

Students, faculty, TAs revise introductory physics class

By Larry Bernard

Erica Park, a junior, didn't like the textbook in her introductory physics class.

So she changed it.

Jason Adler, a senior, thought the waiting lines were too long to get help from his teaching assistants.

So he helped reduce them.

Calin Moucha, a senior, thought his physics tests did not really test his knowledge of the subject.

So he asked for different kinds of tests.

Students deciding how a course should be taught? Deciding on textbooks, curricula, test questions? Is this any way to run a university? What's going on here?

The students did not, of course, do all this alone. What's happening in Physics 101/102 – a large class of typically 400 students in the College of Arts and Sciences – could be the future of how educational reform is conducted in this country:

A 10-person team consisting of undergraduate and graduate students, together with professional staff, lecturers and senior faculty, is revising the curriculum for what typically is a grueling but required course for many non-physics science majors, particularly pre-medical students.

Participatory Action Research

The revision, under way since the fall, is being accomplished by a team that meets at least once a week to go over every detail of the way in which the class is taught and students learn. Called Participatory Action Research, the technique provides for suggestions and criticisms from every level, from an undergraduate to the dean's office, and is as much an experiment in curriculum revision as a search for a better way to teach physics to non-physics majors.

"Physics 101/102 was in need of revisions. I don't think anyone would argue with that. What we have now is an opportunity to significantly improve Physics 101/102 and

to serve as an example to other curriculum revision projects," said Michael Reynolds, a doctoral student in education who is leading the revision team. A physics major as an undergraduate student, Reynolds also is a teaching assistant for the class. "This project requires participation from all levels of the university community," he said.

Physics 101/102 is an autotutorial, a course without lectures. Students pace themselves through the semester using an inch-thick study guide, a Learning Center in 280 Rockefeller Hall that serves as their laboratory, and an army of teaching assistants, lecturers and professors – 16 of them – who staff the center and grade their work.

Students had a list of gripes about the course: a terrible textbook; unacceptably long waits for help; inflexible grading; and some test questions that did not relate to their study guide.

They could find ways to get through the course without learning the material, even

as 80 percent of the class earns a B-minus or better, the students say.

Among the revision team's first order of business was to replace the text with a new one.

"What in the textbook seemed to be adequate explanations in the first edition of the text were by its third edition being found by our students to be inadequate descriptions, so that the students complained that the book was not helpful in learning the physics," said Robert Cotts, the physics professor who serves with Betty Richardson, senior lecturer, as the revision project's co-principal investigators.

"Was this because we had gradually increased our expectations of the level of student understanding? Or were the students less well prepared? Probably both."

So the team searched for a better text. "We focused on three textbooks, and over a couple of months we examined the pros and

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Ornithology chief

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Each time a jet from the airport roars over the Laboratory of Ornithology, it reminds scientists and educators in the wildlife sanctuary that neither people nor birds exist in isolation.

Student leaders

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Representatives of the Student Assembly met with members of Congress and White House officials recently to discuss President Clinton's newly unveiled national service initiative.

Mann named Library of the Future

The Albert R. Mann Library, directed by Jan Olsen, is the 1993 recipient of the American Library Association (ALA)/Meckler Library of the Future Award.

The \$2,500 award, donated by the Meckler Corp., is given to a library, consortium, group of librarians or support organization for information technology in a library setting.

"The 1993 award is presented to the staff of Cornell University's Albert R. Mann Library for their exemplary work in the development of an overall program that demonstrates the capabilities and applications of information technology," said Marty Kesselman, chair of the ALA/Meckler Library of the Future Award Committee. "Clearly, Mann Library has implemented powerful tools for instruction, networking and preservation.

"Through partnerships with corporations, government agencies, foundations and professional associations, this library has made impacts beyond the traditional boundaries of the university. Mann Library's work in these areas forms a blueprint for the continuing evolution of the electronic library of the future."

Electronic library

Since 1991 Mann Library has operated one of the nation's most sophisticated electronic libraries, providing bibliographic, full text and numeric information via computer networks, such as the worldwide Internet. This electronic library, the "Mann Library Gateway," is available to the entire campus community and to hundreds of Cornell Cooperative Extension agents throughout New York.

The Mann Library Gateway enables users, regardless of their location, to gain access to national databases on business, agriculture, biological sciences, education and the environment. Data from the 1990 U.S. Census of Population and from the National Weather Service are also available in the Gateway's collection. The Gateway connects users to Cornell's online library catalog as well as to the Research Libraries Group's 32-million-record database of holdings in research libraries across the country. Through the CARL UnCover system, the Gateway also provides access to thousands of popular and technical magazines and journals from a wide range of disciplines.

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Fun before finals



Peter Morenus/University Photography

Freshmen Jamie Raditic (left) and Allison Kiernan were among the thousands of students who celebrated the end of classes on May 7 with a party on Libe Slope. Final exams, though, begin today. Good luck to all!

Kalos urges restoration of computer funds

By Larry Bernard

A \$47 million stimulus package for computer and information science to the National Science Foundation, which failed to pass Congress, must be restored if the nation is to expand its high-performance computing activities to schools, libraries, health care delivery and other areas, Malvin H. Kalos, director of the Theory Center, said on Tuesday.

Testifying before the U.S. House Committee on Science, Space and Technology's Subcommittee on Science, Kalos, a Cornell physicist, said in prepared remarks that the failure of President Clinton's stimulus package, which included \$9 million for the nation's four supercomputer centers, was "a serious setback."

"Networking activities of the NSF were also adversely affected when these crucial monies were not forthcoming. A way must be found to restore this vital support to the level where the infrastructure is adequate to enable the aims of House Resolution 1757," he said.

High Performance Computing Act

HR 1757 calls for expanding the High Performance Computing Act of 1991 to establish an interagency program for computing applications and networking for schools, libraries, health care, governmental information and other fields. Kalos was one of seven experts who were scheduled to address the subcommittee, chaired by Rep. Rick Boucher (D-Va.), to comment on the proposed law.

The bill, Kalos said, "addresses one of the most important opportunities facing our nation: How we can best exploit the most striking technological revolution in the history of civilization for the economic and social benefit of our country and of its people."

For health care, the bill proposes that computer applications be developed for clinical information systems, a system of disseminating health information to the public and development of health delivery systems. For libraries, the bill seeks the development of prototype digital libraries, providing public access through the Internet, and testbeds for these technologies at the nation's supercomputing facilities. In education, the proposal would develop applications for all levels of school-

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Clear advice



Peter Morenus/University Photography

Russian educators who are developing curriculum for the newly established Environmental College of the Urals examine GIS (geographic information systems) programs at the Cornell Laboratory for Environmental Applications of Remote Sensing (CLEARS) in Hollister Hall last Friday. Participating in the two-day visit to the university were (from left): Dr. Yaroslav Zakow, chief of pediatrics at the Chelyabinsk School of Medicine; Aleksander Lukashev, deputy director for nuclear safety at the Mayak atomic weapons complex; Slava Paperno, translator from Cornell's Department of Modern Languages and Linguistics; Spencer film maker Slawomir Grunberg, one of the hosts, along with Robert Rieger, for the Cornell visit; Stephen D. DeGloria, associate professor of soil, crop and atmospheric sciences; and Russian physicist Elyena Samarina.

Chlorine leak at water plant is capped without incident

Technicians from Cornell's water filtration plant and the Cornell hazardous materials response team on Tuesday capped a leaking tank of liquid chlorine after a leak was discovered at 10 a.m. The tank was removed by a commercial supplier at 12:15 p.m. There were no injuries and no chlorine escaped the filtration building.

The small leak in a valve of the 2,000-pound chlorine tank was detected by water treatment plant technicians. At the time, the tank was being connected to chlorination equipment that purifies water from Fall Creek to campus.

As a routine precaution, Life Safety evacuated the building, near Caldwell Road and the entrance to the Newman Arboretum, as well as the Plantations field house. Cayuga Heights Police and Cornell Public Safety officers also suggested that residents of 16 homes along

Forest Home Drive leave the area while the leak was being capped. Chlorine gas is toxic to the lungs, and liquid chlorine can cause burns to the skin.

The Ithaca Fire Department was on standby at the scene to spray water if a larger leak developed. The Tompkins County Sheriff's Department handled traffic control in the area.

One person was taken to Gannett Health Center for a checkup and was released: Ann Christofferson, the senior plant operator who was in charge at the time the leak occurred. Two others were in the building at the time, a technician and a mechanic.

Liquid chlorine is supplied to the filtration plant in pressurized metal cylinders about six feet long and two feet in diameter. The tanks are switched about once a month. There was no interruption of drinking water to the campus.

New university policy on transactions

"Transaction Authority," a new policy delineating who may spend or receive funds, provide or receive services and enter into agreements on behalf of Cornell, has been issued and mailed to appropriate employees throughout the university.

The new policy deals only with external transactions; one on internal transactions is being developed by the Policy Advisory Group,

which is working with policy-making officers to produce a compendium of all university policies, cast in a common format and available at 19 campus locations.

Any office in the process of writing or revising a policy may call Beverlee Hughes, PAG administrator, at 255-8279 for a copy of the recently issued policy that describes the policy-making process.

BRIEFS

• **English teachers:** Interested in helping people from foreign countries associated with the Cornell community? The Cornell Campus Club has a program for teaching English as a second language to persons temporarily in Ithaca. The classes require a two-hour commitment per week, plus preparation, for the six-week summer session. For more information, contact Ann Marie Dullea at 277-2488 or Joan McMinin at 277-0013.

• **Grad advisers:** The Dean of Students Office is looking for a few enthusiastic graduate and professional student volunteers to help plan and conduct the graduate orientation program in August. Volunteers will devote 10 to 15 hours welcoming new students to campus and participating in a variety of events. Advisers need not be available during the entire orientation week, however. Training provided. For an application or more information, go to the Office of Graduate Student Life programs, Sage Hall, or call 255-1123.

• **Women's Studies election:** The following people will take seats on the Women's Studies executive board next fall, as a result of recent elections. From the faculty: Anne Berger, Cornelia E. Farnum, Sandra E. Greene, Elizabeth A. Povinelli and Rachel Weil. From the staff, community or a neighboring college: Nimat Hafez Barazangi, Pat Court, Cynthia J. Koepp, Kathleen Lilley, Leslie Miller-Bernal and Mary Rhodes. Students: Sabra Brown, Adrienne Estill, Sara Friedman, Dana Luciano, Barbara Mennel and Irene Alejandra Molina.

• **Learning technologies:** The Learning Technologies Program, offered by Cornell Information Technologies Instructional Resource Center, will be held June 14 to 16. The program includes workshops and consulting designed to help faculty integrate learning technologies into their curriculum. There is no charge, but registration is limited. For more information, call Tammy Drake at 255-3329.

• **Computer safety:** A number of thefts of high-end desktop computers have been reported at some West Coast campuses. The Department of Public Safety is reminding the Cornell community to lock all doors and windows when offices or rooms are unoccupied, to mark all valuable equipment with an identification number, to secure computers to their desks, and to be alert and observant. For more information, call Public Safety Crime Prevention at 255-7404.

• **Typists' list:** The Uris Library Reference Department is updating its list of typing and word processing services for the 1993-94 academic year. If you are interested in offering such services, obtain a registration form at the Uris Library Reference Department and complete it by June 15. The earlier you register, the higher in the list your service will appear. The form asks for the computer hardware and software that you use, the typefaces you have available and your rates, among other questions. For more information, contact Uris Library Reference.

OBITUARIES

Associate Professor of Music Donald R.M. Paterson, 59, died May 7 at his family's summer home in New Hampton, N.H., after a short illness. Paterson retired as university organist and Sage Chapel choirmaster in January, after 29 years at the university.

Before joining the faculty in 1964, Paterson was on the faculty at Culver Military Academy in Culver, Ind., and Stephens College in Columbia, Mo. He earned a bachelor's degree at Williams College and a master's degree at the University of Michigan.

At Cornell, he taught first-year theory for many years, a course famous for its high standards and demanding workload, and for the superb musicianship he instilled in his students.

An accomplished organ recitalist, Paterson performed throughout the United States and Europe. His compositions included more than 150 hymn reharmonizations and original pieces and arrangements for chorus. He was noted particularly for his meticulous preparation of programs that were chosen to show the potential of historic pipe organs.

His last recital was at the National Convention of the Organ Historical Society in August 1992.

He was a founding member of the Organ Historical Society and was its first vice president, its second president and a recipient of its Distinguished Service Award.

He is survived by three children, Lucy A. Paterson of Asheville, N.C., and Margaret E. and Robert T.M. Paterson, both of Hamilton, N.J.; a brother, Alan S. Paterson, of Columbus, Ohio; former wife, Linda T. Panzarella, of Hamilton, N.J.; an aunt; and several cousins.

A memorial service to be held in Sage Chapel in the fall will be announced at a later date.

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Clyde E. Ingalls, 88, professor emeritus of electrical engineering, died Dec. 6, 1992.

Ingalls joined the faculty in 1947. He contributed to early developments in telephone and radar, and he built Cornell's first computer and was chair of the committee that set up the university's program in computer science.

He held an electrical engineering degree from Rensselaer Polytechnic Institute and did graduate work at RPI, the University of Rochester and the Massachusetts Institute of Technology.

Survivors include his wife, who can be reached by writing to P.O. Box 5024, Potsdam, N.Y. 13676.

MEMORIAL SERVICE

A memorial service for James P. Titus, senior editor at Media Services who died April 18, will be held on Thursday, May 20, at 3 p.m. in the Anabel Taylor Hall Chapel. A reception will follow in the Founders Room of Anabel Taylor Hall. Titus was editor of *Human Ecology Forum* and *Agriculture and Life Sciences News*. Please RSVP by calling 255-3126 by May 18.

GRADUATE BULLETIN

May degree: All requirements for a May degree must be completed by May 21.

Commencement: Information packets have been mailed to all recipients of August 1992 and January 1993 degrees. Candidates for May 1993 degrees may pick up packets at the Graduate School information desk.

Commencement reception will be held for all graduate degree recipients, families, and friends in the lounge, Sage Graduate Center, immediately following commencement.

Diplomas will be available at the post-commencement reception for May 1993 degree recipients who completed requirements by mid-March (bring ID). Diplomas will be mailed for other recipients.

Ph.D. recognition event: This new ceremony to honor Ph.D. recipients will be held in Barton Hall on Saturday, May 29, at 5 p.m. Family, friends and faculty advisers are invited; reception will follow.

Faculty: Graduate faculty meeting will be held on Friday, May 28, at 4 p.m. in the Sage

Graduate Center. The meeting is solely for the purpose of voting on May degrees.

Summer registration: Forms are available at the Graduate School information desk, Sage Graduate Center. Students receiving summer support from the Graduate School should submit their form by May 21. Students must register if they are receiving financial aid during the summer (such as summer loans, assistantships, travel grants or tuition awards); wish to use campus facilities during the summer; or are off campus but need to be registered for summer study. Registration must be done in person at the Graduate School. Student ID is required. Students who have been registered for a regular semester during the preceding academic year do not pay tuition for non-credit summer registration. Students approved for summer residence credit must pay the appropriate pro-rated Graduate School tuition rate. Tuition must be paid for summer courses taken through the School of Continuing Education and Summer Sessions.

CORNELL Chronicle

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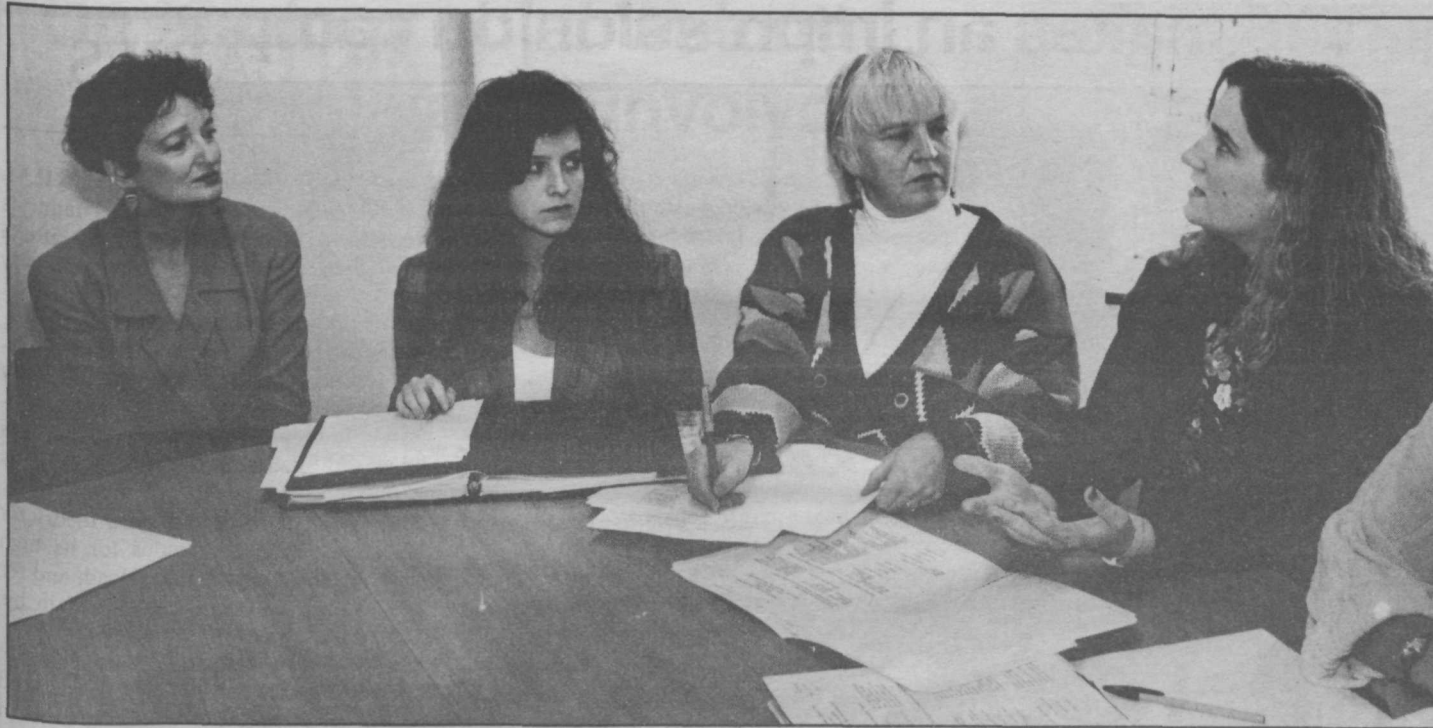
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It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited 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 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.



Peter Morenus/University Photography

While visiting campus last week, Jane Gould (far left), director of the New York State Office of the Aging, met with (from left) nutritional sciences senior Loren Rosenzweig, human service studies senior Kay Friedlander and human development and family studies junior Sonja Haugeto, along with other students and faculty.

Report issued on student services

By Sam Segal

A task force on student support services has given Provost Malden C. Nesheim two dozen recommendations for improving aspects of undergraduate recruitment and admissions, advising, financial aid and residence life.

The 23-member panel, headed by Associate Vice President for Human Relations Joycelyn Hart, said the report reflected "a vision of student services not as emergency vehicles for those in danger of failing but as complements that personalize education and tailor it to a variety of learning styles."

"Cornell has changed a lot since our first steps toward diversity almost 30 years ago," Hart said, adding: "No array of support programs can serve all students equally, but we have tried to suggest ways to change and integrate programs so that they better address the needs of the Cornell of today and tomorrow."

The Task Force on Student Service Systems was charged by Nesheim to indicate how funds and people might be reallocated toward a goal of "academic and social success for all the students we admit to the university's undergraduate programs."

While considerable attention was to be paid to the success of minority-group students and the programs, begun in the 1960s, to support them, Nesheim specified that "the task force charge is not to be viewed by you or others as a mandate to focus on minority programs." Instead, it should "take a broad view of services to any of our students needing educational support."

The task force included 12 faculty members, six students and five administrators. Among their principal recommendations:

Pre-college programs

- University Admissions should strengthen its ties to the Summer College program. The minority pre-freshman summer program has been successful and should be strengthened.

Admissions

- Efforts to recruit minority-group students should adopt approaches to increase the number of admissible students, and the university should offer workshops for teachers and counselors in areas with large minority populations.

Financial aid

- Noting concern about the possibility of limits on aid, the report said that Cornell should examine the consequences of such changes. It favored a policy assuring "adequate financial aid" to "all students who need it," lasting through their undergraduate years.

Academic programs and advising

- Each college should provide a plan for improving advising, but the central administration should articulate common principles.

- The importance of faculty in student advising "cannot be overstated," but any improvements must prescribe clear roles for student-development specialists and trained peers.

- For advising of minority students, the Office of Minority Educational Affairs and the college-based COSEP Associates should serve as consultants in the training of advising teams. There should also be a clearer articulation of the relationship between central administration and college-based professionals charged with serving minority group students.

- The Learning Skills Center and the Office of Instructional Support should be combined into a teaching and learning network, including math and writing programs.

Residential life

- There should be developed within residence halls small, "heterogeneous 'communities within communities,'" and all residential units should seek to "create a positive multicultural dynamic."

- Theme houses should be acknowledged as a reflection of Cornell's commitment to diversity, and there should be "a regular, formal evaluation" of their programs.

- The "epidemic use of alcohol" should be addressed aggressively.

The task force suggested that Nesheim appoint action teams to refine its recommendations. It did not generally set deadlines. However, it did say the provost should name a panel to examine whether the university has "found the right balance between centralized and decentralized services for racial and ethnic minorities" and should have a plan ready for implementation in the fall of 1994.

State's top official on aging meets with students and faculty studying gerontology

By Susan Lang

"I often have been so frustrated by the academic community's research, because so much of it has nothing to do with the real world," Jane Gould, the director of the New York State Office of the Aging, told a group of faculty members from the College of Human Ecology while she was visiting campus last week. "But I'm so pleased by what you are doing, because it has direct applications for public policy and programs."

Gould visited campus on May 6 and 7 at the invitation of Henrik N. Dullea, vice president for university relations, who wanted Gould to see for herself what Cornell was doing in the field of gerontology. The two had been colleagues and friends in the administrations of Governors Hugh Carey and Mario Cuomo for several years before Dullea came to Cornell two years ago.

"I was interested to find out more about what Cornell was doing and to find connections and ways that we might work together," said Gould, who has been with the Office for the Aging since 1976 and the director since 1988. And connections she found, from Professor Phyllis Moen's work as the director of the Life Course Institute and her quest to fund

the Cornell Center for Applied Gerontology; to associate professor and housing specialist Patricia Pollak's work on housing options for seniors and revising public policy to support them; to rural sociology Assistant Professor Nina Glasgow's research on how access of urban and rural elderly to public transportation impacts social isolation and the use of social and public services; to consumer economics and housing Associate Professor Jeanne Hogarth's research on how the retired obtain and spend their income and her extension work on programs that help seniors plan their budgets for retirement.

Gould, who is host of the popular cable television program, *Older Persons Speak Out*, and the recipient of the Intergenerational Service Award from the New York State Council of Senior Citizens, also participated in a round table discussion with seven seniors and graduate students committed to the study of gerontology.

For example, Susan Snyder, a textiles and apparel graduate student, explained her research on developing an inflatable support for nursing home residents who cannot support their upper bodies. Nutritional sciences senior Loren Rosenzweig reviewed her success in recruiting 75 sorority sisters from Alpha Omicron Pi to get

involved in a food delivery and companionship program at Titus Towers, a local elderly housing unit. Kay Friedlander, a human service studies senior in social work, talked about her internship at IthacaCare, where she helped start an adult day program for elders living in the community to socialize with peers and participate in planned activities.

Gould asked the group how they became interested in the elderly and for suggestions on how to interest others in the field. "So many people disregard the elderly, thinking they are going to die anyway, yet many individuals will be in this special population for 25 years or longer," Gould commented.

While visiting Cornell, Gould also met with community leaders in gerontology, including President Emeritus Dale R. Corson, chairman of the advisory committee for Kendal at Ithaca, a not-for-profit life care retirement community that is now in development; Richard Miller, dean of the School of Health Science and Health Performance at Ithaca College; and Irene Stein, director of the Tompkins County Office for the Aging.

"We have a long way to go in many areas, but I am pleased—Cornell is looking at issues that we've only examined in part or haven't gotten to yet," Gould said.

Hockey team reports probable NCAA rules violation on housing

A routine administrative review of its men's hockey program by the Department of Athletics and Physical Education has resulted in self-reporting of a probable NCAA rules violation, according to Laing E. Kennedy, director of athletics.

The impropriety involves the long-standing tradition of some hockey players living with host families while attending Cornell.

Kennedy also announced that the university will conduct an internal review of the program to further clarify any misinterpretations that may have resulted in extra benefits being provided to student athletes while staying with host families. The inquiry will be conducted by Professor Robert Hillman, associate dean of the Law School.

Host families

Kennedy said upon reviewing NCAA legislation on sponsored families, the department felt the need to report the likely rules infraction and correct the current practice that allows some hockey players to live with host families.

The governing NCAA rule states, "A member institution shall not permit individuals outside the institution to serve as 'sponsors' or 'families' for student-athletes who are enrolled in the institution unless such a sponsorship program exists to provide the same benefits and support services to all students at the institution."

Kennedy said, "The housing arrangement for hockey players has been subject to periodic

reviews by the Ivy League. Not until recently did the league office or Cornell have reason to believe that this program was not permitted under NCAA regulations. If rules have been misinterpreted or violated, we will correct the situation and implement proper changes immediately.

"Our goal is to maintain the rich tradition and integrity of Cornell hockey, while complying with all NCAA and Ivy League rules governing our program," emphasized Kennedy, a former Big Red All-Ivy hockey player.

He added, "However well-intentioned, we may have inadvertently created an environment that is not within the proper guidelines, and our goal is to correct the situation."

"Based upon our recent review, the university has concluded that the long-standing tradition of local families offering housing options to hockey players should be eliminated," said Kennedy.

In 1983, a similar university review of the housing arrangements for Cornell hockey players determined that the program was permissible under certain guidelines.

However, Kennedy said that current interpretation of the sponsor family legislation, which first appeared in the operating bylaws of the 1989-90 NCAA manual, makes it clear that the housing practice must stop.

Results of the university's inquiry will also be submitted to the Ivy League and NCAA for review.

Horses available for adoption

Specialists from the College of Veterinary Medicine will offer basic instruction in equine care when the federal Bureau of Land Management holds an Adopt-A-Horse program for wild horses on May 15 and 16 at the Equestrian Center on Pine Tree Road.

The bureau is using the Equestrian Center to place 125 wild horses that were rounded up from fragile rangelands in Nevada, Wyoming, California and Oregon. An adoption fee of \$125 per horse is charged to defray the cost of roundup, veterinary care, transportation and administrative expenses.

Qualified individuals may adopt up to four horses.

Veterinarians and staff members of the college will give instruction on Saturday from 9 a.m. to noon on equine nutrition and feeding principles, basic first aid for horses, vaccinations and other health programs, and horse housing.

The adoption is scheduled from 7 a.m. to 5 p.m. Saturday and 8 a.m. to 5 p.m. Sunday. The horses will arrive by trailer Friday morning, May 14, with viewing hours from 1 to 5 p.m. Friday.

Information on the Adopt-A-Horse program is available from Art DiGrazia, Bureau of Land Management, by calling (414) 297-4417.

Artist Artschwager '48 makes an impression on campus

By Carole Stone

Artist Richard Artschwager '48, who earned a degree in chemistry at Cornell and then left formulas behind to become an artist in New York City, making a living as a woodworker until his drawings, sculptures and paintings on paper began to sell in the mid-1970s, visited campus for three days last week to make a print at the Olive Press, the Art Department's fine arts press.

With master printer Sue Ann Evans, Artschwager made a copper plate etching titled

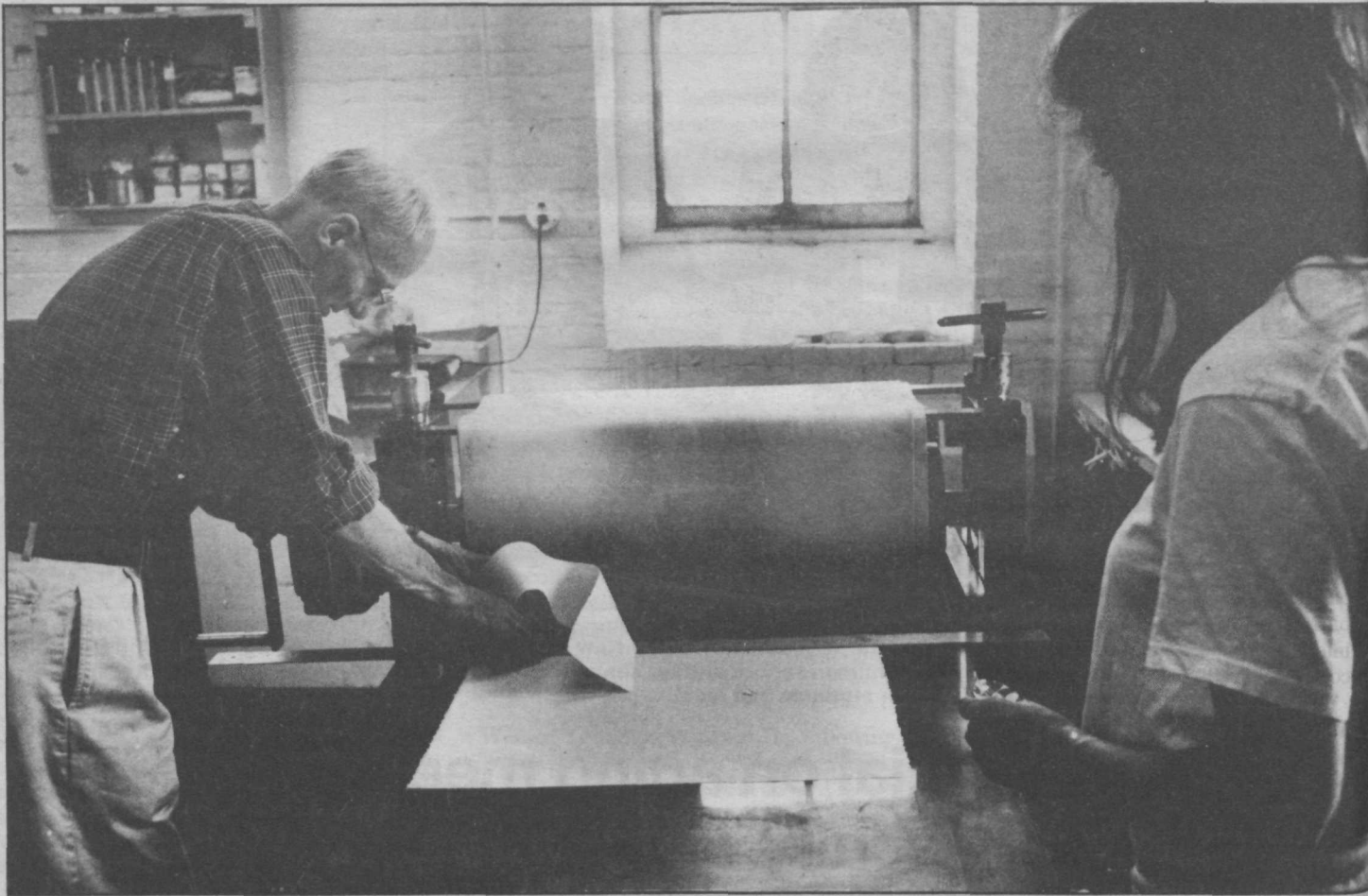
CORNELL People

Door, Window, Table, Basket, Mirror, Rug. It will be familiar to anyone who knows Artschwager's work: He has made some 60 drawings and prints with that title, each one a variation on the original, which included these objects and no others.

'Title is my instruction'

"The title is my instruction," said Artschwager, who is lean and lithe at the age of 70. "It lets me do anything at all as long as it includes these six objects. Sometimes it is a fly's eye view, sometimes a view from under the table, a rogue's gallery, or a view from inside the basket, like this one I just made," the artist said, flipping through a catalog of his drawings.

Immediately after he left Cornell, Artschwager enrolled in art school in New York City for a year. Art dealer Leo Castelli gave him his first one-man exhibition. Since then his work has been shown in galleries in San Francisco, Toronto and Hamburg, among other cities. His work has been included in at least four of the Documenta shows in Kassel, Germany; two of the biennial exhibitions at the Whitney Museum of American Art; and



Peter Morenus/University Photography
Richard Artschwager '48 and printmaker Sue Ann Evans of New York City at work at the Olive Press in Tjaden Hall. Artschwager and Evans made a copper plate etching titled "Door, Window, Table, Basket, Mirror, Rug." He has made some 60 drawings and prints with that title, each one a variation on the original, which included these objects and no others.

the Venice Biennale.

In 1988 the Whitney exhibited a retrospective of Artschwager's work that then traveled to the San Francisco Museum of Modern Art, the Los Angeles Museum of Contemporary Art and the Palacio de Valezquez in Madrid. This year, the artist is being shown by Mary Boone Gallery in New York City.

Is he sentimental about Cornell? "Only

about the people I knew," Artschwager said, recalling that he spent most of his time in Baker and Rockefeller halls and only took a couple of art classes after he returned to Cornell from wartime service in Germany. "I think about the people," he said, "... and about it being 26 degrees on Highland Drive."

The next and last guest artist this year at the Olive Press is William Wegman, who is visit-

ing this week to make a lithograph. On Saturday, May 15, Wegman will sign copies of his latest book, the classic fairy tale *Cinderella* with his Weimeraner dogs Fay Ray and Bettina as Cinderella and the other characters. The book is published by Little, Brown and Co. and sells for \$16.95. The book-signing will be from 1 to 3 p.m. in the lobby of the Herbert F. Johnson Museum of Art.

Looking to small businesses to create jobs is risky: expert

By William Holder

The hopes for job growth pinned on small manufacturing businesses won't materialize unless planners pay close attention to the health of the larger industries in a region, according to a Cornell researcher.

Results of two studies of 250 businesses in New York show that a piecemeal approach to strengthening the small manufacturing sector is risky. These firms, 50 percent of which fail in the first six years, are dependent on close relationships with large companies in their vicinity, said Ruth C. Young, a senior research associate in the Department of Rural Sociology.

Interdependent

"Though small manufacturing firms may be important for job growth, they cannot offer an independent source of employment," she added. "Since they are interdependent, large and small firms share a common fate: If employment declines for one, it is likely to decline for both."

Young and her colleagues surveyed owners of small manufacturing firms in the Rochester area (Monroe County) and in five counties of New York's Southern Tier, plus three counties of Pennsylvania's adjacent Northern Tier along New York Highway 17. Among their findings:

- Almost all the firms surveyed maintained a close relationship with a top customer, often but not necessarily one that was nearby. Most supply custom-made products that large firms prefer not to produce. Rarely, however, does that close relationship extend to the security of a contract.

- Small firms tend to adopt advanced practices such as just-in-time inventory control, filling orders on demand with very little advance warning.

- Almost two-thirds of small firms make a product or component that was made by a local company that once employed the firm's chief executive officer, underscoring the close relationship among firms.

- Small firms almost always subcontract their work to other local firms, with very little

business going out of state, although firms do buy component parts out of state. Competition comes mainly from other small firms. Few small companies compete with their larger neighbors.

"Both large corporations and industrial extension workers tell us that large firms are tending to buy more from fewer suppliers, which they prefer to be located within an hour or two's trucking time," Young said. She and Joe D. Francis, associate professor of rural sociology, and Christopher H. Young, a Cornell research associate, presented their findings in a recent case study published by Cornell's Community and Rural Development Institute.

Subcontracting

In addition, as many corporations restructure and reduce the scope of their operations, their need for subcontracting increases.

"Corporate downsizing is really working to the benefit of small manufacturing firms," Young added. At the same time, however, smaller firms tend not to offer the pension and life insurance benefits typical of large corporations. So workers may find the employment benefits of a large corporation difficult to match in the small manufacturing sector.

In the Rochester area, 76 percent of small firms sell to one or more of four large firms - including Eastman Kodak Co., Xerox Corp., General Motors Corp., and Bausch and Lomb. The Southern Tier is less urbanized, but the trend is the same: 58 percent sell to one of more of only six large companies, including IBM, General Electric, GTE Products, Corning Glass, Dover/Universal Instruments and Dresser Rand.

Many small firms have taken steps to diversify their customer base, the researchers found, but the core companies remain their most important customers.

Dependent on their large customers, the small firms are of great importance to a regional economy but cannot offer an alternative to employment at the large firms, Young contends, adding: "Planners, developers and local governments must look at their regional industrial structure as a whole."



Spring fair

Senior Gwendelyn Daniels (at right, above) paints a rose on junior Alessandra Sagasti's leg during the annual Risley Spring Fair on Saturday. Among the fair goers were Joanna Lowenstein (at right) and her pet iguana, Chaucer.



Photographs by
Peter Morenus

Ornithology chief Walcott wants 'amateurs' involved

By Roger Segelken

Each time a jet from the nearby airport roars over the Laboratory of Ornithology, it reminds scientists and educators working in the wildlife sanctuary that neither people nor birds exist in isolation.

For Charles Walcott, the newly named Louis Agassiz Fuertes Director of the laboratory, the Sapsucker Woods location—between the university campus and Ithaca's portal to the outside world—is symbolic and strategic.

"We try to be the interface between the academic community and the birding public," said Walcott, a professor of neurobiology and behavior and director of the lab since 1982. "Ornithology is one of the few scientific disciplines where amateurs really can contribute. Amateurs can't—or shouldn't—do nuclear physics in the basement. But they can observe birds. We're finding ways for everyone who is interested in birds, at any level, to make valued contributions to the science of ornithology."

Considering that 84 million Americans are interested enough in birds to buy bird seed, laboratory scientists here have a vast field of potential collaborators. Under Walcott's leadership, the lab found that thousands of people will not only volunteer time to gather data (in the U.S.-Canadian Project FeederWatch), they willingly pay a modest fee (for data processing and administrative costs) to work for science.

Success of FeederWatch, in which participants report numbers and species of birds throughout each winter at their bird feeders, led to funding by the National Science Foundation of three National Science Experiments. One, Project PigeonWatch, enlists inner city schoolchildren to study effects of the birds' colors and feather patterns on feeding and breeding success.

For amateurs with more bird-identification skills, the yards and windowsills of North America are the "laboratory" for the Cornell-based National Science Experiment in food preference of ground-feeding birds. Advanced bird watchers are volunteering for Project Tanager, trying to help ornithologists and conservation policy-makers learn the effect of habitat fragmentation on the colorful birds.

When a pilot test of Project Tanager was conducted in Ithaca, the professionals were surprised, Walcott said. Ornithologists believed that tanager populations are sustained only in multi-acre plots of forested habitat, where house cats and other predators cannot reach them.

"But the Ithaca tanagers haven't read the literature. They're breeding here in hectare-sized plots," Walcott reported. Whether Ithaca is typical of the rest of North America, only the volunteer tanager watchers can tell, he said.

Before Walcott took over, the Laboratory of Ornithology had a reputation for excellence among ornithologists, but most of the public did not associate Cornell and birds.

"We wanted the lab to be the authoritative source for bird information, to get our name out there," Walcott recalled.

His first move was to increase the lab's

membership base and change *The Living Bird Quarterly* from a scholarly journal "filled with inscrutable technical articles and beautiful color plates," in Walcott's words, to a more accessible magazine for amateurs and professionals alike. Color photography in *Living Bird*, as the award-winning publication was renamed, is still first-rate, and scientists continue to write most of the articles, "but they're edited to make sure people can understand what they're saying," Walcott said.

Paid membership (beginning at the \$30 level) now stands at more than 14,700, one factor that allowed the laboratory to expand its staff from 15 to 55.

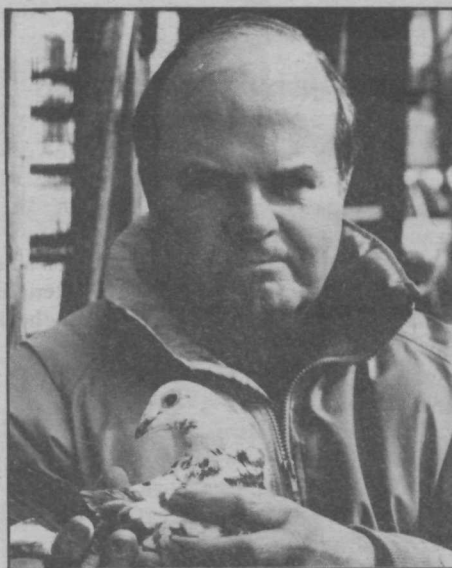
Retail sales, from the Crow's Nest shop in Stuart Observatory and a widely distributed mail-order catalog, also help support an annual budget of about \$3 million.

Radio program

One Ithaca radio station used to carry the lab's weekly program. Now, more than 130 AM and FM stations across the United States broadcast the weekday *Cornell Laboratory of Ornithology BirdWatch*, which is written by lab staffers, filled with bird songs from the lab's Library of Natural Sounds (LNS), and produced and distributed by a local studio, Finger Lakes Productions.

Some 10,000 beginning birders have taken the laboratory's correspondence course, and thousands of others buy recordings made from LNS, now the world's largest collection of bird recordings. The library fills about 5,000 requests a year, serving everyone from field biologists to film makers. Computer software developed at the Bioacoustics Program, a collaboration of biologists and engineers that was established under Walcott's leadership, is used for sound analysis at acoustics laboratories around the world.

One indicator that the laboratory has become an authoritative information source, Walcott notes with some pride, is the constantly ringing telephone.



Charles Harrington/University Photography
Walcott with a research subject. He studies how homing pigeons navigate.



Peter Morenus/University Photography
Participating in the dedication of the Louis Agassiz Fuertes Directorship of the Laboratory of Ornithology were President Frank H.T. Rhodes (far left), laboratory administrative board Chairman Ned Morgans (next to Rhodes), Director Charles Walcott (second from right) and members of the Fuertes family (from left): Katy Boynton Payne, Maria Boynton, Gwen Fuertes, Byrd Fuertes Teague, William Teague, Doris Kay, Steven Anthony Fuertes and Louis Agassiz Fuertes II.

Calling (607) 254-BIRD could be a *New York Times* reporter with an ornithology question, a federal official seeking guidance on a waterfowl population problem, a homeowner with a cracked picture window and an unconscious bird in hand, or an attorney with an environmental case on a court docket.

When it comes to expert-witness testimony, however, the Cornell Laboratory of Ornithology can't take sides, the director emphasized. "The lab's job is to gather information—not to advocate positions," he said. "We can just as easily be called for objective testimony by the EPA (the federal Environmental Protection Agency) as by a chemical company."

Walcott, who is 58, taught biology at Harvard, Tufts and Stony Brook before returning to Cornell, where he earned a Ph.D. in zoology in 1959. While completing a bachelor's degree at Harvard, Walcott earned his first credits in educational television, and he has produced or directed nature programs for WGBH in Boston, the BBC and Children's Television Workshop.

For more than 25 years his research focused on bird navigation—and homing pigeon navigation in particular—and Cornell became one of the world's centers of bird navigation studies. Now completed, the studies here led to the conclusion that all homing pigeons—and perhaps many other avian species—are born with the same array of navigational senses; which abilities they develop depends on their local environment during the critical first weeks of flight.

The Louis Agassiz Fuertes directorship was endowed by several members of the laboratory board of directors and friends of the laboratory. It is named for the Ithaca-born artist and naturalist (1874-1927) whose work in popular and scientific books made him the pre-eminent painter of birds in the United

States for 30 years.

On hand for directorship dedication ceremonies May 8 were Katharine Boynton Payne, the granddaughter of Fuertes who is a bioacoustics researcher at the laboratory, and Edwin H. Morgens, the university trustee and chairman of the lab's board of directors who recently endowed a professorship in bird population studies.

The 25-member board of directors is composed, as might be expected, of professional biologists and ornithologists, but also of people who make a living in business and law while maintaining an active, avocational interest in birds. Walcott credits the guidance of the board for putting the laboratory on a healthy fiscal footing. Once dependent on university subsidies, the laboratory is now entirely self-supporting through grants, membership fees, gifts and revenues from laboratory enterprises.

The best people

"My job is to get the best people in our research and education programs, and then support them," Walcott said. As a professor of biological sciences, Walcott teaches the popular introductory neurobiology and behavior course and guest-lectures in other classes. He is the chief spokesman for ornithology research and education at Cornell and a popular speaker on the alumni club lecture circuit.

The director is also expected to "make choices about what we should do, maintain communication between the board of directors, the staff and everyone on the outside who is interested in birds, and help raise money."

Well, there is one more duty, Walcott remembers as he contemplates the pond outside his office window. For the moment, at least, no waterfowl are squabbling over feed, and the airport is quiet. But his home phone number is at the top of the emergency call list, he says.

"I mop up when the pipes freeze."

Civil rights movement died with King, Professor Harris asserts

By Carole Stone

Associate Professor Robert Harris, former director of the Africana Studies and Research Center, said last week that the civil rights movement in the United States died with the assassination of the Rev. Dr. Martin Luther King Jr.

"The high point of the civil rights movement was 1965, when for the second time in their history African-Americans were written into law—with the 1965 Voting Rights Act, following the 1964 Civil Rights Act—100 years after other civil rights laws that followed the end of the Civil War," Harris told a May 4 panel discussion held to commemorate the 25th anniversary of King's death.

The forum was sponsored by the student-led Cornell Political Forum, which asked four faculty members and a graduate student to discuss civil right from 1968 to 1993.

Other panelists were Associate Professor of Government Mary Katzenstein, who spoke about the women's movement; Paisley Currah, a graduate student in government, who talked about gay and lesbian rights; Associate Professor of Romance Studies Jose Piedra, who spoke about Hispanic studies; and Robert Venables, senior lecturer in the American Indian Program, who spoke of American-Indian rights.

Harris noted the splintering, or fragmenting, of the civil rights movement, as evidenced by the five panelists, each representing a different segment of society, based on gender or ethnic origins. He also chided them for ignoring the African-

American struggle, which he said paved the way for others.

"We helped open the door to the other movements, and they trampled over our backs to enjoy the benefits of equal rights in this country. This country absorbs whomever it wants, from many nationalities and many colors, but it is still denying human rights to African-Americans," Harris said.

Progress of women

In her assessment, Katzenstein described the progress of women in the professions and in reproductive freedom. In 1968, three of 126 students in the Law School were women; today, 76 of 180 are women. And in 1968, when abortion was illegal, a Cornell student who became pregnant and wished to terminate her pregnancy had little choice but to travel to New York City to seek a doctor who would perform an abortion illegally, and often unskillfully.

In describing the gay and lesbian rights movement, Currah traced the movement's origins to the Stonewall riot in New York City 24 years ago and predicted that in the 1990s the movement will become a grass-roots movement again. In the 1980s, the movement became professionalized with lawyers, media experts and activists directing most of the action, but with the battle for sexual rights moving away from national politics and into individual states and local boards of education, there is a need for grass-roots organizing, she said.

Piedra, in his presentation, called the prejudice he feels as a Hispanic at Cornell "insidious and subtle." He recalled that Latinos first proposed the idea of a Hispanic studies program at

Cornell 22 years ago, and that he, finally in 1991, was the program's first director.

He also said that only 15 of the university's 2,000 faculty members are Hispanic—in spite of the fact that by the year 2010 Hispanics will be the largest minority population in the United States. "We are the largest minority at Cornell, and still we don't get any respect," he said.

Venables, who identified himself as "the token white guy in the American Indian Program," said it was difficult to assess the American-Indian rights movement from 1968 to the present because "recognition of those right has not even begun."

The U.S. Supreme Court's 1990 ruling that the North American Indian church's sacramental use of peyote is not protected by the Bill of Rights shows that white America does not understand or appreciate that American Indians have a different world view, Venables said.

The lack of cohesiveness in what can be called the civil rights movement in America in 1993 did not escape the notice of students in the audience in Kennedy Hall's Alumni Auditorium.

Students questioned the fact that each speaker appeared to represent a distinct segment of society, defined by gender or ethnic origins. Several students cautioned against the weakness of identity politics; one student asked why it is difficult for groups to cooperate in cross-cultural coalitions; another asked the panelists what they are doing to support one another's efforts; still another, who identified herself as a "working-class white woman," deplored the lack of attention to class issues.

Physics class *continued from page 1*

cons of each one," said senior Adler, a biology major from Dix Hills, N.Y. Moucha, also a senior majoring in biology who is from Scarsdale, N.Y., said he is "pretty happy with the new book. I tried to put myself in students' shoes who are taking the course now, and I looked for things in the text to help them." The four undergraduates on the revision team, who have been through the course, also surveyed many of the current students, to the point of making pests of themselves to get responses.

Reducing the wait

Those long lines for help were alleviated with a new sign-up board structure. Students can sign up for long help for major problems, or two-minute help when they have just a quick question. "Time In" was added to the sign-up board so instructors could identify those students who had been waiting the longest for either general help or a check of their notebooks. Now, there are rarely more than a few students waiting at a time for guidance from TAs or senior staff.

But why should undergraduates participate in these decisions?

"The basic idea is getting representatives of all stakeholder groups involved so that when you float an idea, things you wouldn't think of are brought up in advance. That way you don't implement something that will cause more problems later on," said Reynolds, the doctoral student leading the team.

"You have a new idea, the whole team takes shots at it. A senior faculty member might have an idea, and a student would say, 'Yeah, but we can get around it this way.' Most ideas are rejected because of the problems we see ahead of time."

And the students, who are paid for their time by the College of Arts and Sciences' Undergraduate Research Program, enjoy help-

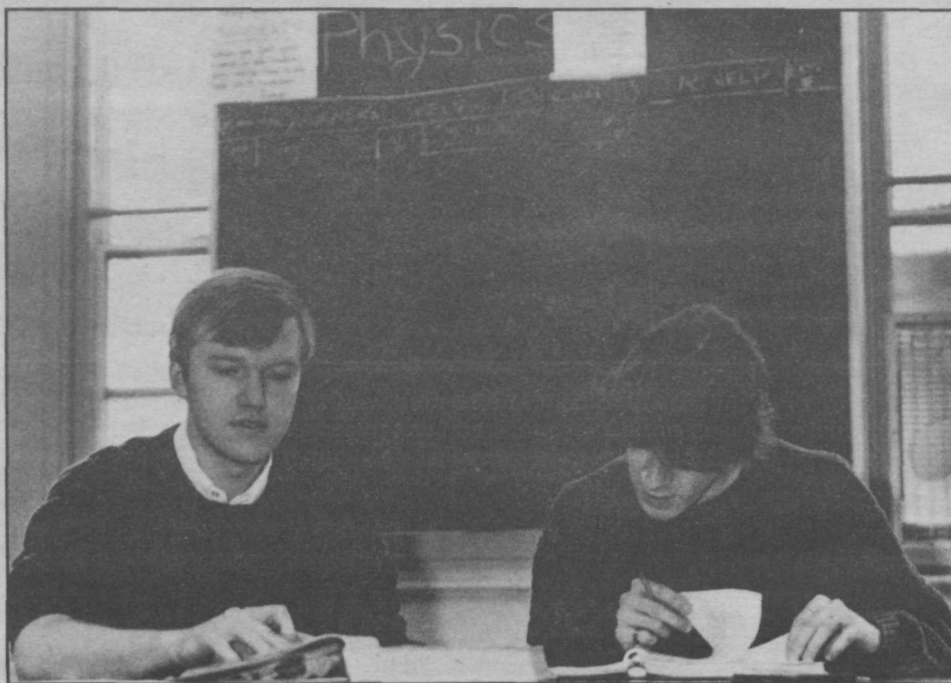
ing improve the course.

going to include many more conceptual questions. We feel that if students are able to understand the concepts, they will be able to solve the problems."

Traditionally, students majoring in physics have been given quantitative problems so difficult that they cannot be solved unless the students understand the concepts first. The

be zero . . ." and so forth.

Members of the team, in addition to Richardson, Cotts, Reynolds, Rodríguez, Park, Adler and Moucha, are: Donna DeCostanzo, an undergraduate; and physics graduate students Stefan Koch, Janet Finch and Abhishek Bhartia. They work with senior faculty and administrators as well. Funding this year came



Peter Morenus/University Photography

Physics 101/102 teaching assistant Stefan Koch (left) helps undergraduate Bill Barrett with a problem at the Learning Center in 280 Rockefeller Hall.

concern now is that the Physics 101/102 courses have moved too far in that direction.

"The question is, how hard, or how analytic, should those problems be for an introductory course for non-majors? I think that more students than we'd like to admit are looking for shortcuts in problem-solving, to bypass the more time-consuming chore of first understanding the concepts," said Cotts, the professor.

As a result, senior staff and faculty are revising some of the test questions. Tests still will have quantitative problems, but more questions will test directly for conceptual understanding.

For example, a question students could answer primarily by rote formula is: "A 1500 kg car travels at a constant speed of 22 m/s around a circular track which is 80 m across. What is the kinetic energy of the car? Zero; 3.6×10^5 J; 3.3×10^4 J," and so on.

But with a revised, concept-based question, students must understand conservation laws to answer the question correctly, for example: "A stationary bomb explodes in gravity-free space breaking into a number of small fragments. Which statement must be true? Kinetic energy is conserved; the sum of the momenta of the fragments must be zero; the sum of kinetic energies of the fragments must

from the President's Fund for Educational Initiatives, a Cornell fund to enhance undergraduate education, in addition to the Undergraduate Research Program and support from the Physics Department for supplies and materials. However, money to continue the project this summer and next year still has not been found.

While some revisions already have been made, others — such as a new grading system — take more time. Reynolds, who is working on his doctoral thesis in part with this experiment in curriculum revision, realizes not all the changes may be made this year.

Incremental changes

"The things we're doing happen very slowly. They may seem like small incremental changes, reducing long lines, changing the exams and so forth.

"But taken together, we're making long-term significant improvements. And these things are difficult to change," he said.

The ultimate goal? "We want to improve the understanding of physics at the level of this course for all students," Cotts said.

"We would like very much for more of them to have a better conceptual understanding of each of the fundamental laws and principles of physics and be able to express and recognize those principles in application."

Kalos *continued from page 1*

ing, including educational uses of the Internet, development of hardware, software and networks for teacher training and for connections among schools in local regions.

"The bill foresees the flowering of developments of the last decade," Kalos told Congress, "developments that have had a vast and positive effect on the scientific community and that now can be turned to the general good of the national community. We are at the convergence of thresholds in video technologies, personal software, exponentially growing supercomputer technologies and high-performance communications that if properly integrated will make a huge qualitative and positive change in our lives."

For example, at the Theory Center researchers are collaborating with scientists at the Wilson Synchrotron Facility to measure the properties of HIV reverse transcriptase, in an effort to design more effective drugs for AIDS.

The need for even greater capability in high-performance computing will be evident soon, Kalos said, "as high school students collaborate with students a thousand miles away using video conferencing; as teachers use Internet information navigators; or as researchers share computer-generated animations of their latest results in electronic team meetings on a national scale."

Kalos asked the committee to include provisions to "recognize the interrelationships among the experimental, precommercial and product facets of a national information infrastructure." Technology transfer should continue to be government-assisted, he said, but the technology operations should be based on commercial networks.

Concerning education and libraries, the bill's proposed program should begin with major national pilot projects that are, Kalos said, "truly interdisciplinary and whose aim is to develop multimedia-based courseware in several areas, such as mathematics, history, English and general science. These pilot projects would involve teachers, academic and multimedia specialists, and computer scientists."

Health care

Concerning health care, Kalos urged that the bill provide for pilot projects where high-performance computing can help improve health care delivery. These projects would provide, Kalos said, "computer-assisted interpretation of medical tests, especially radiology, remote consultation and multimedia integration of patient records, including radiology and other test records."

Kalos also asked for language in the bill that "affirms the role of high-performance computing in such areas as drug design, analysis of medical images and the design of improved prostheses."

Kalos concluded: "The broad response that this bill seeks will enhance the aims of reaching throughout the national community, but I would caution that the needs are urgent. The speed with which we can make a start is an essential ingredient of success."

CORNELL Teaching

ing improve the course.

"I have been really upset," said Park, a biology and society major from Rochester, Minn., who still was trying to grasp concepts of relativity midway through the semester.

"I was glad to have a chance to revise it. I see a difference already. I definitely get the concepts more, and I'm doing better on tests," she added.

Music to the ears

That's music to the ears of people like Jerry Rodríguez, a lecturer in the course and a member of the revision team. "In the past, students taking this course were just solving problems, they were not talking about physics," he said. "The emphasis now is on a more conceptual understanding of physics. The new tests are



Charles Harrington/University Photography

Graduate student Su-Mei Yen (left) and Oya Yildirim Rieger, numeric files librarian at Mann Library, examine a graphical display of U.S. Census information for New York. The software enables students in one of Mann's microcomputer centers to obtain visual displays of complex information about population trends and characteristics of New York — one of many reasons why the American Library Association has given Mann its Library of the Future Award.

Mann Library *continued from page 1*

While Mann Library staff members keep in constant touch with developments in information technology, they have not turned their backs on the printed record of knowledge. They are implementing full-text and graphics retrieval for journals published by the American Chemical Society — taking information retrieval into new territory. Mann staff also are providing leadership in the development of a national plan for the preservation of literature in agricultural sciences, and they are working to provide core collections of this literature on compact discs to Third World institutions. In addition, Mann Library is recognized as a national leader in preserving printed books and journals.

Instructional program

The library's instructional program has enabled students and faculty to consider keyboards, screens and computer software their allies. The program's philosophy is that users of electronic libraries, such as the Gateway, need information technology skills, and it is the responsibility of librarians to teach these skills.

More than 31,000 students, faculty and staff have received instruction in information access and management from Mann staff since 1983.

Mann Library supports the research, instruction and extension work of students, faculty and staff in the College of Agricul-

ture and Life Sciences, College of Human Ecology, Division of Nutritional Sciences and Division of Biological Sciences. The library also serves the citizens of New York as a land grant library.

The library building was constructed in 1952 and houses a print collection of more than 900,000 volumes. The building contains two microcomputer centers and provides research and study space to a primary user population of almost 10,000, including 4,500 undergraduates. An addition to the building, scheduled to be completed within five years, will double Mann Library's size and will feature state-of-the-art technology for instruction and information storage and access.

Mann Library was the recipient of a 1984 John Cotton Dana Library Public Relations Award for "an innovative, creative and effective public information program that dramatically convinced students to cooperate in a campaign to keep food and drink out of the library."

The Mann staff have co-written a book: "Public Access Microcomputers in Academic Libraries: The Mann Library Model at Cornell," edited by Howard Curtis. (Chicago, IL: American Library Association, 1987.)

The award will be presented during the ALA Annual Conference, June 26 through July 1, in New Orleans.

ILR book explores impact of women on labor force

By Albert E. Kaff

A new book published this spring at Cornell reports on how the needs of women workers will influence the agenda of labor movements in the United States in years to come.

"Women are the new proletariat worldwide, and the contradictions they experience and articulate now drive workplace reform," writes Dorothy Sue Cobble, editor of *Women and Unions: Forging a Partnership*, published by ILR Press, a division of the School of Industrial and Labor Relations.

Cobble, associate professor of history, women's studies and labor studies at Rutgers University, contends that economic and social reforms in the past decade have put women on the front line of social change.

Also director of the Center for Women and Work at Rutgers Institute for Management

'If we stop treating home work as a singular, unified category in opposition to on-site work, it is possible to envision how organizing home workers would be beneficial to them as well as their counterparts in offices or factories.'

— Judith Gerson, Rutgers University

and Labor, Cobble argues that most working women face low pay, job segregation, inaccessible child care and a "second shift" at home. But the labor movement has initiated new ties with women and minority workers so as to adjust to fundamental changes in the workplace, she says.

40 labor scholars

The 464-page book contains writings of more than 40 labor scholars and activists who discuss how unions and working women best can serve each other. Here are some of the points made by contributors:

- Margaret Hallock, professor and director of the University of Oregon Labor Education and Research Center, argues that an apparent reduction in the gap between male and female salaries in the 1980s reflected stagnation in men's wages rather than progress in women's pay.

- While temporary work is said to offer flexibility for women workers, Maureen Martella, an administrator, researcher and teacher in the Honors Program at Temple Uni-

versity, contends that "flexibility really meant time off between assignments without pay."

- Judith Gerson, who teaches sociology and women's studies at Rutgers, challenges an assumption by unions that temporary and home workers cannot be organized. "If we stop treating home work as a singular, unified category in opposition to on-site work, it is possible to envision how organizing home workers would be beneficial to them as well as their counterparts in offices or factories."

- Kathleen Christensen, professor of environmental psychology and director of the Work Environments Research Group at the Graduate School of City University of New York, suggests how unions can reach out to workers isolated in their homes: "Unions could use an affiliate or associate membership arrangement as a way to provide education and benefits coverage to seek out others in the community doing similar work at home."

- In an interview with Ruth Milkman, associate professor of sociology at the University of California at Los Angeles, Katie Quan, who helped organize a successful strike of Chinese garment workers in 1982, explains how immigrant women can be organized: "The response of the workers [in 1982] destroyed the myth that Chinese workers don't stand up for their rights because they work for Chinese bosses or because they're from the same part of China or related in some way — the idea that national interests prevail over class interests."

Clerical workers

- Richard Hurd, professor and director of labor studies at the ILR School, deals with clerical workers. In 1980, some 80 percent of the 18 million workers employed in office clerical, administrative support and related occupations were women. Although traditional union strategies were often believed to be unappealing to clerical workers, Hurd reports how grass-roots organizing campaigns succeeded with clerical workers at colleges and universities.

- The Harvard Union of Clerical and Technical Workers organized 3,700 employees who worked in 2,000 offices and laboratories located in 400 buildings.

Will isolated victories in organizing women lead to fundamental changes in the labor movement? Ruth Needleman, associate professor of labor studies at Indiana University, answers: "The more women tell the truth with each other, the greater will be their ability to know what in union culture is outdated or unfriendly. And the greater [will be] their capacity to invent alternatives and create a culture truly reflective of the diversity of the new work force."



Meeting with Sen. Alfonse D'Amato (center) to discuss President Clinton's plan for national service are (from left) Cornell students Tamara Webb '95, Danielle Rinsler '94, and Daniel H. Lee '95, and Harvard University student Allison Wienberg '96.

Students discuss service plan with leaders in Washington

By Daniel H. Lee

Representatives of the Student Assembly met with members of Congress and White House officials recently to discuss President Clinton's national service initiative.

The two-day trip to Washington included meetings with Sen. Alfonse M. D'Amato and a member of Rep. Maurice D. Hinchey's staff, and it ended with a meeting at the White House with officials from the President's Domestic Policy Council and Office of National Service.

The purpose of the meetings, organized by the Ivy Council, an association of student government leaders from the eight Ivy League institutions, was to promote the national service plan. The representatives from Cornell were Student Assembly President Pankaj K. Talwar '93, Public Relations Vice President Daniel H. Lee '95, and Representatives Tamara Webb '95, Andres Gonzales '96 and Danielle Rinsler '94.

D'Amato told the group that he look forward to participating in the debate on national service and direct lending, and that he will "continue to fight to ensure that middle-class students are not shut out of higher education." D'Amato is the ranking Republican on the Senate Banking Committee and a senior member of the Senate Appropriations Committee.

Hinchey's office said that the congressman intends to "work on the further development

of the president's national service initiative," and that Hinchey looks forward to the day "when a life of public service is considered, once again, an honorable profession. I know of no better way to encourage the next generation to embark on a public service path than to expose them to service through this type of initiative."

At the White House, student representatives spoke with officials from the Domestic Policy Council and the newly created Office of National Service. Topics included questions about the source of funding needed to run the program and the process in which students would be selected to join.

The students learned that the "Summer of Service" plan, a pilot program that would provide about 1,000 jobs for students this summer, will be implemented even though it was part of the defeated stimulus package, because the White House was able to secure \$15 million from the Defense Department.

The components of the national service program include creation of a trust fund that would pay students up to \$10,000 for college, in exchange for two years of community service; accounts to provide income-contingent repayment of loans, giving borrowers opportunity to spread their loan repayments over time as a percentage of their income; and the implementation of one-stop direct student loans intended to save taxpayers billions of dollars.

Congressional visit



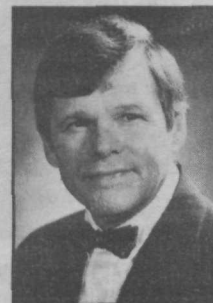
Teri Bloom

U.S. Rep. Carolyn Maloney (right), a newly elected member of Congress who represents the district that includes Cornell Medical College, takes a get-acquainted tour of the Medical College recently with Dr. Lorraine Gudas (left), chair of the Department of Pharmacology and the Revlon Pharmaceutical Professor of Pharmacology and Toxicology.

Appointed Peter J. Bruns, Biological Sciences

Peter J. Bruns, professor of genetics and development, has been reappointed to a second five-year term as director of the university's Division of Biological Sciences.

The division comprises seven "sections," as biology departments at Cornell are known, and the L.H. Bailey Hortorium on campus and the Shoals Marine Laboratory on the Gulf of Maine. Also operated by the Division of Biological Sciences are the Cornell Institute for Biology Teachers, a continuing education and curriculum-develop-



ment program, and the Hughes Scholars Program for undergraduate students.

With a faculty of 102, as well as 1,462 undergraduate biology majors and 331 graduate students, the Cornell Division of Biological Sciences is the nation's leading producer of biology Ph.D.s earned by women and the number one source of undergraduates who subsequently earn Ph.D.s in biology. The division has an annual research and teaching budget of about \$28 million.

Bruns joined the Cornell faculty in 1969 after earning a Ph.D. in cell biology from the University of Illinois.

He served as chairman of the Cornell Section of Genetics and Development from 1980 to 1985 and was first named director of Biological Sciences in 1987.

Dennis Williams, Learning Skills Center

Dennis A. Williams has been appointed to a five-year term as director of the Learning Skills Center. He has been acting director since February 1992.

Williams will continue as an English Department senior lecturer in the John S. Knight Writing Program.

"Dennis' work at the center, along with his teaching and involvement with colleagues, has demonstrated his commitment to Cornell and to students," said David S. Yeh, assistant vice president for academic programs and



campus affairs.

Williams, who graduated from Cornell in 1973 with honors in English, was the education editor at *Newsweek* before coming back to Cornell. He has written a biography of Richard Pryor and a novel, *Crossover*.

CALENDAR

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

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

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

DANCE

Cornell International Folkdancers

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

May 16: North Room, Willard Straight Hall, advanced Balkan teaching, 6:30 p.m.; intermediate/beginning teaching, 7:30 p.m.; request dancing, 8:30 p.m.

CU Jitterbug Club

Lindy Hop dance classes, Thursdays, May 20 through June 17, at 209 N. Aurora St.; Beginners, 7:15 p.m.; Intermediate/Advanced, 8:30 p.m. \$35 in advance, \$40 at the door. For information and registration, call Bill at 273-0126.

Israeli Folkdancing

Thursdays, 8 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.

• "Art Nouveau Posters" is on display through June 13.

• "Chemistry Imagined," through June 13.

• "Up Close: Contemporary Art From the Mallin Collection," through June 13.

• "Photogenics," through June 27.

• On the air: Every Wednesday at 2 p.m., museum staff members and guests will appear on Casey Stevens' program on WHCU 870 AM.

• Artbreak program: On May 16 at 3 p.m., Professor Roald Hoffmann, the John A. Newman Professor of Physical Science, will present a special program about his work in "Chemistry Imagined." Participants are invited to remain in the museum after the presentation for complimentary refreshments and informal discussion with Hoffmann.

• Free tours: Every Saturday and Sunday from 1 to 2 p.m., the museum offers a free tour of its collections and exhibitions. The Johnson Museum also offers foreign language tours by appointment. For more information and to schedule a tour, please contact the education department at 255-6464.

Kroch Library

"Nature's Garland: An Exhibition of Books and Prints From the Botanical Collections of Cornell University Library," Exhibit Gallery, Level 2B, Kroch Library, through June.

Martha Van Rensselaer Hall

An exhibit of historic batik textiles from Indonesia is now on display in the Cornell Costume Collection Showcase outside room G19A in MVR Hall. The exhibit will continue through May.

Olive Press

William Wegman, visiting artist in residence, through May 17.

FILMS

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

and Sunday Matinees, \$3.50. All films are held in Willard Straight Theatre except where noted.

Thursday, 5/13

"The Bad Lieutenant" (1992), directed by Abel Ferrara, with Harvey Keitel, Brian McElroy and Frankie Thorn, 7:45 p.m.

"Used People" (1992), directed by Beeban Kidron, with Shirley MacLaine, Jessica Tandy and Kathy Bates, 10 p.m.

Friday, 5/14

"Pepi, Luci, Bom" (1980), directed by Pedro Almodovar, with Carmen Maura, Felix Rotaeta and Olvido Gara, 7:30 p.m.

"Chaplin" (1992), directed by Richard Attenborough, with Robert Downey Jr., Geraldine Chaplin, Dan Ackroyd and Kevin Kline, 7:30 p.m., Uris.

"The Bad Lieutenant," 9:30 p.m.

"Heathers" (1989), directed by Michael Lehmann, with Winona Ryder, Christian Slater and Shannen Doherty, 10:30 p.m., Uris.

"Notorious" (1946), directed by Alfred Hitchcock, with Ingrid Bergman, Cary Grant and Claude Rains, midnight.

Saturday, 5/15

"Once Upon a Time in China II" (1992), directed by Tsui Hark, with Jet Li and Rosamund Kwan, 7 p.m., Uris.

"Notorious," 7:15 p.m.

"Used People," 9:25 p.m., Uris.

"The Bad Lieutenant," 9:30 p.m.

"Heathers," midnight, Uris.

Sunday, 5/16

"Used People," 4:30 p.m.
Student Films II, 8 p.m.

Monday, 5/17

"The Falls" (1980), directed by Peter Greenaway, with Peter Westley, Michael Murray and Lorna Poulter, 8 p.m.

Tuesday, 5/18

"Sabrina" (1954), directed by Billy Wilder, with Audrey Hepburn, William Holden and Humphrey Bogart, 7:35 p.m.

"Once Upon a Time in China II," 10 p.m.

Wednesday, 5/19

"Labyrinth of Passion" (1982), directed by Pedro Almodovar, with Cecilia Roth, Imanol Arias and Helga Line, 7:45 p.m.

"National Lampoon's Loaded Weapon I" (1993), directed by Gene Quintamo, with Emilio Estevez, Samuel Jackson and Jon Lovitz, 10 p.m.

Thursday, 5/20

"Delicatessen" (1991), directed by Jean-Pierre Jeunet and Marc Caro, with Dominique Pinon, Jean-Claude Dreyfus and Marie-Laure Dougnac, 7:45 p.m.

"National Lampoon's Aimal House" (1975), directed by John Landis, with John Belushi, Tim Matheson and Donald Sutherland, 10 p.m.

David Brickman will perform May 16.

MUSIC

Department of Music

• Ellen Johnston and Wayne Loo will give a free student voice recital with old- and new-time favorites May 14 at 8:15 p.m. in Barnes Hall. Featured compositions are Mozart's "Vedrai, carino" and "Batti, batti" from *Don Giovanni*; "Deh vieni, non tardar" from *Le Nozze di Figaro*. Franz Schubert's *Geheimes, An den Mond, Abendstern* and *Lachen und Weinen*. Handel is represented by *Angels, ever bright, Care selve* and *Oh, had I Jubal's lyre*. In the end, Duke Ellington, Irvin Mills and Manny Kurtz share in the *In a Sentimental Mood*.

• Principal second violinist of the Rochester Philharmonic David Brickman and pianist Michael Salmirs will perform 20th century music on May 16 at 4 p.m. in Barnes Hall. This free

concert features Stravinsky's *Duo Concertant*, Lang's *Illumination Rounds*, and the *Third Sonata* of Enesco. Both artists have appeared in orchestras, chamber ensembles and as soloists. Salmirs is artistic director of the Finger Lakes Chamber Ensemble and teaches at Hobart and William Smith Colleges. Brickman has performed with the Rochester Chamber Orchestra and the Eastman Philharmonia and has served as concert master of the Milwaukee Symphony Orchestra this past season.

Bound for Glory

May 16: Albums from the studio. Sundays from 8 to 11 p.m. on WVBR-FM, 93.5.

RELIGION

Sage Chapel

Peter Gomes of Memorial Church, Harvard University, will give the sermon May 16 at 11 a.m. Music by the Sage Chapel choir, under the direction of William Cowdery, acting university organist. Sage is a non-sectarian chapel that fosters dialogue and exploration with and among the major faith traditions.

African-American

Sundays, 5:30 p.m., Robert Purcell Union.

Catholic

Weekend Masses: Saturday, 5 p.m.; Sunday, 9:30 a.m., 11 a.m. and 5 p.m., Anabel Taylor Auditorium. Daily Masses at 12:20 p.m. in Anabel Taylor Chapel. Sacrament of Reconciliation, Saturday, 3:30 p.m., G-22 Anabel Taylor Hall. Mass schedule for Ascension, May 20, is 12:20 and 5:15 p.m. in Anabel Taylor Chapel.

Christian Science

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

Episcopal (Anglican)

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

Friends (Quakers)

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

Jewish

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

Reform: Fridays 6 p.m., chapel, Anabel Taylor Hall; Conservative/Egalitarian: Fridays, 6 p.m., Founders Room, and Saturdays 9:30 a.m., Founders Room, Anabel Taylor Hall; Orthodox: Friday, call 272-5810 for time, and Saturday, 9:15 a.m., Edwards Room, Anabel Taylor Hall.

Korean Church

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

Muslim

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

Protestant Cooperative Ministry

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

Sri Satya Sai Baba

Sundays, 10:30 a.m., 319 N. Tioga St. For details call 273-4261 or 533-7172.

Zen Buddhist

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

SEMINARS

Astronomy & Space Sciences

"Chip Off of Vesta: A New Link in the Asteroid-Meteorite Connection," Rick Binzel, MIT, May 13, 4:30 p.m., 105 Space Sciences.

Biochemistry, Molecular & Cell Biology

"Cellular and Adhesive Interactions That Regulate Development of the Retina and the Primary Visual Projections," Louis Reichardt, Howard Hughes Medical Center, University of California, co-sponsored with neurobiology & behavior, May 14, 4 p.m., large seminar room, Biotechnology Building.

CISER

"Welfare Change and Demand Modeling: Trade-off Between Energy Tax and Health Costs," H. Hong, agricultural economics, May 17, noon, 401 Warren.

Genetics & Development

"Oligonucleotide Libraries and Drug Discovery," Barry Polisky, Nexagen Inc., May 17, 4 p.m., conference room, Biotechnology Building.

"Genetic Mapping of the Restorer Locus in *Petunia*," Aaron Calfee, May 19, 12:20 p.m., small seminar room, Biotechnology Building.

Immunology

"Cloned Excretory-Secretory Antigens Mediating Mucosal Immunity in *Trichinella spiralis* Infections," Prema Arasu, Baker Institute, May 14, 12:15 p.m., Boyce Thompson Auditorium.

Plant Breeding & Biometry

"Using Multiple Types of cms to Increase Cytoplasmic Diversity During Maize Hybrid Production," Julia Vrebalov, graduate student, May 18, 12:20 p.m., 135 Emerson Hall.

South Asia Program

"Patterns of Girl Neglect in South Indian Villages," Sabu George, South Asia Program, May 14, 12:15 p.m., G-08 Uris Hall.

THEATER

Department of Theatre Arts

• A play reading of "JFK, Elvis & Me" by Cornell playwright Jeffrey Fischer will be held May 15 at 8 p.m. in the Black Box Theatre. Admission is free. The play focuses on JFK's experiences after 12:30 p.m. on Nov. 22, 1963. "JFK, Elvis & Me" explores the consequences of obsession through the metaphor of the Kennedy assassination mystery.

MISC.

ACSW Meetings

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

Alcoholics Anonymous

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

Cooperative Extension

Home Composting Workshop: A home composting workshop will be held today, May 13, at 7 p.m. at the Cooperative Extension offices. Call 272-2292 for more information or to register.

Latin American Studies Program

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

Writing Workshop

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

SPORTS

Home contests in ALL CAPS

Women's Crew

May 16, EARC at Lake Waramaug

Women's Track

May 15-16, ECAC Champs. at Fairfax, Va.

Chronicle schedule

The last weekly issue of the *Cornell Chronicle* will be May 27. Beginning June 10, the *Chronicle* will be published biweekly. The submission deadline for the Calendar will remain 10 days prior to publication date. Thank you.

WorkPlace

Sharing human resource perspectives

Produced by University Human Resource Services

Reflections on the Classification Review Study

—Beth I. Warren, associate vice president for human resources

Dear Colleagues:

Throughout this past academic year we have talked about the many changes that are occurring in the world of work both nationally and throughout Cornell. We have also talked about some of the ways we as an institution and as individuals can begin to prepare for these changes, positioning ourselves so that we can respond flexibly and competitively to those changes. Indeed, we ourselves can be change agents, shapers of our own destinies, exercising our resources and expertise to mold the very changes to which we will need to respond.

I'd like to briefly summarize some of the themes we have explored already, and then to show how they apply to the Classification Review Study. I know there is a great deal of skepticism about this study, a skepticism I believe stems largely from the fact that this study has taken much longer than initially projected and whose process has seemed to many both obscure and abstract.

Study Nears an End

But I am happy to say that this very significant compensation research project is nearing its end. It took four years, but this undertaking was much more complex than its originators anticipated. It involved both quantitative and qualitative analysis—an examination of specific jobs, and an understanding of how all those jobs relate to each other and to the goals and directions of the university.

In the end, the Study Team, the Steering Committee, and I needed to spend a fair amount of time looking at the strategic issues of Cornell to determine how this project would support the strategic directions of Cornell. In University Human Resource Services we also needed to create a vision of where we are going in human resource management practice, and to undergird the Classification Review Study with a coherent philosophy and corresponding supportive policies. (In fact, I prefer calling this project the Compensation Research Study because it really did become much more than the review of the classification of jobs that is implied by calling it the Classification Review Study.) And, in the colleges and units, we needed to meet with and discuss the results of the study

and its implications with each dean and administrative unit head, so that they understood not just what had been done through the study, but the long-term implications involved in maintaining its integrity at the decentralized levels.

Over the next month you will be hearing a great deal about the study. In the next several days all faculty and staff will receive a letter from Provost Malden C. Nesheim and Senior Vice President James E.

tion to respond to and shape change are much more important in the long run—both for individual staff and for the university at large—than any of the specific immediate outcomes that will happen to individual titles, classifications, or, in some cases, salaries. Today I'd like to sketch out the philosophical framework that undergirds this very significant compensation research project.

work so that we can build into our individual and organizational frameworks room for horizontal job enhancement as well as vertical enhancement. Reprinted below is his diagram of this inverted donut, showing how at the center is the core of the job—its essential functions, clearly delineated in the job description—and in the outer circle are the areas for individual or organizational creativity, innovation, and initiative. These outer areas can be developed within a particular job, as a person acquires new skills and new learning, or by moving between jobs that may be different in their scope of responsibilities but that draw upon the same core competencies.

When work is seen in this way, the skills, knowledge, experience, and competencies that will be needed for the future will be the skills of a generalist rather than a specialist. On an organizational level, as more people become generalists and, through their access to computers, have ever increasing access to all sorts of information, the organizations themselves will become more "democratized," less hierarchical.

On an individual level, national studies already indicate that rather than pursuing a single career through a progression of positions and promotions up the career ladder, most Americans in the workforce will make several changes in the course of their worklife. As a result, most of us will find our self-definition in the various talents and competencies that allow us to perform our jobs rather than in a particular current job or title itself.



REFLECTIONS

On The Horizon



Learning and Living with Change

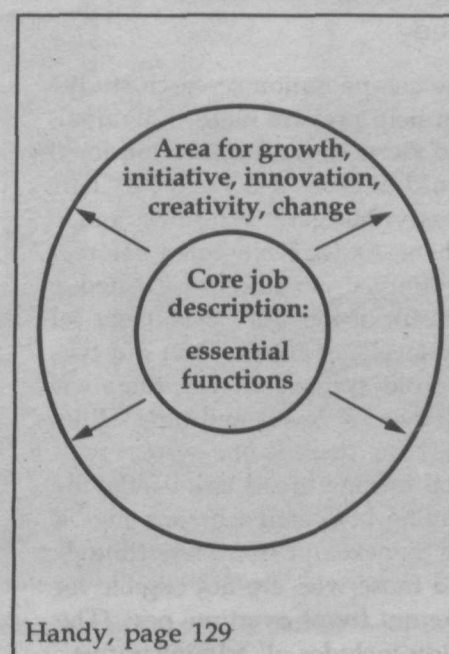
Many months ago we talked about learning and living with change (*The Cornell Workplace*, 10/1/92 issue). At that time I suggested that central to our dealing with change is the concept of continuous learning. Continuous learning is important because it enables us to reframe our questions and our searches for creative solutions in ways that give us—both as indi-

Morley, Jr. announcing that the study is nearing implementation and inviting all faculty and staff members to a series of large-group discussions that the Study Team, the Steering Committee, and I will be holding toward the end of May. Next week there will be a special supplemental issue of *The Cornell Workplace* on the study. Toward the end of June each staff member who was included in the study will receive notification about the study's effects on their job title, band, and, where applicable, salary. Implementation of these results will be effective in the beginning of July.

So why the "Reflections" today? Because the ways in which this project supports the strategic directions of the university and enables us as individuals and as an institu-

viduals and as an organization—the flexibility to respond to the many rapid changes that are taking place around us. Continuous learning also gives us the opportunity to develop what Charles Handy calls "work portfolios": "A work portfolio is a way of describing how the different bits of work in our life fit together to form a balanced whole." (*The Age of Unreason* [Boston: Harvard Business School Press, 1989], 183) Real learning has to give us the skills and tools necessary for building this work portfolio, for creating room for horizontal expansion in our work lives.

Charles Handy uses the analogy of an inverted donut to illustrate how we can conceptualize our current jobs and our core definitions of



Handy, page 129

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Reflections

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Models from New Science

Also during this past year, I have discussed how Margaret Wheatley, in *Leadership and the New Science: Learning about Organizations from an Orderly Universe*, (San Francisco: Berrett-Koehler Publishers, 1992) takes this line of thought another step further. In the past, she argues, organizations based their structure and operations on a Newtonian view of the world, where one understood things by breaking them down into parts and examining those parts: "We manage by separating things into parts, we believe that influence occurs as a direct result of force exerted from one person to another, we engage in complex planning for a world that we keep expecting to be predictable." (6). In this mechanistic world, Wheatley notes, "responsibilities have been organized into functions. People have been organized into roles. Page after page of organizational charts depict the workings of the machine: the number of pieces, what fits where, who the big pieces are. . ." (27) She notes that the recent developments in scientific theory, which move toward a holistic, systemic view of understanding, are related to the recent developments in the field of management theory:

In motivation theory, our attention is shifting from the enticement of external rewards to the intrinsic motivators that spring from the work itself. We are refocusing on the deep longings we have for community, meaning, dignity, and love in our organizational lives. We are beginning to look at the strong emotions that are part of being human rather than segmenting ourselves . . . or believing that we can confine workers into narrow roles, as though they were cogs in the machinery of production. As we let go of the machine models of work, we begin to step back and see ourselves in new ways, to appreciate our wholeness, and to design organizations that honor and make use of the totality of who we are. (12)

The Compensation Research Study

The compensation research study can help prepare us as individuals and Cornell as an institution for the world of work described by Charles Handy, Margaret Wheatley, and others. As we have noted before, the unified job structure created as a result of the study has fewer salary levels, or bands, than did the two old systems. Before, there were thirteen GP levels and nine CP levels. Now there is one system with a total of nine broad pay bands, including both staff who are eligible for (nonexempt from) overtime pay and those who are not eligible for (exempt from) overtime pay. (The study includes all administrative

and support staff except those in bargaining units and those at the medical college.) In some bands there are both overtime eligible and overtime ineligible positions.

It logically follows, then, that if more jobs are included in each band, some people are grouped together in the same band who used to be either "higher" or "lower" than others in the old system. I.E., there is less hierarchy. It also follows that since the bands are broader, the range between each level's minimum hiring rate is greater. This allows for greater flexibility within each band, both in terms of internal mobility and in terms of enhancements to current positions.

The new system has also simplified the job title structure, reducing the number of titles from over 2,000 to approximately 515, and has grouped these titles according to job families (communications, com-

puters, etc.). The reduced number of job titles and the creation of job families will make it easier for staff to understand the relative relationship of each job to every other job and to determine what career development options they might wish to consider, including both horizontal and vertical movement.

New Paradigms

Without getting into the details of the study (since those will be covered in the special insert to *The Cornell Workplace*), I'd like to delineate some of the implications of having job families, fewer and wider bands, and fewer titles. I'd also like to suggest some of the changes that these implications will cause in the ways we relate to each other and think about ourselves.

As noted above, this new structure supports the direction of the university to become a flatter, less hierarchical, more flexible organiza-

tion. The wide bands will allow for movement within a band for staff to develop the breadth and depth of competencies that will be needed in the future. The compensation structure, programs, and policies will support mobility in terms of job and work enrichment by emphasizing a broader spectrum of competencies—fostering generalists. The university will thus be better able to respond to its changing needs by finding appropriate competencies from within. This could reduce the current practice of looking for specialists who might fulfill the need of the moment but whose competencies are so specialized that in-house mobility after the need has disappeared is next-to-impossible. The new system will promote a culture in which people will be encouraged to use their talents in multifaceted ways instead of in just one way, able to realize their full potential as members of a quality workforce. (continued on p. 3)



Cornell Employee Assistance Program Expands Services to Campus Community

Beginning June 1, 1993, the Employee Assistance Program sponsored by Cornell University will expand its services to the Ithaca-based Cornell campus community. Over the past few months, Family & Children's Service of Ithaca, Inc. and Family Enterprises, Inc. have worked with University Human Resource Services to structure a program for Cornell faculty and staff designed to compliment the initiatives of the University Human Resource Faculty/Staff Health Program.

Expanded Hours

As of June, the number of counseling sessions available for faculty and staff and their dependents will increase from 8 to 10 sessions. Appointments to see an Employee Assistance counselor may be scheduled Monday through Friday at either a downtown or campus location. Evening hours are also available Monday through Thursday at the downtown offices of Family & Children's Service of Ithaca. By offering a greater number of counseling sessions through the Employee Assistance Program, we are able to help faculty and staff and their dependents work through a broader range of personal, family and work-related problems. This service is free and confidential. **For more information on the counseling services available through the Employee Assistance Program, call (607) 273-1129.**

Serving Teens and Parents

Just in time for summer, a new service is being added to the Cornell Employee Assistance Program. **TeenLine**, a phone assistance service for parents and teenagers, will

be available to the Cornell community. Offered through Family Enterprises, Inc., this toll-free line is staffed by professionals experienced in working with adolescents. These professionals will be available to answer questions about problems teenagers are experiencing and the most appropriate method to deal with the situation. TeenLine is not a diagnostic service, but an educational resource to help parents become more aware of the range of options available. TeenLine is also a resource for teenagers. The 800 line is available for teenagers to use and ask questions on a variety of issues, including substance abuse, sexuality, school problems, communication with parents and other concerns. This service offers teens a chance to talk to someone, have questions answered, and hear about additional resources, without giving a name. **Call TeenLine at 1-800-242-TEEN (8336) whenever you have questions about adolescent care. The call costs you nothing—the guidance may be invaluable.**

Serving Those Dealing with Eldercare

In recognition of the fact that today one in four working adults provides care for a parent or older adult relative, Cornell University has also added ELDER CARE to the services available through the Employee Assistance Program. ELDER CARE is a consultation and referral program of Family Enterprises, Inc. which provides trained specialists to assist individuals facing the difficulties of trying to balance the needs of family and job responsibilities with those of an aging relative. This service is available free of charge and may be

used as often as the employee wishes. When you call ELDER CARE, a staff member can assist with the following:

- Provide expert help in understanding aging.
- Clarify and assess your family's elder care needs.
- Conduct a search for resources to meet your elder's identified needs.
- Provide information on local service providers, including the cost and availability of services. The same information is also mailed to you.
- Conduct follow-up with you to determine if your elder care needs have been met or if additional assistance is needed.
- Provide you with a copy of *The Family Guide to Elder Care*, which contains information about the many aspects of aging and ways to meet the related lifestyle changes. The book also contains information and check lists to help caregivers evaluate services.

The ELDER CARE consultation and referral service can be reached by calling 1-800-392-5374.

Family & Children's Service of Ithaca, Inc. and Family Enterprises, Inc. are pleased to have the opportunity to work with University Human Resource Services to provide a comprehensive Employee Assistance Program designed to serve the needs of the Cornell staff and faculty community. **For more information about the Employee Assistance Program sponsored by Cornell University, call (607) 273-1129 or contact Linda Staff, the EAP campus representative, at (607) 255-6276.**

Reflections

(continued from p. 2)

The product of this research study calls for new metaphors, then, new ways of thinking about ourselves relative to our title, our job, our position. Each of us can no longer define ourselves or others by the position we hold or where we "are" in the hierarchical stratification of the old system. We will be valued not for the title we hold but for the work we do.

Because of the many factors that were used in the evaluation process, individual "rank" will not be dictated solely by how many people someone supervises or by the size of someone's budget. This will require a major shift in thinking for some people, who in the past have used these criteria as a tool to gauge someone's importance or what someone's standing was in the university. Moreover, because of the broad bands, many people who used to think of themselves as "above" or "below" someone else will now be located "side-by-side,"—which, significantly, will reinforce the team-based, networking mode the university is moving in through such efforts as the Quality Improvement Process.

The days of the proliferation of new positions and the shadow proliferation of salaries through constant reclassification are gone. They were outmoded in any case, as the constant reclassification of jobs as a lever to reward good performance set up a system for potentially inflating the former work and salary structure. By contrast, the wider bands and fewer titles will mean that individuals, supervisors, and departments will need to think seriously about how they reward quality work, and to act with integrity and responsibility when such rewards are financial in nature.

The issues facing the university in the next decade mean that though we must be competitive in attracting and retaining a workforce that meets our institutional needs, we must do this in a more prudent way. We need to look at the broad concept of cost-containment, not only as it applies to the benefits that Cornell offers, but as we assess the design of work and what is really needed to accomplish the goals of the university. This assessment needs to be balanced against the competitive salaries that are needed to support those goals. Cornell can no longer afford to artificially inflate a system that can only be adjusted for by our being in a constant layoff mode.

In short, the new compensation structure calls for a major cultural shift—we must learn not to value our own self-worth by the band we are in, but by the competencies we have gained. We are going to need to see each other as colleagues and not as "CP this" or "GR that." Much of the recognition will come through the shared pride we can have in the quality of work we

have achieved and the quality of life we have attained.

The new structure also supports a concept I have been promoting for some time; i.e., that we can no longer afford to think of ourselves as "non-anything." We cannot let one law, in this case the Fair Labor Standards Act (FLSA), determine our entire culture as a community of learners and our self-concept as individuals. Yes, we must comply with that law, but for too long it has been used to make social and cultural distinctions between groups of people where none needed to be made.

Therefore, upon close examination, you will find the new compensation system to be one continuous, integrated system, a seamless flow between those that might be called overtime eligible and those who are not eligible for overtime pay. Except where the law makes the distinction, we will be referring to all those in this system as "staff," not as "exempt" or "nonexempt" employees.

The new system, which pays attention to large rather than to minute differences between jobs, will be exciting to many people and disappointing to others. But just as many have embraced the philosophical tenants undergirding legendary service, recognizing that much important work is done by those who are closest to our clients, some supervisors and managers will need to make a paradigm shift in their perceptions of their roles. In the future, supervisors will need to play increasingly coaching, mentoring, and envisioning roles rather than controlling, manipulating, and "bossing roles." This compensation system underlines the fact that we are a community of workers, a community of colleagues, a community of inter-related functions which can no longer be driven by artificial stratification.

Conclusion

There will be many questions as we move through implementation, and we welcome these questions and comments as we become more familiar with the adjustments that the new system and the new paradigms will require. There will also be opportunities for staff to discuss with their supervisors any questions they may have about how the study might have affected their particular jobs. We encourage open dialogue within your units and across campus.

At this point, I would like to thank the whole community for your attentive work throughout the process of the study, and for your patience as this project has evolved. My appreciation goes out to all the staff members and their supervisors who filled out the initial questionnaires and, where needed, subsequent updates and refinements; to the college and unit administrators for their many hours of review and feedback, including this past year of very intensive review at the unit level; to our colleagues on the Steering Committee and the Evaluation Committee, who grappled with the design of the study process and the

implications of the study results, and determined how those could best dovetail and support the strategic directions of the university; to the budget officers who spent long hours looking at costing models and helping us choose one that best fits the future needs for both flexibility at the individual, college and unit levels and fairness at the university level; to the computer experts who helped examine the data from many lenses to ensure its integrity and to integrate the new system with other systems across campus; to the executive staff and deans, who gave much thought to the policy and philosophy of pay; to the many internal as well as external consultants. Last—but certainly not least—I wish to thank all the staff of University Human Resource Services for the fortitude, professional commitment, and determination to be as fair and sensitive as possible to an issue so close to the internal and external fabric of each individual. To these several thousand people, I extend heartfelt thanks for what has truly turned out to be a university community project.

What now? With the compensation research study providing a solid foundation for the future, it will

nevertheless continually need to be refined, tended and nurtured so that our compensation system remains current with the needs of its day and does not require major overhauling whenever new changes in our society and in our institution inevitably occur. In the short term, there will probably also need to be minor refinements at the individual level for some jobs. Because of the magnitude of the research project, it is not perfect. But I believe that it is as perfect as is humanly possible, and that it has integrity at the most fundamental of levels. It will soon be time to move beyond the study, for the study is, after all, not an end in itself but a means to an end. It will soon be time to focus on the study's true end—the support of our work, of our networks of working relations, and of our careers and potential careers within this challenging university of first rank.

—Sincerely,

Beth I. Warren

Beth I. Warren

Associate Vice President for Human Resources

University Cooperative Nursery School Garage Sale a Success!

The annual fund-raising effort of the University Cooperative Nursery School was a great success. Despite the inclement weather, the sale and auction raised over \$800. People lined up, dodging raindrops for a chance to examine the treasures donated by the board and parents of the school. The fare ranged from small and large toys to clothing and furniture. A beautiful Aaprika stroller was offered for silent auction but received no bids. This stroller is top of the line (\$250 new) and still for sale by the school. A quilt auction, organized by Theresa Arsenault, offered chances for a beautiful quilt created

by parents and members of the school. The quilt was won by Sally Reimer, a teacher at the nursery school. Robin Seely, sale organizer, said the entire project was a wonderful cross-cultural experience, mixing the wonderful foods of many countries with the quaint Americana of garage sales. The nursery school is an organization governed by a board of parents and teachers from the school. The school operates two half day sessions and still has openings for the fall. For more information call the registrar, Kimberly Bloom at 255-6342.



Cindy Wright and Therese Arsenault with children Kim Kuever and Michael Arsenault



THE Bulletin Board

Service Recognition Dinner to Be Held June 8, 1993

The 38th Annual Service Awards Dinner will be held in Barton Hall on June 8, 1993. The reception will begin at 5:45 p.m. and the dinner at 6:45 p.m.

The Service Awards Dinner is held each year to honor those staff who have worked at the university for 25 years or more. Staff celebrating 25, 30, 35, 40, and 45-year anniversaries are given special recognition for their years of service. Staff who worked at Cornell for 25 years or more and who have retired or have gone out on long-term disability over the past year (since July 1, 1992) are also invited to the dinner. All invited staff members may bring a guest to the dinner. In appreciation for the years of service their staff have devoted to Cornell, many deans and senior administration members also attend.

Invitations for the dinner have been sent out, and are due back to University Human Resource Services by May 14th. If you have not received an invitation and believe that you should have, please contact Service Awards Committee co-chair Cheryl S. Bishop, at 255-6890.

CHRISP Demographic Module Training

Demographic Inquiry Screens, Friday, June 4, 9:30 a.m.-12:00 noon

Demographic Input/Update Screens, Friday, June 11, 9:30-11:00 a.m.

Training sessions will be held in 163 Day Hall. Call Beth Hebert at 255-2534 to register.

Clothing Recovery Drive

For the past four years, Ecology House has organized and sponsored a clothing recovery drive at the end of Cornell's spring semester. Each of the past four years have seen hundreds of trash bags full of clothes collected and donated to Ithaca community organizations.

The purpose of this drive is to encourage the Cornell and Ithaca communities to participate in sound environmental practices by reducing waste by keeping unwanted, but perfectly usable, clothes from entering the waste stream and thus reusing these clothes, and also to provide clothing to those members of the community who are in need.

Ecology House will again organize a clothing recovery drive in coordination with Residence Life and local concerned groups to begin at the end of this semester. Donations can be dropped from Friday, May 14 to Friday, May 21 in the large, red barn at the end of the Ecology House driveway. The clothes will then be donated to community organizations who can distribute them to the local needy. Also, any appliances that students wish to discard will be collected. These appliances may be left with the collection boxes.

If you have any questions contact Julia Gutreuter at 253-1291, Heidjer Staecker at 253-0611, or Connie Fuess at 255-1191.

Workshops Offered

A *Quality Problem Solving* workshop will be held on May 27 from 8:30 a.m.-4:30 p.m. at 20 Thornwood Drive; the instructor is Ron Kardas.

Career Exploration and Effectively Marketing Yourself will be offered on June 1, 3, and 8 from 9:00 a.m.-4:00 p.m. at 20 Thornwood Drive; the instructor is Michael Knaus.

Layoff Support Group

UHRS Employment Services is sponsoring a support group for university staff who are on layoff status or who have been informed of impending layoff. Activities will be determined based upon the participants needs, and may include guest speakers on assessing per-

sonal and professional options, developing networks inside and outside of Cornell, and other topics relating to re-employment strategies. The next meeting will be held on June 14 from 3:00-4:30 in Room 101, 20 Thornwood Drive.

Please call Esther Smith (4-8367) or Wendy Manzanares (4-8372) for more information.

Weight Watchers at Work

The next Weight Watchers at Work series kicks off on Wednesday, May 26 at 12:00 noon to 1:00 p.m. with a registration and orientation meeting in 250 Caldwell Hall. Members can also join on Wednesday, June 2. For further information, call Jacquie Corso at 1-800-234-8080.

Employment Services Staff Phone Numbers

Patricia Hutton, director	254-8369
Dee Dee Berry	254-8366
Allan Bishop	254-8359
Holly Cary	254-8355
Sandy Dennis-Conlon	254-8354
Courtney Fletcher	254-8350
Micaela Grill	254-8374
Anita Harris	254-8357
Mary Beth Jordan	254-8360
Monica Lacey	254-8361
Wendy Manzanares	254-8372
Karen McLean	254-8371
Karen Raponi	254-8368
Peggy Reynolds	254-8373
Esther Smith	254-8367
Cynthia Smithbower	254-8352
Sue Tvaroha	254-8362
Teresa Wallding	254-8370
Sam Weeks	254-8353

Employment Services staff can also be contacted through QuickMail, E-Mail, and Audix. There is also a "drop-box" in 130 Day Hall. You may also pick up forms at 130 Day Hall: requisitions, ACSS, employee transfer applications and position authorization forms.

Location

Employment Services is located on 20 Thornwood Drive, Cornell Business/Technology Park near the Tompkins County Airport.

Directions

Route 13 to Warren Road; notice sign for airport. Warren Road to Brown Road-first right. Thornwood is the first right turn off Brown Road. The reception area for Employment Services is room #106.

CAREER Opportunities

Employment Services, 20 Thornwood Drive, Cornell University, Ithaca, NY 14850-1265

- Cornell University is an equal opportunity, affirmative action educator and employer.
- Please note that some searches are limited to current Cornell University employees; external candidates will not be considered for these vacancies.
- Cornell University employees may apply for any posted position with an employee transfer application (available through University Human Resource Services). In addition to the transfer application, we recommend a resume and cover letter, specifying the job title, department and job number.
- Employment Services consultants are available by appointment to meet with employees to discuss career planning issues or concerns.
- Employment Services or the hiring department will acknowledge receipt of all materials by mail. Hiring supervisors will contact individuals selected for an interview by telephone, so it is helpful to include more than one telephone number.
- Interviews are conducted by appointment only.
- If you are currently available for employment, you may wish to consider temporary opportunities at the university. Please write to Karen Raponi, Temporary Services, 20 Thornwood Drive, Ithaca, New York 14850-1265.
- *The Cornell Workplace*, including Career Opportunities, can be found each week on CUINFO.

Professional

University Counsel and Secretary of the Corporation (PA6604)
University Counsel-Endowed
Posting Date: 4/29/93
 The University Counsel is the chief legal officer of the University and reports directly to the President and the Board of Trustees. The Counsel is an executive officer and participates in the consideration and resolution of policy matters. The Counsel heads a staff of seven lawyers and appoints and directs all outside counsel retained on behalf of the institution. Legal matters under the supervision of the University

counsel include: litigation, labor law, real property and land use, health care, insurance, construction, intellectual property, capital finance, trusts, legislation and a wide variety of corporate issues and transactions. Applicants should be admitted to the New York State bar, or be qualified and prepared to apply for admission, and have extensive experience (10 yrs. or more) regarding matters of substantial legal importance. Significant management experience and policy responsibility are essential as are and appreciation for the distinctive characteristics of a university and the public policy issues that influence its activities. Prior experience with educational institutions is desirable but not essential. The search process will begin immediately and conclude when the position is filled. To apply, send a cover letter,

resume, and names of three references to: Search Committee, suite 106, 20 Thornwood Drive, Ithaca, NY 14850-1265.

Director, Organizational Development Services/Senior Consultant (PA6606) HR/II
University Human Resource Services-Endowed
Posting Date: 4/29/93

Reporting to the Associate Vice President for Human Resources, serve as a member of the senior management team and as a senior leader in the overall functioning of the university-wide office of human resources. Organizational Development Services is integrally involved with the Cornell faculty/staff health program with a particular focus on work groups, department, organizational health including facilitating

improvement of both inter- and intra- unit relationships and helping groups effectively initiate and manage change. Regular emphasis will be on prevention, early intervention, conflict resolution, group communications, group assessment, and action planning as well as providing consultation around strategic change management strategies in concert with strategic priorities of UHRS, the client, and of the university as a whole.

As a member of the University Human Resources Senior Management Team, participates in the overall programmatic and administrative planning, trends analysis, assessment of client need, and evaluation of human resource initiatives undertaken by this comprehensive, dynamic, evolving, integrated, strategically collaborative human resource function in a large, complex multinational university of high rank.

Professional Off-Campus

PA#19 Leadership/Volunteer Management Issue Team Leader
Location: Chemung County, Elmira, NY
Posting Date: 5/6/93

Provide leadership in the planning, implementation, and evaluation of educational programs in leadership and volunteer management for clientele in Chemung County. Identify needs for leadership education (including volunteer management, agency and local government official training, process skills, inservice and public policy development) with assistance from advisory committees, program participants and program coordinators. Provide program assistance in planning and conducting educational programs in one or more of the following areas: youth at risk, intergenerational programs, 4-H club program and environmental education for youth.

Minimum Qualifications: Bachelor's degree with emphasis in education, environmental education, or human development/family relations. Strong background in environmental issues.. 2yrs. of progressively responsible professional experience in cooperative extension or equivalent professional experience in youth programming in an academic or human service setting. (Master's degree plan must be developed and initiated within a three year period.) Salary: \$21,600 commensurate with qualifications. Send letter of intent resume and transcript(s) by May 20, 1993 to: Box 26, Kennedy Hall, Cornell University, Ithaca, NY 14853.

PA#20 Agronomy
Location: Rensselaer County, Troy, NY
2yr. Term Position
Posting Date: 5/6/93

Responsible for providing leadership in planning, implementing and evaluating educational programs in agronomy for Rensselaer, Albany, Saratoga, and Schenectady Counties. Primary Focus(65%) in soil management and conservation, crop production, integrated pest management, crop harvest and storage. Programming includes seminars, workshops, newsletters, mass media, exhibits at fair and other events, site visits, phone calls, and evaluation of efforts. Secondary focus(35% in nutrient management assisting program leader in Rensselaer County in compiling data for analysis.

Minimum Qualifications: Bachelor's degree appropriate to the responsibilities of the position. Coursework and background in education preferred. Minimum of three year's field experience in agronomy. Salary: \$26,600. Send letter of intent, resume and transcript(s) by May 20, 1993 to: Box 26, Kennedy Hall, Cornell University, Ithaca, NY 14853.

PA#27 Agriculture
Location: Otsego County, Cooperstown, NY
Posting Date: 5/6/93

As a member of the Otsego/Delaware County Dairy Team, this person will be responsible for the planning, implementation and evaluation of educational programs in field crop production and nutrient management directed to farmers and related agribusinesses with an 80% full-time equivalent commitment. In addition, a 20% full-time equivalent will be devoted to general 4-H Youth Development responsibilities with emphasis in animal science and technology programming. In conjunction with the program leaders, this person will develop program objectives and plans within assigned areas of responsibility and provide educational programming in specialized subject-matter areas related to field crops production, nutrient management, and 4-H Youth Development Animal Science programs. May act as a multi-associate team member in area of specialized subject matter responsibility. Will seek out, prepare, and submit proposals to secure additional program funding, actively involving others in the organizations.

Minimum Qualifications: Bachelor's degree with a major in agronomy, soil nutrient management, education or general agriculture and plan or progress toward acquiring a Master's degree. Three years of relevant experience or a Master's degree with one year relevant experience desirable. Coursework in education, general agricultural education, or youth work programming highly desirable. Salary: \$21,500. Apply by May 20, 1993. Contact: Staff Development and Recruitment, Box 26, Kennedy Hall, Ithaca, NY 14853.

Extension Services: Program Leader 4-H Youth Development
Location: Cornell University, Ithaca, NY
Posting Date: 5/6/93

Provide leadership for quality nonformal youth education programs. Responsibilities include leadership for developing, delivering, evaluating and marketing programs to diverse audiences throughout New York State. Provide leadership and support for campus and Cornell Cooperative Extension Association work related to vision, scope and direction of youth development education for the Cornell Cooperative Extension System. Serves as State 4-H Leader. Works in a wide variety of collaborative settings both within and external to the

Requirements: Master's degree in a relevant field and at least 7 years of relevant experience. Strong capacity to understand the breadth of human resources management practices and the complexities of this university; excellent skills in coaching, data reduction, feedback, group process, model building, negotiation, mediation, observing, presentation, questioning, relationship building, and visioning. Strong self-knowledge and intellectual versatility. Sound change agent, consultation, planning, leadership, quantitative, and qualitative skills. Proven ability to work in a team and in ambiguity and to be proactive. Excellent systems thinking skills and the ability to sustain an ethical workplace practice.

Preferred qualifications include a terminal degree in a relevant field with at least 7 years of relevant experience. Experience in working with health care issues, experience in a university setting and O.D. practice as an employee in a workplace.

For consideration, send a letter of application and resume, postmarked no later than May 28, 1993 to Beth I. Warren, SPHR, Associate Vice President for Human Resources, University of Human Resource Services, 130 Day Hall, Cornell University, Ithaca, NY 14853-2801.

Associate Director, Supercomputing Technologies (PA6803) Level 40
Theory Center-Endowed
Posting Date: 5/13/93

With little supervision and considerable latitude, provide technical leadership and overall direction for the Supercomputing Technologies component of the Theory Center. This includes parallel tools, parallel applications, and visualization.

Requirements: M.S. required, Ph.D. degree, preferably in the sciences, is strongly preferred. 8-10 yrs relevant experience in successfully establishing and overseeing complex technical projects in a scientific environment. Experience managing a computing program or facility with responsibility for staff, budget, and planning. Excellent technical, written and oral skills and the ability to thrive in a rapidly changing, collaborative setting are essential. Send cover letter and resume to Cynthia Smithbower.

Applications Programmer/Analyst III (PT6801) Level 34
CIT Information Resources-Endowed
Posting Date: 5/13/93

Support and administrative application system in routine and emergency situations. Design, develop, modify, maintain, document, manage development/maintenance of complex application systems software having many modules or interrelationships with other software modules, involving logical relationships. Team-manage a group and be a team contributor. Work and communicate with technical and non-technical professionals.

Requirements: Bachelor's degree or equivalent combination of education and experience with computer courses. 3-5yrs. experience with sound knowledge of ADABAS, Natural, VM/CMS, MVS, and JCL. Familiarity with common microcomputer applications such as Word, Excel, Lotus, Foxbase, FileMaker, etc. Knowledge of applications for interactive administrative system, database management system, and machine architecture. UNIX and LAN experience a plus. Good communication skills. Send cover letter and resume to Sam Weeks.

Application Programmer/Analyst II (PT6403) Level 33

University Registrar-Endowed
Posting Date: 4/15/93
Under general supervision, provide computer applications programming containing information and analytical support and programming for special projects necessary for the effective operation of the office of the University Registrar. Assist in maintaining complex applications software in support of a major administrative system.

Requirements: Bachelor's degree or equivalent with computer related courses required. 2-3yrs. related experience preferably in higher education setting. Knowledge of applications for interactive administrative systems, database management systems, machine architecture and system utility programs. Working knowledge of SAS, ADABAS Natural, VM/CMS, MVS, UNIX/AIX and Macintosh networks. Strong written and verbal communication skills. Send cover letter and resume to Sam Weeks.

Technical Consultant (PT6603) Level 32
CIT/Network Resources-Endowed
Posting Date: 4/29/93

Provide and facilitate a variety of information, installation and trouble related services for a broad array of voice/video/data products. Maintain information systems which support service provision by teams; act as primary communications interface for NR service teams and customers on day-to-day basis.

Requirements: Bachelor's degree or equivalent required. 1-2yrs. telecommunications or related experience. Supervisory experience, as well as excellent interpersonal, written, verbal, and organizational skills are essential. Send cover letter and resume to Sam Weeks.

System Programmer/Analyst I (PT6101) Level 32
Law-Endowed
Posting Date: 3/25/93

Perform system administration, data preparation, and data maintenance activities for the legal information institute, and electronic-publishing operation conducted under the auspices of the Cornell Law school. Prepare and distribute disk-based hypertext materials. Prepare, test and document computer programs. Provide front-line support for institute-developed and operated databases. Assist users.

Requirements: Bachelor's degree in computer sciences or equivalent combination of education and experience required. Knowledge of IBM PC's and Sun workstations. System administration experience under SunOS preferred. Programming experience in the Perl language strongly preferred. General knowledge of Internet-based applications, including Gopher and World-Wide Web. Experience with PC-based hypertext packages, especially Folio Views. Send cover letter and resume to Sam Weeks.

Microwave Engineer (PT6808) HRII
National Astronomy and Ionosphere Center-Endowed
Posting Date: 5/13/93
Provide technical support in the design and fabrication of feed horns, couplers, orthomode transducers and high power rotary joints for ultimate installation and use by the Arecibo Observatory, PR.

Requirements: Bachelor's degree (BSEE) or equivalent required. MSEE preferred. 3-5yrs. job related experience required. Send cover letter and resume to Sam Weeks.

Head Men's Basketball Coach (PA6801) HRII
Athletics-Endowed
Posting Date: 5/13/93

Planning and executing of men's intercollegiate varsity basketball program. Plan, organize and supervise all practices, team meetings and games. Responsible for selecting the squad, policies, practices relative to individual and team participation. Recruit, identify, evaluate and encourage application and acceptance of student athletes at Cornell in accordance with Ivy League and university policies.

Requirements: Bachelor's degree in physical education or equivalent required. Credentials should reflect proven success in coaching, recruiting and working with college age student athletes. Send cover letter and resume to Cynthia Smithbower.

Assistant Director (PA6703) HRII
University Development/Public Affairs-Endowed
Posting Date: 5/6/93

Assist the director in planning and implementing strategies to increase giving to student aid purposes at Cornell. Duties will include responding to inquiries about establishing new scholarships and fellowship funds, and working with potential donors and a variety of campus offices to establish new funds. Assist the Director in establishing plans for the Cornell Campaign for Student Aid and all work on the campaign; explore and develop potential for corporate support of student aid; and assist the director in developing strategies for increasing giving to support graduate students. Involves extensive contact with university staff and donors.

Requirements: Bachelor's degree or equivalent required. Excellent communication skills, both verbal and written. Good people skills; tact, warmth and desire to be helpful especially important. Substantial experience in development or related fields. Knowledge of Cornell University and financial aid programs very helpful; some familiarity with corporations and/or graduate study also helpful. Good judgment and creativity in approaching problems and seeking solutions. Good research and problem solving skills. Ability to take on a large project, design a work plan and follow it. Ability to make and implement recommendations based on information gathering process. Computer literacy; familiarity with Macintosh systems. Send cover letter and resume to Cynthia Smithbower.

Education Arts Editor (PC6502) HRII
University Relations/News Service-Endowed
Posting Date: 4/22/93

Serve as education/arts editor for the Cornell news service. Publicize in the national and international print and broadcast media the university's undergraduate education and international programs, performing arts and other designated units. Also responsible for internal communications in assigned areas. Aid in development and supervision of student writing program. Monday-Friday, occasional nights and weekends.

Requirements: Bachelors degree or equivalent required; graduate degree or study desirable. Minimum of 5yrs. experience in journalism/communications; experience in university news office desirable. Demonstrated excellence in writing and demonstrated success in placements of news articles in the print and broadcast media. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Copy Editor I (PC6809) HRI
University Relations/Publications Services-Endowed
Posting Date: 5/13/93

Edits and proofs manuscripts, assists in creating subsequent production stages, and works with clients, designers, and support personnel during the entire process of producing printed publications.

Requirements: Bachelor's degree or equivalent required. 2-3yrs. related working experience with computers and word-processing programs (Specific experience with Macintosh computers, Microsoft Word, and PageMaker is desirable). A sensitivity to language, nuance, and tone. A high regard precision and accuracy. Attention to details and facts. Ability to work both independently and closely with others, and administer multiple tasks and procedures. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Assistant Director, Masters of Engineering (PA6802) HRI
Engineering Co-Op/M.Eng Program-Endowed
Posting Date: 5/13/93

Maintain daily operations of M.Eng program. This includes maintenance of fellowship/financial Aid awards and overseeing applications/enrollment process. Also involves promotion of both co-op and M.Eng. programs, job development, and career counseling.

Requirements: Bachelor's degree or equivalent required. Computer skills with database management. 2-3yrs. experience in student services, career counseling or financial aid. Communications and management skills essential. Send cover letter and resume to Cynthia Smithbower.

Business Writer (PC6814) HRI
University Relations/News Service-Endowed
Posting Date: 5/13/93

A 12-month term appointment to serve as Business Writer for the Cornell News Service. Publicize in the national and international print and broadcast media research and educational programs in the Schools of Hotel Administration and Industrial and Labor Relations, Johnson Graduate School of Management, and other units as assigned. Also responsible for internal communications in assigned areas. Monday-Friday occasional nights/weekends.

Requirements: Bachelor's degree or equivalent required. 2-3yrs. experience in journalism/communications. Demonstrated excellence in writing and demonstrated success in placements of news articles in the print and broadcast media. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Assistant Director Alumni Affairs (PA5601) HRI
Hotel Administration-Endowed
Posting Date: 2/18/93

Assist in establishing goals, priorities and strategies for the over 8500 members and 45 chapters worldwide, of the Hotel school's alumni organization, the Cornell Society of Hotelmen, referred to hereafter as the "Society". Coordinate all relevant School of Hotel Administration and Society events, VIP and other visits, meetings, trade shows functions, and other events.

Requirements: Bachelor's degree or equivalent required with significant coursework in communication, education, organization or leadership development desirable. 3-5yrs. experience and demonstrated success in recruiting or training volunteers and in organizational development. Ability to handle multiple projects with exceptional attention to details. Computer word processing skills required. Excellent written communications skills required. Send cover letter and resume to Cynthia Smithbower.

Administrative Supervisor I (PA6702) HRI
University Health Services-Endowed
Posting Date: 5/6/93

Provide administrative and secretarial support to director of Psychological Services and 10 psychotherapists. Maintain computer, record and monitor expenses; supervise 4 support staff; manage office, compile and maintain records assuring client confidentiality.

Requirements: Associate's degree or equivalent required. 3-5yrs. of experience with administrative and office supervisory responsibilities. Knowledge of computers, systems management and budget desirable. Strong organizational, communication, interpersonal skills. Ability to manage a high pressured, fast paced office. Ability to work with people in crisis. Send cover letter and resume to Cynthia Smithbower.

Research Support Specialist I (PT6705) HRI
Nutritional Sciences-Statutory
Posting Date: 5/6/93

Take charge of running a lab involved in biopsychology (cognitive testing) research. Supervise and integrate the activities of 10-12 undergrads, grads and post docs. Participate in testing 100 animals daily. Trouble shoot the 11 computer operated testing chambers. Perform data management and analysis. Participate in designing experiments.

Requirements: BS degree or equivalent. Biopsychology background desirable. 2-3yrs. related experience. Be able to work under pressure and meet deadlines. Accuracy a must. Excellent interpersonal, communication and organizational skills. Ability to work independently and prioritize work. Supervisory experience helpful. Experience with computers for data analysis, knowledge of electronics and statistics are all desirable. Pre-employment physical required. Send cover letter and resume to Sam Weeks.

Research Support Specialist I (PT6503) HRI
Agricultural and Biological Engineering-Statutory
Posting Date: 4/22/93

Determine criteria and methods for delineating hydrologically critical areas as part of the NYC/Cornell Whole Farm Planning Process. Develop models to establish criteria for hydrologically critical areas. Work closely with county projects teams, farmers and other Cornell team members.

Requirements: Bachelor's degree in earth science or engineering. 1-2yrs. of related experience. Send cover letter and resume to Sam Weeks.

Research Support Aide (PC6503) HRI
Chemistry-Endowed
Posting Date: 4/22/93

Complete administrative responsibility for content of the international journal "Accounts of Chemical Research", including coordination of the solicitation and peer review of manuscripts and special marketing efforts. Also prepare other correspondence and scientific papers. **Requirements:** Bachelor's degree or equivalent in chemistry; Master's degree desirable. Familiarity with modern chemistry and science library; editorial experience helpful. Familiarity with scientific computing and French/German helpful. 1-2yrs. experience desirable. External applicants send cover letter, resume and 3 references to Esther Smith. Employees should include employee transfer application.

Research Support Specialist I (PT5701) HRI
Anatomy-Statutory
Posting Date: 4/22/93 **Repost**

Perform a wide variety of morphologically-based techniques in support of an anatomically-based research program. Design experiments, analyze data and developing computerized approaches to experimental design. Instruct staff and students working in the research laboratory in the successful application of a variety of specialized research techniques.

Requirements: Bachelor's degree or equivalent required. 3-5yrs. working in a research laboratory with good knowledge of experimental design, data analysis, and computerized approaches to analysis or morphological images. Ability to maintain laboratory equipment and keep accurate laboratory records. Send cover letter and resume to Sam Weeks.

Research Support Specialist I (PT6306) HRI
Food Science-Statutory
Posting Date: 4/8/93

Provide technical support to an extensive research project in the area of high pressure and/or extrusion processing of food and other related biomaterials.

Requirements: M.S. in food science/engineering or equivalent. Minimum 2yrs. of related experience. Send cover letter and resume to Sam Weeks.

The Cornell Workplace

Mission of University Human Resource Services: "to advance the practice of human resource management in the Cornell workplace."

EDITOR: Nancy Doolittle, 255-3541
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PRODUCTION: Cheryl Bishop, 255-6890

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Mail subscriptions available US delivery first class mail at: \$12.00 for 3 months; \$18.00 for 6 months; or \$26.00 for 12 months. Make checks payable to: Cornell University, 20 Thornwood Drive, Ithaca, NY 14850-1265.

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, sexual orientation, age, or handicap. The university is committed to the maintenance of affirmative-action programs that will assure the continuation of such equality of opportunity. Sexual harassment is an act of discrimination and, as such, will not be tolerated. Inquiries concerning the application of Title IX may be referred to Cornell's Title IX coordinator (coordinator of women's services) at the Office of Equal Opportunity, Cornell University, 234 Day Hall, Ithaca, NY 14853-2801 (Telephone: 607-255-3976).

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

Cornell Cooperative Extension System. Encourage and initiate collaborative efforts between faculty and off-campus staff and with state and national agencies and organizations on issues of common concern. Recruit and participate in screening of candidates to be recommended for Cornell Cooperative Extension Association positions.

Requirements: Master's degree is required, and earned doctorate preferred, in a discipline appropriate to the position (such as human development or nonformal education). Eight years (six with earned doctorate) progressively responsible professional experience including five years (three with earned doctorate) of demonstrated success in youth education (or closely related field) program development, implementation, management and evaluation. Send letter of intent, current resume which includes responsibilities and accomplishments for each significant position; and names addresses and telephone numbers of four references by June 15, 1993 to: Dr. Michael Duttweiler, Search Committee Chairperson, 354 Roberts Hall, Cornell University, Ithaca, NY 14853, (607) 255-2231. Additional information regarding the position may be obtained from Dr. Duttweiler, Search Committee Chair.

PA#26 Natural Resources and Agriculture Educator
Location: Yates County, Penn Yan, NY
Posting Date: 5/6/93

Anticipate and identify needs. Develop, implement and evaluate innovative, targeted educational programs in natural resources and agriculture, currently focused on water quality and waste management issues and their interrelationships with agricultural, residential and recreational practices. These programs will address the subject matter and public policy needs of clearly targeted youth and adult audiences, including community leaders. Guide and support volunteers and program assistants who are implementing agricultural programs for youth and adults in plant and animal sciences. Identify evolving program needs through local and regional paid and volunteer Cornell Cooperative Extension Staff and committees, clientele, agency staff and community leaders in organizations with similar or complimentary objectives and Cornell faculty. Deliver programs and information through collaborative efforts with other professionals, other Cornell Cooperative Extension staff and volunteers media, individually or other appropriate means. Structure delivery to accommodate diverse targeted audiences. Provide subject matter information to paid and volunteer staff, and clientele, including schools, agencies and local government, consistent with program priorities.

Minimum Qualifications: Master's degree in natural resources, agriculture or closely related field, with coursework in educational methods. At least three years of progressively responsible experience in Cooperative Extension or equivalent professional experience in educational in an academic, service or industry setting. Ability to develop deliver, and evaluate informal educational programs. Excellent communication skills. Salary: \$28,000. Apply by May 20, 1993. Contact: Staff Development and Recruitment, Box 26, Kennedy Hall, Ithaca, NY 14853.

PA#25 4-H Youth Development
Location: Monroe County, Rochester, NY
Posting Date: 5/6/93

Provide leadership to the 4-H youth development program in the areas of Environment and Science (emphasis in recycling and water resources). Plan, implement and evaluate innovative youth education programs through a variety of delivery methods including 4-H clubs, schools programs, special interest and outreach effort. Program topics may include solid waste, water quality, environmental appreciation and stewardship, and science exploration. Develop and enhance networks of volunteers to extend program and provide staff leadership and coordination to key volunteers in support of the 4-H Animal Science Program

Minimum Qualifications: Bachelor's degree appropriate to the responsibilities of the position. Course work in education highly preferred. Master's degree preferred. Minimum of 1yr related experience required in teaching or extension-related work or experience in the Cornell Cooperative Extension Agent Intern Program. Salary: \$22,200, commensurate with qualifications. Apply by May 20, 1993 to Staff Development and Recruitment, Box 26, Kennedy Hall, Ithaca, NY 14853.

PA#24 Agriculture
Location: Schoharie County, Cobleskill, NY
Posting Date: 5/6/93

Responsible for planning, implementing, and evaluating educational programs in farm management and filed crops program areas for the Cornell Cooperative Extension associations of Schoharie and Montgomery counties. Will conduct intensive farm management programming under a special water quality grant. Identify and structure programs that address community and individual needs and consider the diversity of the community. Interpret Cornell and Association program direction, communicate recommendations to clientele, and foster acceptance of programs, methods and policies, including multi-disciplinary and multi-association programming efforts. Serve as a subject-matter resource to the staff ad clientele, including schools, agencies, and other groups, as they are identified. Provide input to association director and program committee in preparing and submitting proposals to secure additional funding.

Minimum Qualifications: Bachelor's degree with major in farm management and coursework in field crops. Coursework in education highly preferred. Minimum of one year related required in teaching or extension-type work or experience in the Cornell Cooperative extension Agent Intern Program. Course work in ag engineering and communications actions desirable. Salary: \$26,000, Commensurate with qualifications. Apply by May 20, 1993 to Staff Development and Recruitment, Box 26, Kennedy Hall, Ithaca, NY 14853.

PA#23 Association Director
Location: Oswego County, Mexico, NY
Posting Date: 5/6/93

Serve as the administrator for a non-formal educational organization serving a rural and suburban county of 122,000 citizens with programs that extend the resources of Cornell University and the National Land Grant University system to the people, businesses and governments of the county and their organizations. Responsible for providing overall administrative leadership and management for the County Cooperative Extension Association. Formally represent, and accountable to, the association Board of Directors, its standing committees, and the Director of the Cornell Cooperative Extension System. Exercise professional judgment and executive skills in developing and coordinating overall association operations, policies and activities. Provide leadership in adopting overall

educational and technical program efforts to address changing needs. Provide leadership to association's program management team. Administer association policies, procedures, and operations; provide administrative supervision of employees and volunteers. Provide leadership for association relations with legislators, local government leaders, community leaders, funding agencies, and civic and special interest groups. Responsible for the Equal Employment Opportunity/Affirmative Action programs of the association. Provide leadership for the overall program development process, including multi-disciplinary and multi-association programs, and ensure that the association Plan of Work serves as a basis for programmatic decisions (e.g. facilitating the development and implementation of the Plan of Work, program review, program evaluation, and program modification).

Minimum Qualifications: Master's degree appropriate to the responsibilities of the position. At least five years of progressively responsible professional experience including at last three years in Cooperative Extension or closely related employment. Substantive coursework and/or experience in education required. At least three years of substantive management responsibilities, including finance, personnel, and organizational management. Marketing and fund development experience is highly desirable. Salary: \$42,000 commensurate with qualifications. Apply by May 20, 1993 to Staff Development and Recruitment, Box 26, Kennedy Hall, Ithaca, NY 14853.

PA#21 Association Director
Location: Allegany County, Belmont, NY
Posting Date: 5/6/93

Responsible for providing administrative leadership and management for Cornell Cooperative Extension of Allegany County. Formally represent, and accountable to, the association Board of Directors and the Director of the Cornell Cooperative Extension System. Exercise professional judgment and executive skills in coordinating overall association operations. Administer association policies, procedures, and operations; provide administrative supervision of employees and volunteers. Provide leadership for association relations with legislators, local government leaders, community leaders, funding agencies, and civic and special interest groups. Responsible for the Equal Employment Opportunity/Affirmative action programs of the Association. Responsible for providing in-depth program leadership for the planning, implementation and evaluation of association's Community and Rural Development, 4-H Youth Development and Human Ecology programs. Provide leadership, coordinate, and encourage multi-disciplinary, Multi-association, area and statewide team efforts to address priority issues.

Minimum Qualifications: Master's degree in education; public/adult education; extension or business administration; human services; community development or an appropriate related filed. At least five years of progressively responsible professional experience including at least three years in Cooperative Extension or closely related employment. Substantive coursework and/or experience in education required. At least three years of substantive management responsibilities, including planning and organizational management, budgeting proposal written and personnel management. Salary Range: \$30,000-\$38,000 commensurate with qualifications. Send letter of intent, resume and transcript(s) by May 20, 1993 to: Box 26, Kennedy Hall, Cornell University, Ithaca, NY 14853.

Professionals Part-Time

Applications Programmer/Analyst III (PT6806) Level 34

History of Art-Endowed
Posting Date: 5/13/93

Provide all technical computer support and development for the Aegean Dendrochronology Project. Support 15 users in applications including Paradox WordPerfect, CMS, DOS and internet communications. Develop, upgrade and document applications to user specifications. Administer a Novell network. Flexible hours.

Requirements: Bachelor's degree or equivalent required. 3-5yrs. experience, at least as a student programmer required. Novell network experience preferred. Send cover letter and resume to Sam Weeks.

Nursery School Teacher (PC6310)
University Cooperative Nursery School-Endowed
Posting Date: 4/8/93

In charge of afternoon program of parent cooperative nursery school. Responsible for curriculum and teaching of class of 10 four and five year olds. 12-5pm, Monday-Friday, August-June.

Requirements: Bachelor's degree, experience required. Previous coursework in early childhood education desirable. Experience teaching 3-5yr. olds required. Send cover letter and resume to Sally Reimer, University Cooperative Nursery School, Robert Purcell Union, Box 18.

Professionals Temporary

Senior Technician (PT6809)
Mammalian Cell Culture/Animal Science
Posting Date: 5/13/93

Provide technical support in mammalian cell culture research involving studies on the role of a novel peptide, found in mammary tissue and milk, that effects cell proliferation and differentiation.

Requirements: Skilled in cell culture, immunocytochemistry and various analytical techniques such as PAGE, Western, Northern and Southern blotting. Experience in confocal microscopy and cell cycle analysis is preferred. Send Curriculum vitae, work history and names of 3 references to Dr. R.C. Gorewit, Department of Animal Science, Cornell University, Ithaca, NY 14853.

Extension Support Specialist II (PT6803) HRI
Human Service Studies-Statutory
Posting Date: 5/13/93

Assist project director in the development and expansion of the CLASP literacy project. Develop and implement a project evaluation. Develop and market training materials. Recruit participants. 20hrs/week.

Requirements: Master's degree preferred in human services, social work, human resources or a related field or equivalent. Experience developing training materials and workshops in adult literacy is preferred. Experience working with profit and not-for-profit employers preferred.

Proficiency in word processing is required. Send cover letter and resume to Sam Weeks.

Instructional/Curriculum Development Specialist and Editor (\$6501)
Program on Employment and Disability
Posting Date: 4/22/93

The ILR Program on Employment and Disability seeks an individual to serve as editor and curriculum development specialist for materials on the Employment Provisions of Americans with Disabilities Act of 1990. The position will be part-time and will be an appointment of less than six months. Salary will be consistent with credentials and experience of the individual. Please submit a letter of interest and samples of writing and editorship to Susanne M. Bruyère, 106 ILR Extension. Questions, please call 255-2891.

Boyce Thompson Institute

Mechanical Assistant
Plant Research-Mechanical Department
Part-time, 20 hours/week
Salary: \$10.25-\$13/hour, commensurate with experience.
Posting Date: 4/29/93

Help maintain the mechanical systems of a plant research facility. Knowledge of air conditioning, heating, refrigeration, plumbing, electrical and electronic systems and carpentry needed.

Requirements: Strong mechanical background, the ability to work independently in a conscientious, responsible manner. Contact: Anne Zientek, 254-1239.

Research Assistant
Plant Research
Full-time for 6 months or part-time for full year
Salary: \$7.35/hour
Posting Date: 4/29/93

Rearing insect colonies, propagating and purifying baculovirus stocks, maintaining virus repository records and assisting with insect bioassays and other routine lab duties.

Requirements: Bachelor's degree in biology/chemistry or related field. Laboratory experience required. Contact: Anne Zientek, 254-1239.

Technical

Technician GR18 (T6105)
Physiology-Statutory
Minimum Biweekly Salary: \$542.89
Posting Date: 3/25/93

Participate in long-term animal experiments with pregnant animals. All aspects of general maintenance of animals and records related to the experiments. Blood sampling and preparation of infusions, under supervision of professional personnel.

Requirements: Bachelor's degree in biological sciences or equivalent preferred. Previous experience with sheep useful. Pre-employment physical required. Must be able to lift 50lbs. Send cover letter and resume to Sam Weeks.

Technician GR19 (T6804)
James A. Baker Institute-Statutory
Minimum Biweekly Salary: \$566.28
Posting Date: 5/13/93

Provide assistance carrying out lab experiments in reproductive biology. Handle rodents and horses. Assist with laboratory organization and maintenance.

Requirements: Associates degree or equivalent in animal science, biology, or related field required. Minimum 1yr. related experience. General knowledge of standard laboratory procedures including the use of general laboratory equipment. Some computer skills helpful. Pre-employment physical required. Send cover letter and resume to Sam Weeks.

Technician GR19 (T6501)
Veterinary Pathology-Statutory
Minimum Biweekly Salary: \$566.28
Posting Date: 4/22/93

Provide technical assistance in carrying out various experiments using molecular, biochemical and cell biological methods. Assist with routine lab operations and maintenance. Perform tissue cultures; prepare media and solutions; and maintain cell stocks. Assist in maintaining lab supplies.

Requirements: AAS in biology, biochemistry, chemistry or related field. Lab experience desired. On-the-job training provided. Send cover letter and resume to Sam Weeks.

Technician GR20 (T6307)
Entomology-Statutory
Minimum Biweekly Salary: \$590.45
Posting Date: 4/8/93

Provide research support for field crop entomological studies including lab and field work on leafhoppers, cutworms and snout beetles. Assist in experimental design. Coordinate rearing of insects and entomopathological nematodes. Collect and summarize data. Assist in supervising temporary staff.

Requirements: BS degree in one of the following: biology, entomology, horticulture, agronomy, or plant science. Experience in insect rearing, experimental field plot techniques, crop production practices, statistics, and computer literacy. Some training and experience in one or more of the above listed fields and knowledge and experience in microbiology helpful. Valid NYS driver's license. Send cover letter and resume to Sam Weeks.

Animal Health Technician (T5612) GR20
Veterinary Medical Teaching Hospital-Statutory
Minimum Biweekly Salary: \$590.45
Posting Date: 2/18/93

Provide support therapy for ICU patients and assist with emergency procedures. Teach intensive care and emergency protocol to veterinary students assigned to ICU duty. Maintain and monitor critically ill patients (IV fluids, drug therapy, life sustaining equipment, and vital signs). Rotating shifts.

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

Computer Operator GR21 (T6701)
CIT/CR-Endowed
Minimum Biweekly Salary: \$615.42
Posting Date: 5/6/93

Operate large scale computer systems and associated

peripheral equipment. Monitor data communications network. Consult with vendor engineers and department support staff. Also, monitor server systems and consult with server administrators. Swift-work/weekends.

Requirements: A.A.S. degree or equivalent combination of education and experience in large data processing facilities required. Computer operating experience with minimum 3yrs. related data communications experience helpful. Knowledge of computer hardware, software, operating systems and programming languages. Send cover letter and resume to Sam Weeks.

Technician GR21 (T4807)
Microbiology, Immunology, and Parasitology-Statutory
Minimum Biweekly Salary: \$615.42
Posting Date: 4/22/93 Repost

Provide technical support for an immunology lab. Conduct nutritional and cellular immunology experiments using rat and chicken animal models and *in vitro* cellular systems. Evaluate cellular immunity, flow cytometry and other related assays. Maintain rats. Perform routine lab duties including data analysis, lab maintenance, record keeping and preparation of supplies and reagents, etc.

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

Technician GR21 (T5504)
Diagnostic Laboratory/VET-Statutory
Minimum Biweekly Salary: \$615.42
Posting Date: 3/4/93 Repost

Maintain and supervise research parasitology lab. Supervise work-study students. Perform routine parasitological tests, including microscopy, on research samples. Perform ELISA tests. Modify/develop new diagnostic tests as needed. Keep lab records up to date including computer entry. Maintain equipment, perform library searches and xeroxing.

Requirements: BA or BS in biology, animal science of related field required. 2-3yrs. related experience required. Knowledge of and experience with routine biological lab techniques. Potentially infectious materials will be handled. Basic knowledge of computers (WP, D-Base) necessary. NYS driver's license required. Send cover letter and resume to Sam Weeks.

Technician GR22 (T6703)
Psychology-Endowed
Minimum Biweekly Salary: \$641.92
Posting Date: 5/6/93

Assume operation and supervision of Infant Research Center. Plan, conduct, and analyze data from research with human infants. Explain research to parents and summarize experimental findings. Supervise 10 undergrad assistants.

Requirements: B.A. or B.S. degree or equivalent required. 2-4yrs. related research experience required. Experience with statistics and database software preferred. Must have good supervisory, organizational and interpersonal skills. Must like working with infants. Send cover letter and resume to Sam Weeks.

Electronics Technician GR22 (T6602)
Vet Physiology-Statutory
Minimum Biweekly Salary: \$641.92
Posting Date: 4/29/93

Provide general support in the areas of electronics and computing. Fabricate, calibrate, maintain and repair electronic and electro-mechanical physiological measuring equipment. Assist in setting up equipment and recording experimental data. Enter data and maintain computerized data bases. Assist in the maintenance and trouble shooting of PC's and LAN. Participate in computer programming and configuring hardware for data acquisition and real-time monitoring and control of experimental systems.

Requirements: BS degree or equivalent with some course work in computers and electronics. Several years related experience. Knowledge of LAN's and PC repair. Electro-mechanical skills. Knowledge of physiology helpful. Send cover letter and resume to Sam Weeks.

Computer Operator GR22 (T6502)
Law-Endowed
Minimum Biweekly Salary: \$641.92
Posting Date: 4/22/93

Serve as night supervisor/lab manager and consultant for networked public computing facility. Maintain and administer activities on multivendor, multi-server LAN connecting 200 workstations with 4 Gb. on-line storage. Establish and maintain user accounts. Perform security audits. Manage mass storage devices and perform system-wide backups. Provide user support. Maintain and repair hardware PC's, printers, modems, and CD-ROM players. Maintain the network. Provide software support. 2:30-11pm, Sunday-Thursdays (flexible).

Requirements: BS degree in computer related field or equivalent combination of education and experience. Knowledge of IBM and Mac PC's. Experience and ability in providing software support for non-technical users. Familiarity with Novell network and administrative tools highly desirable. Strong interpersonal and writing skills. Send cover letter and resume to Sam Weeks.

Technician GR23 (T6807)
Fruit and Vegetable Science-Statutory
Minimum Biweekly Salary: \$669.23
Posting Date: 5/13/93

Provide technical and group leadership support for vegetable crops applied research and extension program. Participate in design of experiments and coordinate arrangements for field studies and demonstrations. Plant and maintain field and greenhouse crops used in research. Install equipment for monitoring plant, soil, and weather parameters. Record data on crop development, yield, and fruit quality. Assist with laboratory procedures such as photosynthesis measurements and plant and soil chemical analysis. Use computer software to organize, statistically analyze, and graphically present results. Contribute to written reports and oral presentations for scientific and lay audiences.

Requirements: BS degree or equivalent in the plant sciences, biology, or related field required. Minimum of 2-4yrs. experience including 1-2yrs. in applied research and crop production. Good working knowledge of farm equipment and standard plant growing techniques is essential. Basic knowledge of computers necessary; familiarity with spreadsheet, statistics, and graphics software is highly desirable. Must be organized and have demonstrated ability to work independently. Pesticide applicators license desirable. Send cover letter and resume to Sam Weeks.

CHES Operator GR24 (T6805)**CHES-Endowed****Minimum Biweekly Salary: \$701.22****Posting Date: 5/13/93**

Provide technical support (computer, scientific engineering, machining, etc.) for CHES user groups. Supervise the enforcement of safety codes. Monitor status of X-ray synchrotron facilities. Correct system malfunctions and software problems associated with instrument control. Maintain lab equipment. Design new equipment using CAD. May assist in experimental problems.

Requirements: BS or equivalent in technical/scientific field such as engineering or physics. Good mechanical lab skills. Computer programming experience preferred. Send cover letter and resume to Sam Weeks.

Electronics Technician GR24 (T6604)**Biomedical Electronics Service-Statutory****Minimum Biweekly Salary: \$701.22****Posting Date: 4/29/93**

Provide technological support for the research, teaching and clinical programs at the College of Veterinary Medicine with emphasis on component level repair of sophisticated electrical and electronic instrumentation. Some computer workstation and peripheral equipment repair. Some network installation and support.

Requirements: Education and experience equivalent to a certified biomedical electronics technician required. Strong computer science background preferred. Experience troubleshooting sophisticated medical and analytical electronic instrumentation to the component level. Some experience troubleshooting and repairing micro-computers and peripherals. Ability to interact with lay users and translate technical jargon into terms they can understand. Send cover letter and resume to Sam Weeks.

Technical Part-Time**Electronics Technician GR24 (T6504)****Modern Languages and Linguistics-Endowed****Minimum Biweekly Salary: \$701.22****Posting Date: 4/22/93**

Install and maintain computers, multimedia, and other electronic hardware and software in the language lab and staff offices. Perform routine upgrading, maintenance and documentation of DOS and Windows-based computers on a Novell network. Write user manuals. Hire, train and supervise student technicians. **Requirements:** AAS degree in electronics/computers, BS desirable. At least 1yr. of computer/electronic experience. Must be able to install and maintain hardware and software and have a thorough knowledge of electronic circuitry. Supervisor experience desirable. Send cover letter and resume to Sam Weeks.

Technical Temporary**Technician (T6802)****Fruit and Vegetable Science-Statutory****Posting Date: 5/13/93**

Assist in vegetable crops studies including planting, maintenance, and harvest of field plots and greenhouse experiments. Assist with plant and soil sampling procedures; yield and fruit quality measurements; and use of lab and field research equipment.

Requirements: Experience with farm equipment, plant production methods, and research data collection desirable. Must have NYS driver's license. Send cover letter and resume to Sam Weeks.

Photographer (T6706)**University Relations-Endowed****Posting Date: 5/6/93**

Produce high quality photographic images to be used for public relations.

Requirements: 3yrs. in location photography. Ability to interact with diverse clients and subjects including VIPs. 3 month temporary position. Send resume and work sample to Chris Hildreth, Comstock Hall, Cornell University, Ithaca, NY 14853.

Research Technician (T6401)**Clinical Sciences-Statutory****Hiring Rate: \$7.80****Posting Date: 4/15/93**

Manage a research laboratory including ordering supplies, maintaining inventories, preparation and assistance with research surgeries, media preparation and tissue/cell culture. Monday-Friday/8:00-5:00, less than 6 months

Requirements: B.S. in animal or biological sciences. Experience with in vitro fertilization or mammalian cell culture as well as electron microscopy. Send cover letter, three references and resume to Sam Weeks.

Laboratory Technician (T6004)**Entomology-Statutory****Hourly Rate: \$6.50****Posting Date: 3/18/93**

Perform lab bioassays of fungi and nematodes against ticks. Cut histological sections of tricks embedded in plastic. Perform fluorescent and sterile technique.

Requirements: High school diploma or equivalent. Experience using microtome, histological stains, and laboratory bioassays. Send cover letter and resume to Sam Weeks.

Office Professionals**Temporary Office Professional Positions**

The temporary service at Cornell University is presently recruiting for the following areas: Receptionist, Office Assistant, Data Entry Clerk, Secretary, and Administrative Aide. Individuals will need to be proficient in the use of the Macintosh or IBM computers. Programs that are in great demand would be Microsoft Word, Filemaker, Pagemaker, Excel, WordPerfect and Lotus. A typing speed of 45-60 wpm is preferred. Minimum of one year office experience is necessary. If you are not presently employed and would consider temporary opportunities, please send a cover letter stating your interest in temporary opportunities and a resume to Karen Raponi, Employment Services, 20 Thornwood Drive.

Document Access Assistant GR17 (C6704)**Albert R. Mann Library-Statutory****Minimum Biweekly Salary: \$530.38****Posting Date: 5/6/93**

Under the direction of the document access librarian

assist patrons at the circulation desk utilizing the NOTIS circulation software. Coordinate the shelving of unbound materials making decisions pertaining to access and repair of unbound materials. Assist in interlibrary loan by screening and verifying incoming requests, and searching local and national databases to verify and identify holdings information. Provide research assistance utilizing multiple public access databases.

Requirements: High school diploma or equivalent. Some college coursework preferred. Experience working in an academic/research library, and experience with use of microcomputers preferred. Strong interpersonal and communication skills, ability to meet deadlines and pay attention to detail. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Office Assistant GR18 (C6805)**Administrative Services-Endowed****Minimum Biweekly Salary: \$542.89****Posting Date: 5/13/93**

Process accounts payable vouchers. Assemble and distribute various reports from the Job Cost System to various facilities and business operations departments. Appointment until 6/30/94.

Requirements: High school diploma or equivalent. Some college coursework preferred. 1-2yrs. related experience. Must possess good communications, (written) and organizational skills. Experience in a business office environment. Experience with Macintosh and mainframe computers preferred. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Secretary GR18 (C6803)**Health Services-Endowed****Minimum Biweekly Salary: \$542.89****Posting Date: 5/13/93**

To assist in management of requirements area in Gannett Health center. To maintain records of students eligible to use the health center and to record immunizations of patients as required by NYS law.

Requirements: High school diploma or equivalent. Some college coursework preferred. 1-2yrs. related medical office experience. Must be able to type at least 60 wpm and have basic computer skills. Excellent interpersonal skills required. Confidentiality is essential. Heavy typing. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Secretary GR18 (C6707)**University Health Services-Endowed****Minimum Biweekly Salary: \$542.89****Posting Date: 5/6/93**

To assist in management of the reception area for the Contraception, Gynecology and Sexuality Service (CGSS) unit. To act as liaison between CGSS staff and patients. To assure and maintain smooth and efficient patient scheduling and flow. 10-month position from the middle of August - the middle of June.

Requirements: High school diploma or equivalent. Some college coursework preferred. 1-2 yrs general secretarial/office skills. Computer experience desirable, must know WordPerfect. Strong administrative skills. Family planning knowledge helpful. Ability to elicit and discuss personal information in a non-judgmental manner. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Office Assistant GR18 (C6701)**Vet Medical Teaching Hospital-Statutory****Minimum Biweekly Salary: \$542.89****Posting Date: 5/6/93**

Mornings work in Clinics Business Office duties include computer input of hospital vouchers, assist in functions of accounts receivable and cash control. Afternoons and Saturdays work in Small Animal Clinic front office reception, gathering patient history and client information; operate computer terminal for medical records; handle admission discharge and cashiering of small animal patients.

Requirements: High school diploma or equivalent. Coursework in accounting and medical terminology desirable. Monday - Saturday 39hrs/wk 1-2 yrs. related experience. Strong organizational, interpersonal and communication skills required. Able to work independently in an active complex environment. Light typing. External applicants send a cover letter and resume to Esther Smith. Employees should include employee transfer application.

Office Assistant GR18 (C6602)**Continuing Education and Summer Sessions-Endowed****Minimum Biweekly Salary: \$542.89****Posting Date: 4/29/93**

Serve as receptionist; process mail and requests for information; order supplies; general typing; provide clerical support to registrar and assistant registrar.

Requirements: High school diploma or equivalent. 1-2yrs. related experience required. Some college course work preferred. Able to work with diverse public. Excellent interpersonal and communication skills required. Experience with WordPerfect desirable. Able to set priorities and work independently under heavy pressure. Some familiarity with Cornell desirable. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include an employee transfer application.

Secretary GR19 (C6808)**Chemical Engineering-Endowed****Minimum Biweekly Salary: \$566.28****Posting Date: 5/13/93**

Provide academic/research related clerical/administrative support to several faculty and their research groups. Type correspondence, class work, technical material and prepare purchase orders; oversee completion and submission of research proposals; schedule appointments and coordinate meetings; handle travel arrangements and reimbursements; maintain vanda cards and petty cash; process incoming/outgoing mail and deliveries for building; serve as school's receptionist; answer phones; assist with various social functions; handle room reservations; supervise student employees and manage business office operations.

Requirements: High school diploma or equivalent. Some college coursework preferred. Minimum 2yrs. related experience. Excellent typing skills required. Must be able to organize work, set priorities and work with frequent interruptions. Strong interpersonal and communication skills essential. Knowledge of Macintosh required. Heavy typing. External applicants send cover letter and resume to Esther Smith. Employees include an employee transfer application.

Accounts Assistant GR19 (C6810)**Administrative Services-Endowed****Minimum Biweekly Salary: 5/13/93****Posting Date: 5/13/93**

Responsible for all non-exempt payroll/personnel functions for engineering and facilities (220+ employees). Monitors administration of the building trades council (BTC)), International Union 66 Operating Engineers (IUOE), and United Auto Workers (UAW) union contracts. Coordinates daily functions in conjunction with the administrative aide.

Requirements: High school education or equivalent. Some college coursework in accounting preferred. 1-2yrs. experience using calculator, typewriter, and personal computers. (Macintosh) necessary. Accurate typing and excellent interpersonal, (oral and written) communication skills. Cornell university payroll accounting and mainframe desired. Light typing. External applicants send cover letter and resume to Esther Smith. Employees include employee transfer application.

Public Services Assistant GR19 (C6608)**Bailey Hortorium-Statutory****Minimum Biweekly Salary: \$566.28****Posting Date: 4/29.93**

Provide library and administrative support for a small collection. Clerical support for the department for special projects and routine clerical jobs.

Requirements: High School diploma or equivalent. Some college coursework of 1-2yrs. or AAS degree preferred. Minimum 2yrs. related experience required. Familiarity with Library system helpful. Good organizational skills. Light typing. External applicants send cover letter and resume to Esther Smith. Employees should include an employee transfer application.

Administrative Aide GR19 (C5703)**ILR Extension and Public Service-Statutory****Minimum Biweekly Salary: \$566.28****Posting Date: 4/15/93 Repost**

Serve as registrar for office of management and executive education public programs. Manage computerized registration system to track participants; respond written and telephone inquiries about programs, compose and send confirmation letters. Provide program support for OMEC executive programs. Manage marketing visit schedules for director and senior program faculty, participate in development and implementation of marketing strategies, make all travel arrangements and meeting rooms, meals, etc. Responsible for postcourse follow up.

Requirements: High school diploma or equivalent required. Some college coursework preferred. 1-2yrs. related experience. Ability to use computer spreadsheet programs, file management packages and wordprocessing software (IBM). Good interpersonal skills a must. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR19 (C6604)**Chemistry-Endowed****Minimum Biweekly Salary: \$566.28****Posting Date: 4/29/93**

Act as administrative aide to the executive director. Responsible for supporting operational and academic matters. Do word processing and arrange meetings for the executive director. Help prepare all reports produced by the department office. Assist in clerical work pertaining to faculty, undergraduate and graduate matters as directed. Maintain departmental calendar and statistical lists.

Requirements: High school diploma or equivalent. Some college course work preferred. 2-3yrs. experience using Macintosh computer and software for word processing. Minimum 1yr. previous experience as secretary in administrative office. Demonstrated ability to meet deadlines and work under pressure. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include an employee transfer application.

Administrative Aide GR20 (C6802)**Athletics-Endowed****Minimum Biweekly Salary: \$590.45****Posting Date: 5/13/93****Cornell Employees Only**

Provide administrative and secretarial support for director and assistant directors of athletic public affairs. Assist with preparation of newsletters, phonathons, special events and projects; manage work-flow; prioritize and prepare all incoming and outgoing correspondence; handle confidential correspondence.

Requirements: Associate's degree or equivalent. Minimum 2-3yrs. related experience. Excellent organizational communications and interpersonal skills. Ability to handle confidential information. Experience with IRIS; Macintosh computers and knowledge of PageMaker desirable. Medium typing. Send employee transfer application, cover letter and resume to Esther Smith.

Administrative Aide GR20 (C6606)**Physiology-Statutory****Minimum Biweekly Salary: \$615.42****Posting Date: 4/29/93**

Provide administrative support to professor. Supervise the financial, personnel and administrative aspects of the research group. Assist in budget preparation, oversee accounts, process purchase orders and travel requisitions.

Requirements: Associate's degree or equivalent. Minimum 2-3yrs. administrative/secretarial experience. Knowledge of word processors/personal computers. Experience with grant preparation. Accounting/bookkeeping experience necessary. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR20 (C6607)**Synthesis Engineering Education Coalition-Endowed****Minimum Biweekly Salary: \$615.42****Posting Date: 4/29/93****Cornell Employees Only**

Provide administrative/clerical support to staff of the Synthesis Coalition national headquarters office.

Requirements: Associate's degree or equivalent. 2-3yrs. related experience required. Knowledge of Macintosh computers and word processing, spreadsheet and database applications. Strong office and organizational skills. Good interpersonal skills. Good interpersonal communications skills. Experience in academic environment. Medium typing. Submit cover letter, resume and employee transfer applications to Esther Smith.

Assistant to Program Director GR20 (C6308)**Nutritional Sciences/CNPP-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 4/8/93**

Serve as assistant to the program director of Cornell food and nutrition policy program. Assume responsibility for all administrative tasks relating to director's activities in a program which conducts research and training activities in Africa, Asia, and Latin America.

Requirements: AAS degree or equivalent. 2-3yrs. of progressively responsible office experience. Excellent word processing skills(80+wpm). Experience with technical manuscripts required. Software expertise with particular knowledge of WP 5.1, Lotus, Quattro Pro, Notebook required. Working knowledge of IBM PC compatible equipment and DOS3.1+ necessary. Proven ability to work independently, prioritize, take initiative, work under pressure, and work creatively under tight deadlines vital. Ability to work as team player, organizational and people skills a must. Experience with research office, international work, and fluency in a foreign language (French preferred) useful. Strong communication (written and verbal) a must. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Personnel Assistant GR20 (C6705)**Cornell Cooperative Extension-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 5/6/93**

Provide administrative and clerical assistance for two personnel associates in maintenance, analysis, and review of federal retirement, federal employees' group life insurance, workers' compensation and unemployment insurance accounts for cornell cooperative extension statewide (1400+ employees). **Requirements:** Associate's degree in accounting, business/personnel or equivalent. Monday - Friday 8:00a.m. - 5:00p.m. Medium typing. Minimum 2 years related experience. Attention to detail, public contact, judgment and accuracy. Complete familiarity with word processing and spreadsheets. (WordPerfect, Lotus (or Quattro). Good with numbers and familiar with accounting procedures. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Editorial Assistant GR20 (C6706)**Agricultural Economics-Statutory****Minimum Biweekly Salary: \$590.45****Posting Date: 5/6/93**

Assists managing editor in editorial activities. Specific emphasis on updating existing home study courses and developing new course materials. Designs, produces mechanical and tracks production of these materials. Also writes and designs two quarterly newsletters, and designs brochures and promotional materials. Medium typing.

Requirements: Associates degree or equivalent. Bachelor's degree preferred. Well grounded in english language. Desktop publishing on Macintosh required with some publishing experience. Knowledge of graphic design, printing, photography and editing procedures are required. Strong written, oral, and visual communications skills needed. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR20 (C6708)**School of Hotel Administration-Endowed****Minimum Biweekly Salary: 590.45****Posting Date: 5/6/93**

Provides administrative and clerical support for the Director of Development and the Director of Publications in the daily operations of the Department of External Affairs at the school of Hotel Administration. The position will report jointly to both directors, and workload will be apportioned by and through them as needs vary. **Requirements:** Associate's degree in business or office professional preferred: 2-3 yrs comparable work experience desired. Excellent communication (written and oral) and interpersonal skills required. Excellent work process skills essential. Medium typing. Flexibility key: ability to move from one assignment to another with ease, with sensitivity to the variations in development & publications demands. Ability to understand, respect and maintain confidentiality. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application. Women and minorities are encourage to apply.

Accounts Assistant GR20 (C6711)**Administrative Services-Endowed****Minimum Biweekly Salary: \$590.45****Posting Date: 5/6/93****Cornell Employees Only**

Provide administrative and accounting support for facilities and business operations departments (directors, business managers, superintendents, plant/account/section managers and support staff). Until 6/30/94

Requirements: High school education or equivalent. Associates degree in accounting preferred. Experience using typewriter and personal Macintosh/Mainframe computers necessary. Cornell accounting experience desirable. Excellent interpersonal communications (written & oral) skills necessary. Send employee transfer application, cover letter and resume to Esther Smith.

Administrative Aide GR20 (C6712)**University Development/Public Affairs-Endowed****Minimum Biweekly Salary: \$590.45****Posting Date: 5/6/93**

To assist the director of special gifts through providing administrative support and management skills in the overall daily operations of the special gifts program of university development. The program manages the cultivation and solicitation of alumni and friends of Cornell who have the potential to make gifts between \$100K - \$1 million.

Requirements: Associate's degree or the equivalent in education, experience and training. 2-3 years related experience required. Knowledge of Macintosh word processing. Ability to work with computer inquiry programs (e.g. on the Cornell mainframe). Good typing, proofreading and organizational skills. Medium typing. Ability to pay attention to detail a must. Good communication skills and a pleasant telephone manner. Ability to prioritize assignments, work under pressure and meet deadlines. Ability to maintain a high degree of confidentiality. Knowledge of Cornell desirable. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR21 (C6812)**Cornell Tradition-Endowed****Minimum Biweekly Salary: \$615.42****Posting Date: 5/13/93****Cornell Employees Only**

Provide a variety of complex administrative functions in support of the Cornell Tradition. Office management on-line system maintenance; supervision of office assistant, temporary and student employees; some desk-top publishing, maintenance of the operating budget handling correspondence and inquiries (including drafting correspondence) reconciliation of accounting statements (including fellowship accounts), statistical reports on fellowship program, assistance with student employment accounts for program participants.

Requirements: Associate's degree or equivalent. 2-3yrs. related experience in a busy office with numerous program components. Excellent communication (written and oral) required as well as knowledge of computer systems and Macintosh desk-top publishing skills. Ability to handle confidential information on both students and donors a necessity. Knowledge of accounting procedures. Supervisory skills important and ability to remain flexible in small, busy office. Medium typing. Send employee transfer application, cover letter and resume to Esther Smith.

Administrative Aide GR21 (C6702)
ILR Central Europe Project-Statutory
Minimum Biweekly Salary: \$615.42
Posting Date: 5/6/93

Provide full range of clerical support for the school's Central Europe project with Czech and Slovak Universities; support the work of the executive and academic director and affiliated faculty; respond to inquiries; make arrangements; maintain files; develop office system, maintain budget and other data bases; type proposals. Until 12/94 with possible continuation. **Requirements:** Associates degree or equivalent experience. 2-3yrs. related experience required. Medium typing. Primarily Mac, but also IBM computer expertise required. Ability to work independently, write well and to understand cultural differences. Willingness to work unusual hours. International knowledge or experience important. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR21 (C6709)
Computer Science-Endowed
Minimum Biweekly Salary: \$615.42
Posting Date: 5/6/93

Assist two senior faculty in conduct of all aspects of their university work; assist in monitoring current research programs; implement leading edge information management technologies to organize administrative functions (WAIS, LATEX); coordinate administrative activities and software distribution for a large research group. Assist faculty and senior researchers in design and writing of scientific research grant proposals for submission to government and industry sponsors. Research and compile statistics, reports and correspondence for projects delegated by faculty supervisor. Manage budget (\$80,000) for LICIS (Logic in Computer Science) annual conference. Function as electronic information management expert and consultant for department administrative staff. Manage software distribution effort including documentation, for a large software project. Use complex graphics and typesetting software for proposals, reports and manuscripts.

Requirements: A.A. degree or equivalent; 2-3 years related office experience. Demonstrated communication, interpersonal and public relations skills. Must be able to work without direct supervision; requires a high degree of autonomy in identifying and resolving problems and screening requests. Aptitude to learn complex computer system structure requiring programming skills and creativity. Demonstrated general administrative and organizational skills essential, including technical typing, writing skills. Scientific and accounting background desirable. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR22 (C6806)
Institutional Planning/Statutory Affairs-Endowed
Minimum Biweekly Salary: \$641.92
Posting Date: 5/13/93

Provide with minimal supervision, administrative support for the director of institutional planning and research, the director of statutory affairs and other members of their staff.

Requirements: Associate degree or equivalent. 2-3yrs. experience required. Excellent organizational, interpersonal and communication (written/oral) skills. Ability to handle confidential information. Experience with Macintosh computers using Excel and Microsoft Word. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR22 (C6603)
Astronomy-Endowed
Minimum Biweekly Salary: \$641.92
Posting Date: 4/29/93

Assists professor in directing the Pew Science Education Program and administering a grant by the Pew Foundation which finances the program. There are 7 colleges and universities involved in the program and the job also consists in coordinating and overseeing the involvement of these and other institutions. Organizing meetings and symposia; drafting all correspondence; interviewing students and handling finances.

Requirements: Associates degree or equivalent. 3-4yr. administrative secretarial experience beyond formal training. Word processing and writing skills very important. Excellent organizational & interpersonal skills. Ability to work under pressure. Prior experience at Cornell preferable but not required. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include an employee transfer application.

Office Professionals Part-Time

Circulation/Reserve Assistant GR17 (C6703)
Circulation/Uris Library-Endowed
Minimum Biweekly Salary: \$530.38
Posting Date: 5/6/93

Under the direction of the administrative supervisor, assist in the reshelving of materials returned from circulation, and work at the security desk. 20 hrs/wk. **Requirements:** High school diploma or equivalent. Some college coursework preferred. Ability to work effectively with a variety of people in a public service setting. Must be able to shelve and shift books. Must be exceptionally dependable. Good organizational and communication skills. External applicants send cover

letter and resume to Esther Smith. Employees should include employee transfer application.

Medical Transcriptionist GR18 (C6804)
Health Services-Endowed
Minimum Full-Time Equivalent: \$542.89
Posting Date: 5/13/93

Transcribe and print all dictated confidential office visit notes for GHC medical patient charts. Monday-Friday, 20hrs/week. 9month position, August-May.

Requirements: High school diploma or equivalent. Some college coursework preferred. 1-2yrs. transcription experience required; familiarity with medical terminology. Accurate typing (80wpm); Lanier dictating system; and Macintosh computer WriteNow 2.2 word processing preferred. Ability to work under pressure and deal with a variety of people. Ability to maintain strict confidentiality. Heavy typing. External applicants send cover letter and resume to Esther Smith. Employees include employee transfer application.

Senior Department Assistant GR18 (C6006)
Reference/Olin Library-Endowed
Minimum Full-Time Equivalent: \$542.89
Posting Date: 5/6/93

Under the general supervision of the department head and individual reference librarians, provide basic secretarial/office support to a very active public services department. Format and type instructional materials; type correspondence and reports; handle supplies and equipment orders, pay records and statistics. Interact with a wide range of staff. 20hrs./week.

Requirements: High school diploma or equivalent. Some college preferred. Intermediate word processing skills. Good organizational skills. Ability to work well under pressure. Excellent interpersonal skills. 1-2yrs. related experience. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Secretary GR18 (C6601)
CISER-Endowed
Minimum Biweekly Salary: \$542.89
Posting Date: 4/29/93

Cornell Employees Only.
 Provide clerical and administrative support to the CISER staff and members.

M-F, 12pm -4pm. **Requirements:** High school diploma or equivalent required. Formal training of 1-2yrs., college course work preferred. Position requires exemplary communication and interpersonal skills. Familiarity with C.U. accounting system. Computing experience to include extensive use of IBM PC, WordPerfect, and familiarity with mainframe basics is essential. Dbase III+ and basic knowledge of the Mac desirable. Medium typing. Send cover letter, resume, and transfer application to Esther Smith.

Administrative Aide GR19 (C6813)
Law-Endowed
Minimum Full-Time Equivalent: \$566.28
Posting Date: 5/13/93

Provide secretarial and administrative support for a Law school professor. Manage all administrative aspects of his work in affiliation with the American Law institute. Monday-Friday, 25hours/week, flexible.

Requirements: High school diploma or equivalent. Some college coursework preferred. 2-3yrs. secretarial/administrative experience. Ability to work independently and exercise good judgment. Coordinate and prioritize tasks. Excellent communication (written and oral) skills. Knowledge with personal computers and word processing (WordPerfect preferred). Heavy typing. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR19 (C6605)
Center for Advanced Imaging Technology-Statutory
Minimum Full-Time Equivalent: \$566.28
Posting Date: 4/29/93

Cornell Employees Only
 Assist director in the performance of administrative duties required for the smooth operation of the Center, including budgeting, accounting, payroll, and secretarial support. M-F, 25-30 hours/week with a possibility of becoming full-time.

Requirements: High school diploma equivalent in business and office administration preferred. Some college course work. Knowledge of Statutory Accounting System. 2yrs. previous office experience. Working knowledge of IBM PC, Microsoft Word, and Excel. Data base management skills very desirable. Medium typing. Send employee transfer application, cover letter and resume to Esther Smith.

Secretary GR20 (C6405)
Chemistry-Endowed
Minimum Full-Time Equivalent: \$590.45
Posting Date: 4/15/93

Provide clerical support to one professor and his research group. Type correspondence, manuscripts, grant applications; answer telephone; file; fax; process incoming and outgoing mail (US and campus); photocopy and occasional library research. Monday-Friday 8-12.

Requirements: AAS degree or equivalent. Minimum 2yrs. experience with scientific word processing using IBM WordPerfect. Must be able to handle confidential materials properly. Excellent communication skills. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include an employee transfer application.

Assistant to the Coordinator of University Education GR21 (C6811)
Johnson Art Museum-Endowed
Minimum Full-Time Equivalent: \$615.42
Posting Date: 5/13/93

To assist the coordinator of university education with outreach to student organizations and university staff by developing, teaching, documenting, and evaluating programs which focus on exhibitions and the museum's permanent collection. To provide computer and general office support as requested. Flexible, some evenings and weekends. Appointment until 5/96.

Requirements: BA. in art history/art education. Coursework in museum studies a plus. 2yrs. minimum teaching experience in art programs at the high school/college level. Excellent communication (verbal and written) skills. Ability to work independently on several projects simultaneously. Proficiency in Mac software highly preferred. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Administrative Aide GR21 (C6710)
Veterinary Administration-Statutory
Minimum Full-Time Equivalent: \$615.42
Posting Date: 5/13/93

Cornell Employees Only

Provide administrative support to the associate dean for research and graduate education and two grant and contract coordinators. Includes coordinating independent projects, preparing documents, reports, and correspondence, maintaining office file index, and providing administrative assistance. Monday-Friday, 5.5hrs/day. 10month, September-June.

Requirements: AAS degree or equivalent. 2-3yrs. administrative experience; 2-3yrs. sponsored research/program administration desirable. Excellent interpersonal/communication skills. Accuracy and organizational skills essential. Knowledge of databases and WordPerfect is required. Heavy typing. Send cover letter, resume and employee transfer application.

Administrative Aide GR21 (C6807)
Cognitive Studies-Endowed
Minimum Full-time Equivalent: \$615.42
Posting Date: 5/13/93

Provide administrative, secretarial and accounting support related to the cognitive studies program and its undergraduate and graduate program. Act as liaison for members of the program, co-directors, faculty, students and visitors. Coordinate speaker series, conferences and workshops. Manage program account and payroll. 20hrs/week.

Requirements: Associate's degree or equivalent. Minimum 2-4yrs. job-related experience. Ability to work independently. Must have excellent organizational, interpersonal and communication skills. Experience with CU accounting procedures preferred. Familiarity with Macintosh. Medium typing. External applicants send cover letter and resume to Esther Smith. Employees should include employee transfer application.

Office Professional Casual

Casual Cashier (\$6301)

Ornithology

Hourly Rate: \$5.25

Posting Date: 4/29/93

The Crow's Nest Birding Shop is seeking an individual to perform cashiering duties. Respond to general nature questions. Answer phone. Knowledge of birds is helpful but not essential. Must be very customer oriented. Hours: Saturday and Sunday 10am-4pm. Other weekday hours as needed, especially in the summer. Please send a cover letter and resume to Karen Raponi, Employment Services, 20 Thornwood Drive.

Office Professional Temporary

Medical Transcriptionist

Gannett Health Center

Hiring rate: \$7.00 hr

Posting Date: 5/6/93

Transcription of confidential records for psychological and medical patients using Lanier Centralized Dictating System and Macintosh computer WriteNow 2.2 wordprocessing. Also typing of handwritten letters, memos, forms and reports. **Requirements:** High school graduate with at least 2 years transcription experience. Heavy typing. Must be able to accurately type 75-80 wpm. Familiarity with medical terminology. Ability to work under pressure and to maintain strict confidentiality. Hours 9:00am to 1:00pm, Monday through Friday, 20 hours a week. Please send a cover letter and resume to Karen Raponi, Employment Services, 20 Thornwood Drive.

Curriculum Writer (\$6205)

Education-Statutory

Hiring Rate: \$8.00

Posting Date: 4/1/93

Responsible for the development and editing of environmental education curriculum materials for elementary students. Assist and report to the Director and Curriculum Specialist of the instructional materials service in the department of education.

Requirements: B.S. in natural resources, education or communications. Excellent Macintosh computer skills. Teaching experience preferred. Ability to work independently and with others. Able to meet deadlines. Send cover letter and resume and an example of your writing to Andrew Fagan, IMS Curriculum Specialist, Department of Education.

General Service Casual

Golf Course Rangers

Robert Trent Jones Golf Course

Posting Date: 4/22/93

Oversee golf course activity. Knowledge of golf rules and regulations essential. Active playing experience

required. Excellent interpersonal and public relation skills is a must. Casual appointment will begin upon course opening and will continue until the end of the season. Schedule will be Friday, Saturday, Sunday and special events until the end of May. Saturday, Sunday and special events for the remainder of the appointment. Interested applicants may call Dick Costello at 257-3661, Monday-Wednesday.

Academic

Assistant Professor

Horticultural Sciences/Ag Experiment Station/ Geneva, NY

Posting Date: 5/13/93

Appointment: Extension 60%; Research 40%

Responsible for a statewide vegetable crop extension program. Involves close interaction with extension field staff, processing industry field staff and others involved in vegetable crop production and marketing. Provides training and technical support to county and regional Cooperative Extension personnel involved with vegetable crops. Participation in statewide extension programming and cooperation with other faculty working with vegetable crops is expected. Act as liaison between vegetable growers organizations and commodity groups with Cornell University. Oversee cultivar trials and certain cultural practice trials will be within the extension responsibility of this position. Conduct a research program directed at solving production problems faced by NY vegetable growers. Program should complement existing research programs at Cornell University. Seek external funding in support of extension and research programs.

Requirements: Ph.D. in one of the Plant Sciences of related areas. Available November 1, 1993, or as negotiated. Send a complete resume, transcripts, and the names of 3 individuals from whom letters of reference may be solicited to: Dr. Michael H. Dickson, Horticultural Sciences, NYS Agricultural Experiment Station, Cornell University/Geneva Campus, Geneva, NY 14456 by August 31, 1993.

PA#22 Sea Grant Extension Specialist

Location: Stony Brook NY, or in a county bordering the lower Hudson River

Posting Date: 5/6/93

Develop, implement, and evaluate a regional extension education program pertaining to marine environmental quality and pollution problems and their remediation in Sea Grant's Marine District (includes tidal waters/shore of Long Island, NYC, and Hudson River to the Troy Dam), with special emphasis on sustainable growth issues. Conduct educational activities that (1) enhance governmental, media, special interest/user group and general public awareness and understanding of marine and coastal environments and associated pollution problems; (2) assist such audiences to develop, implement, or support activities that seek to remediate such problems; (3) aid existing Cornell Cooperative Extension programs at the university and county level relating to marine resource use, development, planning and conversation in addressing pollution problems and issues; (4) work closely with other governmental agencies involved in water pollution control and prevention.

Minimum Qualifications: Master's degree in environmental science or education, marine/aquatic science, coastal/natural/water resources management, land use planning or closely related field, plus four years experience in environmental, resources management, policy, education or communications. Demonstrated ability in written and verbal communications and group/meeting organizational skills and working with the public are also strongly desired. Familiarity with New York's marine waters and the lower Hudson River is desirable. Salary: Commensurate with qualifications. Apply by May 20, 1993 to Staff Development and Recruitment, Box 26, Kennedy Hall, Ithaca, NY 14853.

Lecturers or Teaching Associates, 93-94 Academic Year

Modern Languages and Linguistics

(although there are no certain openings at present, full- and part-time positions sometimes become available on short notice.)

Posting Date: 5/6/93

DMLL would like to update its file of candidates qualified to teach the following languages: Cebuano, Chinese (Cantonese and Mandarin), English for Academic Purposes, French, German, Hindi, Indonesian, Intensive English (English as a Second Language), Italian, Javanese, Japanese, Khmer (Cambodian), Korean, Mandinka, Sinhala, Spanish, Tagalog, Tamil, Thai, Vietnamese, and Yoruba. Please send a letter of interest, a resume describing past language teaching experience, level of fluency, educational background, and the names of at least two individuals we can contact for references. Materials will be reviewed by the appropriate language supervisor; if and when openings arise, qualified candidates identified through this search will be contacted. Address materials to: John S. Bowers, Chair, Department of Modern Languages and Linguistics, 209 Morrill Hall, Cornell University, Ithaca, NY 14853-4701