major mailing pieces. The person in this position will have the responsibility of packaging and mailing large amounts of Program informational pieces on a weekly basis. Units of incoming mail will average about 350 pieces daily.  
**Requirements:** High School diploma or equivalent. Some experience helpful with working in a fast paced, highly scheduled environment. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Research Aide, GR17 (C6619)**  
**Natural Resources-Statutory**  
**Minimum Biweekly Salary: \$530.38**  
**Posting Date:** 5/16/91  
Provide a variety of support services to 7 professional research staff. Specific duties include data entry, coding, conduct telephone interviews; slide and figure preparation on computer; calculations for tables; literature review; and clerical assistance.  
**Requirements:** Associate's preferably in Natural Resources, Social Sciences, or related field. Data entry using SPSS-DE, microcomputer experience using dBase and Quattro Pro, coding, figure preparation, familiarity with SPSSX and SAS. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Office Assistant/Inventory Clerk, GR18 (C6608)**  
**CIT Consumer Services-Endowed**  
**Minimum Biweekly Salary: \$542.89**  
**Posting Date:** 5/16/91  
Under direction, track and monitor CIT Sales Inventory; assist in the relieving and distribution of all inventory items.  
**Requirements:** High School diploma or equivalent. Minimum of 1 year experience in computerized inventory control. Ability to lift 75 pounds. Light to medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Assistant Accounting Clerk, GR18 (C6503)**  
**Unions and Activities/RPU-Endowed**  
**Minimum Biweekly Salary: \$542.89**  
**Posting Date:** 5/9/91  
Provide clerical support for Head Accounts Assistant. Process daily banks, checkout sheets, daily cash reports, monthly reports, Cornellcard and mail. Assist Assistant Director and cashier in the general management of the Convenience Store to order, receive and maintain inventory. Days and hours are Monday-Friday, 8:30a.m.-5:00p.m. 10 month position.  
**Requirements:** High School diploma or equivalent. Some coursework in accounting preferred. 1 year accounting and book-keeping experience desired. Strong organizational, communication and interpersonal skills. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Secretary, GR18 (C6505)**  
**ILR/Collective Bargaining and Labor Law and Lab History-Statutory**  
**Minimum Biweekly Salary: \$542.89**  
**Posting Date:** 5/9/91  
Coordinate and provide administrative support to ILR's Collective Bargaining Institute. Provide support to 3 full time and 1 emeritus professor; maintain data base records on budgets and all parties involved in CB Institute; perform wordprocessing and manuscript preparation using Wordperfect.  
**Requirements:** High School diploma or equivalent. Some college coursework preferred. 1 year related experience. Strong organizational, administrative and communication (written and oral) skills. Ability to handle diversified tasks under pressure. Knowledge of Macintosh File and Wordperfect-FPC software. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Accounts Assistant, GR18 (C6205)**  
**Administrative Operations/Cornell University Library-Endowed**  
**Minimum Biweekly Salary: \$542.89**  
**Posting Date:** 4/25/91  
Under the direction of the Accounting Manager, maintain all records, files, accounts payable and receivable for all library material purchases and fine and replacement income. Approve accounts payable invoices/credits to the central university accounting office for payment. Review vendor statements, inquiries, duplicate payments, and returned checks; and prepare correspondence regarding past due invoices, credits due, and payment inquiries. Light typing.  
**Requirements:** High School diploma or the equivalent. Some college coursework in accounting bookkeeping or business preferred. 1-2 years previous accounting/bookkeeping experience and familiar with standard office machines. High degree of accuracy on work with strong concentration on detail. Experience with microcomputers, IBM preferred and interpersonal skills. Familiarity with Cornell (written and verbal) and interpersonal skills. Familiarity with Cornell Accounting System desirable. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter, resume to Esther Smith, Staffing Services, 160 Day Hall.

**Accounts Assistant, GR18 (C6212)**  
**Media Services-Statutory**  
**Minimum Biweekly Salary: \$542.89**  
**Posting Date:** 4/18/91  
Process all billing and maintain financial records for design, and editorial sections of Media Services. Serve as receptionist for incoming clients and vendors.  
**Requirements:** High School diploma or equivalent combination of education and accounting experience. Individual must be well organized, very flexible, accurate, able to maintain confidentiality. Must have demonstrated computer knowledge and experience using Excel, Write Now and 4th dimension. Knowledge of graphic design and printing processes helpful. Strong interpersonal skills necessary, as well as ability to work with minimal supervision. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Sales Department Secretary, GR19 (C6605)**  
**Stafier Hotel-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/16/91  
Provide secretarial/clerical support to the sales department.  
**Requirements:** High School education required. Some college coursework preferred. A working knowledge of Word Perfect. 1-2 years related office experience. Medium typing. Regular Cornell employees only send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Administrative Aide, GR19 (C6625)**  
**Alumni Affairs-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/16/91  
Provide secretarial support to the Associate Director and Reunion Assistant of Class Programs. Assist with all aspects of reunion planning, including designing layouts, inputting information, preparing class mailings, and charting reunion requests. Extensive contact with alumni and university public affairs departments.  
**Requirements:** High School diploma or equivalent. Some college coursework preferred. 1-2 years related experience. Proficiency with Macintosh computer and software. Ability to work in a fast-paced environment with continual deadlines. Medium typing. Regular

Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Accounts Assistant, GR19 (C6609)**  
**controller's/Accounting-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/16/91  
Audit payment vouchers for adherence to University regulations; resolve problems and advise University personnel of policies and procedures pertaining to payments; compute moving allowances for prospective Endowed College employees; prioritize payment vouchers to assure that checks will be written and available at the time required.  
**Requirements:** High School diploma or equivalent. Some college coursework in accounting preferred. Must be able to work under pressure and be able to enforce regulations in a tactful manner. Possess good communication skills. Minimum 2 years related experience. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Secretary, GR19 (C6622)**  
**Dean of Students Office-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/16/91  
Provide secretarial/administrative support for one Assistant Dean and one Advisor of Greek Life. Answer telephones; schedule meetings; handle correspondence; back up support for 3 other DOS staff and Administrative Manager. Work closely with fraternities and sororities.  
**Requirements:** High School diploma with at least 2 years related experience. Computer knowledge helpful especially the Macintosh. Some college coursework preferred. Able to coordinate and prioritize a variety of tasks. Excellent organizational, interpersonal and communication skills. Written skills needed with correspondence handling. Heavy typing. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Editorial Assistant, GR19 (C6604)**  
**Cornell University Press-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/16/91  
Assist six editors in Editing Department; check all stages of proof; help with manuscript and index preparation.  
**Requirements:** Associate's or equivalent. Knowledge of Chicago Manual of Style desirable. Proofreading skills. Excellent concentration and eye for detail. Ability to organize flow of work and meet schedules for over 140 books per year. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Secretary, GR19 (C6603)**  
**University Relations-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/16/91  
Provide secretarial, receptionist, and clerical support to the Administrative Aide, as well as the Executive Director of Government Affairs and the Director of Federal Relations. Must be able to work and deal with a fast-paced office.  
**Requirements:** High School diploma or equivalent. Some college coursework preferred. Minimum of 2 years secretarial experience. Word processing experience preferably with Microsoft word, and working knowledge of IBM PC. Excellent grammar, punctuation and proofreading skills. Must be well organized and pay close attention to detail. Strong interpersonal and communication skills. Heavy typing. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Gift Deposit Clerk, GR19 (C6613)**  
**Public Affairs Records-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/16/91  
Perform all functions on the recording of Statutory gifts and initiates receipt acknowledgement to donors.  
**Requirements:** High School diploma or equivalent. Some college coursework preferred. Minimum 2 years of job related experience, including use of computers. Knowledge of statutory accounting helpful. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Secretary, GR19 (C6105)**  
**University Career Center-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 4/1/91  
Provide all administrative and secretarial support for three career advisors in the area of Arts and Sciences and preprofessional advising, including job-hunting workshops; alumni programs; Graduate School Days; booklets and other publications.  
**Requirements:** High School diploma or equivalent. Minimum 2 years office experience. Some college coursework preferred. Excellent organizational skills and attention to detail. Familiarity with Macintosh and word processing; other programs, including Excel preferred. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Accounts Assistant, GR19 (C6509)**  
**Bursar's Office-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/9/91  
Maintain student finance and cornellicard billing systems. Direct contact with students, parents and other C.U. departments in person, via telephone and written correspondence concerning student billing; processing adjustments and other transactions; reconciling statement; processing deposits, vouchers and journal entries.  
**Requirements:** High School diploma or equivalent. College coursework preferred. 1-2 years related experience. Knowledge of general accounting. Strong interpersonal skills. Ability to work in an active, complex environment. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Relief Night Auditor, GR19 (C6405)**  
**Stafier Hotel-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/2/91  
Review, verify and record all hotel revenue. Generate reports through property management systems as required. Perform duties of Night manager in relief. Coordinate and participate in front desk, concierge and bellstaff activities to provide quality guest service. Five days a week. 11pm-7am.  
**Requirements:** High School diploma or equivalent. Some college coursework in accounting preferred. 1-2 years related hotel experience desirable. Knowledge of computers essential. Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Administrative Aide, GR19 (C6402)**  
**School of Hotel Administration-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/2/91  
Provide administrative and secretarial support to four faculty members. Type; answer phones; schedule meetings; handle mail and travel.  
**Requirements:** High School diploma or equivalent. Some college, 1-3 years secretarial experience. Word processing skills required with strong knowledge of Macintosh system and its software programs. Work independently, excellent interpersonal skills. High level of confidentiality essential. Requires independent judgement and decision making. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Administrative Aide, GR19 (C6411)**  
**Center for Environmental Research-Statutory**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/2/91  
Provide general office support to 8 staff in the CLEARs program unit of CER. Do word processing and editing correspondence, reports and instructional materials; telephone and reception duties including map sales; liaison with CER for accounting; A/R, and payroll; coordinate assignments for student assistants.  
**Requirements:** High School diploma or equivalent. Some college coursework preferred. 1-2 years related office experience. Knowledge of Cornell accounting systems. Good communications skills. Word processing skills for both IBM and Macintosh preferred. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Secretary, GR19 (C6406)**  
**Entomology-Statutory**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date:** 5/2/91  
Provide secretarial support for the Department of Entomology using both the IBM and Macintosh computer. Responsible for smooth operation of daily department activities as well as serve as secretary to faculty using a variety of software packages.  
**Requirements:** High School diploma or equivalent. Some college coursework in business or secretarial science preferred. Ability to work comfortably on IBM computer using DOS and variety of software packages (Word Perfect, Lotus) and ability to work on Macintosh or willingness to learn. Excellent organizational, interpersonal, and communication (written and oral) skills essential. Heavy typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.



**Office Assistant, GR19 (C6301)**  
**Office of the University Registrar-Endowed**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date: 4/25/91**  
 Provide personal service to individual students, alumni and staff. Prepare, certify and transmit CU transcripts. Certify, validate CU students enrollment, degree status or record of academic achievement from external organizations, agencies and students.  
**Requirements:** High School education or equivalent. Some college coursework preferred. Minimum 1-2 years related experience required. Computer input experience. Excellent interpersonal and organizational skills. Heavy typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Laboratory Coordinator, GR19 (C6302)**  
**Diagnostic Laboratory/Clin Path-Statutory**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date: 4/25/91**  
 Receive, access and distribute lab specimens. Distribute internal and external reports. Enter all laboratory results into computer. Provide relevant laboratory information to staff, students and outside clients. Cross train with laboratory secretary.  
**Requirements:** High School diploma. Some college coursework preferred. 1-2 years related experience. Familiar with veterinary and medical terminology. Computer knowledge; strong interpersonal skills. Light typing. *Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.* External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Accounts Assistant, GR19 (C5905)**  
**Division of Nutritional Sciences-Statutory**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date: 3/28/91**  
 Under direction of Administrative Manager assist in daily operations of Division of Nutritional Sciences Business Office. Responsibilities include account reconciliation; preparation of journal entries; coordination/verification of various monthly campus billings; preparation of deposits; maintenance of division's local accounting system (OASIS) and internal report generation for the Division's 300+ accounts (statutory and endowed). The Division has an annual operation budget of \$10-12 million.  
**Requirements:** High School diploma or equivalent. 1-2 years related experience. Some college coursework preferred. Familiarity with Cornell's accounting system preferred; knowledge of statutory accounting procedures helpful. Previous computer experience (mainframe and PC compatible) required; competency in word processing (Word Perfect), database management (dBase or PC-File) and spreadsheets (LOTUS) preferred. Experience in account reconciliation strongly preferred. Excellent interpersonal, organizational and communications skills essential. Attention to detail; ability to work under pressure and meet deadlines required. Light typing. Regular Cornell employees. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Word Processor Operator, GR19 (C5709)**  
**Division of Nutritional Sciences/CFNPP-Statutory**  
**Minimum Biweekly Salary: \$566.28**  
**Posting Date: 3/21/91**  
 Perform complex technical word processing tasks, often under tight and shifting deadlines, for Ithaca research and publications staff. 1 year term, continuation contingent upon funding.  
**Requirements:** High School diploma or equivalent preferred. Some college coursework preferred. Experience with lengthy manuscripts and technical documents required. Excellent grammatical and organizational skills required. Able to work independently with eye for detail essential. Knowledge of Wordperfect and spreadsheet and/or database packages preferred. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Administrative Aide, GR20 (C6401)**  
**History of Art-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/2/91**  
 Provide secretarial/administrative support to faculty including the Graduate Field Representative and the Director of Undergraduate Studies.  
**Requirements:** Associate's or equivalent. 2-3 years related experience. Typing/keyboard 60 wpm. Knowledge of IBM PC using WordPerfect. Able to set priorities and work in complex, active environment essential. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP.

**Conference Service Supervisor, GR20 (C6607)**  
**Statler Hotel-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/16/91**  
 Direct and coordinate the activities of the Conference Services staff. Flexible; nights and weekends.  
**Requirements:** Associate's or equivalent. Valid NYS drivers license required. Prefer some hospitality industry or equivalent background. 2-3 years related experience. Excellent organizational interpersonal and communication skills. Supervisory experience required. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Office Assistant, GR20 (C6615)**  
**Campus Services, Barnes PO Substation-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/16/91**  
 Serve as a lead person to coordinate department operations and maintain department integrity. Collect and record all postal transaction information needed to prepare daily reports and cash deposits for the U.S. Postal Service.  
**Requirements:** High School diploma or equivalent. Excellent business math background. Minimum 3 years customer service experience and excellent communication skills are required; Postal experience preferred. Knowledge of U.S. Postal rules and regulations and ability to operate mail department. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Administrative Aide, GR20 (C6617)**  
**University Development/Public Affairs-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/16/91**  
 Provide administrative support to the Assoc. Dir., Reunion Campaigns, in the Cornell Fund. Coordinate between 3 other support staff logistics involved in implementing 14 reunion campaigns a year. Generation of correspondence, class reports, pledge cards, and training materials and coordination of special events sponsored for reunion campaign volunteers.  
**Requirements:** Associate's or equivalent in experience. 2-3 years related experience. Excellent organizational, communications, and interpersonal skills. Ability to prioritize assignments, work under pressure, and handle confidential information. Knowledge of Macintosh computer helpful. Medium typing. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Accounts Coordinator, GR20 (C6623)**  
**Center for environmental Research-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/16/91**  
 Conduct all financial transactions for multidisciplinary research center. Maintain records on all levels of account activity, reconcile department records with University records; generate monthly reports an special reports; assist with development of computerized accounting, equipment, and personnel databases.  
**Requirements:** Associate's or equivalent experience in field of accounting. 2-3 years related experience. Knowledge of Cornell accounting procedures or general knowledge of fund accounting necessary. Experience with Macintosh database and spreadsheet software preferred. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Administrative Aide, GR20 (C6501)**  
**Unions and Activities/Noyes Center-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/9/91**  
 Provide clerical and administrative support to the Noyes Center professional staff. Serve as office manager, supervise reservations, student office assistants and Noyeswriter; oversee/review office policies and procedures; serve as receptionist and assist in the day to day operation of Noyes Center.  
**Requirements:** Associate's or equivalent required. 2-3 years related experience in senior level office position with supervisory responsibilities and significant public interaction. Bookkeeping/accounting background and excellent grammar skills essential. Experience with computers and/or word processors. Medium typing. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Accounts Assistant, GR20 (C6407)**  
**Physiology-Statutory**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/2/91**  
 Share responsibility for management and reconciliation of over 100 accounts (state, endowed, college and grants). Establish and maintain working relationship with three colleges (one endowed) and Division of Biological Sciences; advise on University, State and College financial policies; assist in back-up for personnel and payroll functions when necessary.  
**Requirements:** High School diploma or equivalent, some advanced bookkeeping/accounting schooling desirable. Associate's degree preferred. 2 years Cornell accounting essential. Strong interpersonal and communication skills. Medium typing. Regular Cornell employees only. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Secretary, GR20 (C6306)**  
**Chemistry-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 4/25/91**  
 Provide administrative and secretarial support to a Nobel Prize winning professor and active international research group. Manage production of manuscripts and research proposals. Administer all aspects of office during professor's absence; arrange travel, seminars.  
**Requirements:** Associate's or equivalent. Knowledge of chemistry and some foreign language helpful. Minimum 2-3 years secretarial experience including knowledge of CU manuscript, grant proposal and travel systems. Computer experience (IBM, Macintosh) necessary. Heavy typing. Regular CU employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Administrative Aide, GR20 (C6308)**  
**Facilities/Administrative Operations/Cornell University Library-Endowed**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 4/25/91**  
 Under general supervision of the Operations Manager, coordinate all purchasing activities for capital equipment and computer hardware orders for the Endowed Library System. Process invoices for payment. Monitor computer lines and telephones. Prepare work orders and oversee computer maintenance, blanket orders and maintenance agreements. Provide administrative support to the Prefect Coordinator, Project Manager, Photocopy Services Supervisor, and the Personnel area.  
**Requirements:** Associate's or the equivalent. Minimum of 2-3 years of office/purchasing experience. Strong interpersonal, communication (written and verbal)and organizational skills. Experience with database and spreadsheet management (dBase and LOTUS preferred) as well as word processing (WordPerfect preferred). Able to handle confidential material with discretion. Attention to detail. Familiar with University Purchasing and customer services procedures helpful. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Administrative Aide, GR21 (C6606)**  
**Office of University Registrar-Endowed**  
**Minimum Biweekly Salary: \$615.42**  
**Posting Date: 5/16/91**  
 Manage and provide services to students, alumni, staff and external organizations and agencies; coordinate the appropriate dissemination of publicly available information on students, to certify restricted student information at the student's request, and to register student for the current semester.  
**Requirements:** Associate's degree, equivalent work experience, or appropriate combination thereof. 3 years supervisory and customer service experience essential. Ability to use independent judgement and handle highly confidential information. Excellent communication, interpersonal and organizational skills. Experience with word processing and database management, preferably on Macintosh. Heavy typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Research Aide, GR21 (C6614)**  
**Neurobiology and Behavior-Statutory**  
**Minimum Biweekly Salary: \$615.42**  
**Posting Date: 5/16/91**  
 Provide administrative support to professional research group. Assist in preparation of research grants; prepare reports; type and proofread scientific papers; serve as liaison with on and off campus contacts in setting up meetings, workshops, lectures; coordinate travel; handle daily correspondence; maintain files; order supplies; assume to other responsibilities, as needs arise.  
**Requirements:** Bachelor's or equivalent in some biology helpful. 1-2 years related experience. Computer/wordprocessing a must. Excellent organizational and communication (written and/oral) skills. Heavy typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Administrative Aide, GR21 (C6618)**  
**Astronomy-Endowed**  
**Minimum Biweekly Salary: \$615.42**  
**Posting Date: 5/16/91**  
 Act as assistant to the Chairman in his capacity as director of a special educational program sponsored by the Pew foundation. Prepare and process confidential materials. Maintain schedules of due dated, prepare and oversee reports due. Oversee accounts duties. Make travel arrangements. Some travel involved.  
**Requirements:** Associate's or equivalent required. 2-3 years administrative secretarial experience beyond formal training. Word processing and writing skills very important. Excellent organizational and interpersonal skills. Ability to work under pressure. Prior experience at Cornell preferable but not required. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Administrative Aide, GR22 (C6506)**  
**Veterinary Administration-Statutory**  
**Minimum Biweekly Salary: \$641.92**  
**Posting Date: 5/9/91**  
 Manage the administrative operations of the office of facilities and services for the College of Veterinary Medicine. Prepare and manage office budgets; manage construction and renovation project budgets; prepare and process contracts for services; manage office files; provide clerical support; special projects. General direction received; independent decision-making required.  
**Requirements:** Associate's or equivalent required. 3-4 years directly-related work experience. Excellent interpersonal and strong (oral/written) communication skills. Ability to use personal computers for word processing, database management and spreadsheet analyses. Familiar with buildings/maintenance terminology. Analytical skills. Flexible and adaptable. Preference to experience working with Cornell shops preparing documentation for architectural engineering and contractual services. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

## Office Professional Part-time

**Office Assistant, GR18 (C6307)**  
**Agricultural Economics-Statutory**  
**Minimum full-time equivalent: \$542.89**  
**Posting Date: 4/25/91**  
 Provide farm families with support using the 800# information, referral, consulting system. Support consists of: emotional, legal, financial and family issues. Days and hours, 10a.m - 5p.m. Position until 8/31/91. Further employment contingent upon continued funding.  
**Requirements:** High School diploma or equivalent. Some college coursework preferred. Strong listening and interpersonal skills. Familiar with farming and farm families necessary. Familiar with Cornell Cooperative Extension a plus. Typing/computer familiarity necessary. Minimum 1 year related experience. Light typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

**Administrative Aide, GR19 (C6502)**  
**Synthesis Engineering Coalition-Endowed**  
**Minimum full-time equivalent: \$566.28**  
**Posting Date: 5/9/91**  
 Provide secretarial support for the College of Engineering's participation in the Synthesis National Engineering Education Coalition. Answer telephones; process forms; type and word process document and correspondence; handle filing; some account reconciliation. Days and hours are Monday-Friday, mornings.  
**Requirements:** High School diploma or equivalent. Some college coursework preferred. 1-2 years related experience in office environment. Ability to work independently and under general supervision. Strong telephone reception skills. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

## Office Professional Off-Campus

**Secretary, GR20 (C6611)**  
**Cooperative Extension/NYC-Statutory**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/16/91**  
 Provide secretarial and program assistance to the Expanded Food and Nutrition Education Program and the Urban Horticulture Program. Type and edit correspondence, educational materials; maintain and input data for computerized recordkeeping system; maintain time and attendance records for staff. Monday-Friday, 9:00-4:30p.m.  
**Requirements:** Associate's or equivalent. Minimum 2 years related work experience. Knowledge of computers/keyboarding/word processing. Figure aptitude. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

**Secretary, GR20 (C6610)**  
**Cooperative Extension/NYC-Statutory**  
**Minimum Biweekly Salary: \$590.45**  
**Posting Date: 5/16/91**  
 Provide secretarial and program assistance to the Expanded Food and Nutrition Education Program in the Bronx. Type correspondence, memos, educational materials; maintain and input data for computerized recordkeeping system; maintain time and attendance records for staff. Monday-Friday, 9:00-4:30p.m.  
**Requirements:** Associate's or equivalent. Minimum 2 years related work experience. Knowledge of computers deyboarding/word processing. Figure aptitude. Medium typing. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza.

## 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.

**Distribution Assistant (\$6601)**  
**Agricultural and Biological Engineering-Statutory**  
**Hiring Rate: \$7.00**  
**Posting Date: 5/16/91**  
 Assist in distribution of publications. Enter orders in computer, print invoices, pack boxes and prepare for mailing. Assist in marketing and other office duties. Answer phone. Monday-Friday, 8:00a.m-12:00 noon.  
**Requirements:** Familiarity with MacIntosh computer. Able to lift 40 pound boxes. Send application materials to karen Raponi, Staffing Services, 160 Day Hall.

**Administrative Aide (\$6502)**  
**Residence Life-Endowed**  
**Hiring Rate: \$7.56**  
**Posting Date: 5/9/91**  
 Management of busy, fast paced office. Daily contact with high school students and staff. Must be able to interact effectively with people. Efficient organizational skills. Macintosh word processing experience required. Produce correspondence and newsletters. Order and maintain office supplies. Inventory office at end of program. Maintain expenditure records, prepare vouchers and payroll records. Coordinate events and room reservations. Excellent telephone skills. Interact with various University departments. Full-time, 39 hours per week, Monday-Friday, some weekends may be required. May 15-August 14. Please send completed application, cover letter and resume to Karen Raponi, Staffing Services, 160 Day Hall.

**Data Entry Operator (\$6305)**  
**Division of Summer Session, Extramural Study, and Related Programs-Endowed**  
**Posting Date: 5/2/91**  
 Data entry of all summer student registration information and perform general clerical duties.  
**Requirements:** High School diploma or equivalent. Experience with IBM PC and WordPerfect desirable. Send cover letter and resume to Karen Raponi, Staffing Services, 160 Day Hall.

**Service Clerk (\$6503)**  
**Lab of Ornithology-Endowed**  
**Posting Date: 5/9/91**  
 Assist with sales at the Crow's Nest Birding Shop on weekends, Monday nights for seminars, and possible hours during the week to cover for vacations. Cashiering, answer phones, data entry, and able to lift 50 pounds. Work with customers service skills and flexibility. Must be dependable.  
**Requirements:** High School diploma or equivalent. Cash register and data experience helpful. Please send cover letter and completed application 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 East Hill Plaza 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.

**Food Service Worker, S003 (G3803)**  
**Unions and Activities/Noyes Center-Endowed**  
**Hiring Rate: \$6.56**  
**Posting Date: 9/27/90**  
 Operate electronic cash register, handle cash and credit sales, prepare and sell food items; stock and monitor inventory levels; maintain clean work area and adhere to all health department sanitation codes. 10 month position. Monday-Friday, 4p.m. - 12p.m.  
**Requirements:** High School diploma or equivalent. At least 1 year experience in food service operation required. Must relate well with people (excellent customer service skills) and work independently at a rapid pace. Previous experience with electronic registers and kitchen equipment required. Regular Cornell employees only. Send employee transfer application to Esther Smith, Staffing Services, East Hill Plaza.

**Patrol Officer, GR03 (G6205)**  
**Public Safety-Endowed**  
**Hiring Rate: \$9.01**  
**Posting Date: 4/18/91**  
 Prevent, detect and stop criminal behavior; protect life and property; preserve peace, and respond to required police and university services within the campus area.  
**Requirements:** High School diploma or equivalent. College degree preferred. Must obtain, maintain and satisfactorily complete all licensures and training requirements as designated by the Director of Public Safety and the laws of New York State. Must possess valid New York State Drivers license and New York State pistol permit. Strong communication skills (written and oral). Must satisfactorily complete the probationary period of Public Safety for Patrol Officer. Regular Cornell employees send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall. Women and minorities are encouraged to apply. Deadline for applications is May 17th, 1991.

**Shift and Maintenance Mechanic, S009 (G6301)**  
**M&SO Mechanical Shop-Endowed**  
**Hiring Rate: \$8.66**  
**Posting Date: 4/25/91**  
 Able to maintain boilers, burners and other mechanical and HVAC equipment found in commercial, industrial, residential and research institutions. Monitor equipment, building and utility systems. Inspect, lubricate and repair all mechanical equipment. Install and read electric, water and steam meters. Days and hours vary according to shift.  
**Requirements:** High School graduate or equivalent. Knowledge of HVAC, utilities, controls and other support systems in a high technology environment. Minimum of 3 years experience in building trades and mechanical maintenance with boilers and burners. Valid NYS drivers license required. Regular Cornell employees send transfer application, cover letter and resume to Esther Smith, Staffing Services, East Hill Plaza. External applicants send cover letter and resume to Esther Smith, Staffing Services, 160 Day Hall.

## General Service

Send application materials for the following positions to Cynthia Smithbower, 160 Day Hall.

## General Service Temporary

**Groundworker (B6401)**  
**Athletics/Golf Course-Endowed**  
 60% establish and maintain gardens; 40% maintain grounds; mow grass. other related duties. Monday-Friday; 6:00-2:30; some weekend work.  
**Requirements:** Some directly related work experience. For consideration submit application materials to Cynthia Smithbower, 160 Day Hall.

## Academic

**Lecturers/Teaching associates**  
**Department of Modern Languages and Linguistics**  
 There are specific language openings in Chinese (Mandarin/Cantonese), Italian, Japanese, Khmer, Russian, Spanish and Tagalog.  
 While there are no specific openings, the DMLL wants to update its files of candidates qualified to teach the Bengali, Burmese, German, Hindi, Indonesian, Italian, Japanese, Khmer (Cambodian), Korean, Nepali, Polish, Russian, Sinhala, Swedish, Tamil, and Vietnamese languages. Send a letter and resume of past language teaching experience, level of fluency, educational background, and the names of at least 2 individuals we can contact for references. Address inquiries to: John S. Bowers, Chair, Department of Modern Languages and Linguistics, 209 Morrill Hall, Cornell University, Ithaca, NY 14853-4701.

## Cornell Employment News

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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, NY 14853-2801 (Telephone: 607-255-3976).

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