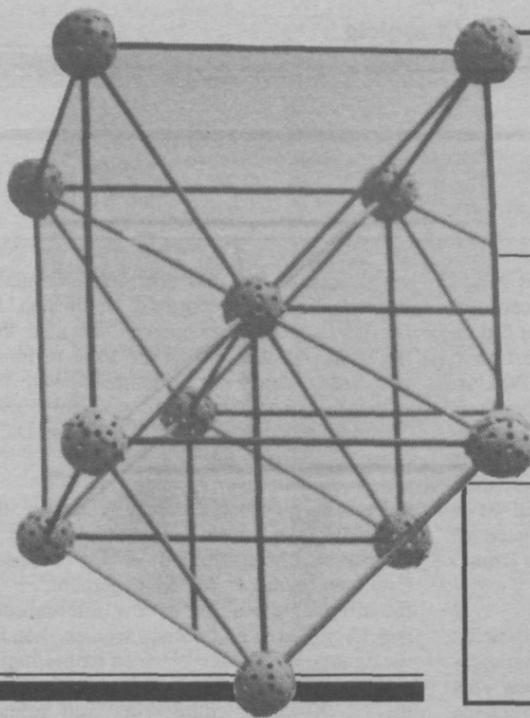


CORNELL CHRONICLE

Volume 21 Number 15 December 14, 1989



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Magic with glass

Out of sight!

Ezra's wedding socks, high-tech chips to fly aboard space shuttle Columbia

When the space shuttle Columbia flies into space on its planned Dec. 20 mission, it is scheduled to carry a packet of Cornell mementos: microscopic gold reproductions of the university's crest, a supercomputer circuit board — and founder Ezra



Chris Hildreth

Trustee Ezra Cornell holds his great-great-grandfather's silk wedding socks scheduled to be launched aboard the space shuttle Columbia.

Cornell's 158-year-old wedding socks.

The silk socks, plain except for delicate piping down the side, were worn by the farmer and inventor at his 1831 wedding to the estimable farmer's daughter Mary Ann Wood. Presumably white when first made, they have now aged to a light tan. They were borrowed from University Archives for the 10-day mission.

The minuscule gold crests were created on silicon chips at Cornell's National Nanofabrication Facility (NNF) with the same technologies used to construct advanced microelectronic and optical circuits.

The supercomputer memory board, donated by International Business Machines Corp., will be installed as a working component in one of the twin supercomputers at the Cornell National Supercomputer Facility (CNSF) upon its return to Earth.

The Cornell mementos will be carried into space at the invitation of Cornell graduate David Low, a mission specialist on the Columbia flight who received his bachelor's degree in mechanical engineering in 1980.

Transporting mementos into orbit aboard the shuttle is not unusual, although the Cornell packet is, according to NASA spokesmen. Souvenirs carried aloft at the invitation of astronauts usually include flags, banners, decals or small medals. According to NASA, other venerable objects that have flown in space include a 4,000-year-old tablet and a dinosaur bone.



Chris Hildreth

The tiny silicon chip bearing a microscopic replica of Cornell's crest sits on a penny. Cornell's National Nanofabrication Facility produced 125 of the chips, one for each year of the university's existence next year.

However, the Columbia mission represents the first time 158-year-old silk wedding socks have flown into space.

"We'd like to thank David Low for inviting us to fly these mementos," said John Burness, vice president for university relations. "By contributing Ezra Cornell's heirloom hosiery, we're telling him and the other Columbia astronauts that we expect this mission's success to knock our socks off!"

Said University Archivist Gould Colman, "We think Ezra Cornell would have enjoyed the prospect of his wedding socks traveling in space. He was known for his whimsical sense of humor.

"He also was known for his frugality. So, we think he would have been pleased that his socks had found another use over 150 years after the wedding.

"Also, it's appropriate that this shuttle flight include a keepsake from Ezra Cornell, who helped pioneer this nation's telegraph network," Colman said. Cornell's founder, a farmer, inventor and entrepreneur, built the telegraph line over which Samuel F.B. Morse sent the first message, he explained. Ezra Cornell also introduced glass insulators, a key component that allowed telegraph lines to work, and one purpose of the Columbia mission

Continued on page 8

Barker backs FCR budget plan, up to a point

Senior Provost Robert Barker told the Faculty Council of Representatives yesterday that its budget recommendations "reflect priorities very similar to our own," but he added that the administration "just cannot see the 1990 budget producing the dollars to fund those recommendations in their entirety."

Barker, continuing a theme sounded earlier this year by President Frank H.T. Rhodes, said that even if Cornell goes ahead with a major fund-raising campaign, the faculty and administration must begin making hard choices, accepting that "additions and improvements to our total academic programs may have to be bought with the retirement or reduction of some other programs."

Barker was responding to four recommendations made by the FCR's Financial Policies Committee and endorsed by the full body at its Nov. 8 meeting.

The exchange is part of the process of developing the 1990 endowed general-purpose budget, which governs operations of the College of Architecture, Art and Planning; College of Arts and Sciences; College of Engineering; and various central-administration functions. The budget, which is projected to rise from this year's \$228.3 million to about \$245 million, will be voted on by the Board of Trustees in March.

The four faculty recommendations addressed by Barker were: cutting the number of tenure-track lines by 2 percent in each of the next two years, raising faculty salaries by 10

Continued on page 8



Charles Harrington

Epidemiologists (from left) Christine Rossiter, Bob Newhart and Luis Fernandez check deer samples for Lyme disease and other diseases.

Deer hunters help CU track Lyme disease

Deer hunters across New York state are voluntarily sending in samples from deer to help epidemiologists in the New York State Diagnostic Laboratory at the College of Veterinary Medicine determine whether deer are involved with some diseases — including Lyme disease — that also occur in domestic animals.

The testing program, which is expected to yield samples from hundreds of deer this year, is believed to be the only survey of its kind in the nation.

Deer hunters are being asked to send samples of blood, fecal matter, intestinal tissue and external parasites from white-tailed deer to the Veterinary Diagnostic Laboratory. Samples are tested for four diseases:

- Bluetongue, an insect-transmitted viral disease of sheep, cattle and goats. A similar virus also is responsible for an often-fatal disease of deer, EHD or epizootic hemorrhagic disease, which is found in some areas of the United States and Canada.

- Johne's disease or paratuberculosis, a bacterial disease affecting the intestinal tract of ruminants worldwide. A problem of growing economic importance in cattle in the United States, Johne's disease also occurs in mountain goats and sheep and in zoo animals.

- Leptospirosis, a water-borne bacterial disease that affects many species of animals and can cause abortion in cattle.

- Lyme disease, a bacterial infection in people (and, ac-

Continued on page 8

BRIEFS

■ **Salvation Army ringers:** The Big Red Marching Band will present a concert and carol sing on the Ithaca Commons at 6 p.m. on Friday, Dec. 15, as part of an effort to aid the Salvation Army. More than 40 Cornell athletes, coaches and staff members will join the marching band, cheerleaders and the Mr. and Ms. Big Red Bear mascots to give a bell-ringing hand to the Salvation Army Kettle Campaign. There will be at least four Cornell bell ringers at each of three kettle stations on the Commons from 3 to 7:30 p.m. on Dec. 15.

■ **Select Benefits claims:** Select Benefits participants cannot reclaim unused balances in the accounts that they set up each year and are reminded to incur reimbursable medical expenses by Dec. 31. To check account balances, statutory employees should call 255-4455; endowed, 255-3936. The deadline for submitting 1989 claims is March 31, 1990.

■ **Care of research animals:** A two-day free course on "The Care and Use of Animals in Research and Teaching" will be offered Tuesday and Wednesday, Jan. 16 and 17, by the Center for Research Animal Resources in the College of Veterinary Medicine. The course is intended for investigators, instructors, graduate students and technicians who use living animals in research or teaching. For details and to register, call Susan Lindsay at 253-3521.

■ **Return milk crates:** Anyone who has an orange-colored milk crate owned by the Cornell University Dairy in Stocking Hall has until Friday, Dec. 22, to return the crates with no questions asked. A new state law makes theft of milk crates punishable by a fine of up to \$100. Some 2,000 crates

worth nearly \$10,000 are stolen annually from the dairy, according to Joseph H. Davidson, general manager. He said that the orange crates, which are used to transport milk, should not be confused with red crates that the Dairy Store sells for \$3.99. The orange crates can be left at the Dairy Store, Davidson said.

■ **Founding editors:** Robert A. Jarrow, the Ronald P. and Susan E. Lynch Professor of Investment Management at the Johnson Graduate School of Management, is a founding co-editor of a new international quarterly that will publish articles that investigate the interface between mathematics and finance, exploring topics on financial theory, financial engineering and related mathematical and statistical techniques. The first issue of the journal, titled "Mathematical Finance," is scheduled for publication in January 1991. David C. Heath, professor of operational research and industrial engineering, is one of 16 associate editors of the quarterly, which will be published at the University of Chicago.

■ **First come, first go:** With some relatively new four-way-stop intersections on campus, the Department of Public Safety is reminding motorists that if two or more vehicles arrive at a four-way stop at the same time, it is the vehicle to the right that has the right-of-way. Otherwise, it is the first vehicle to arrive at a four-way-stop intersection that has the right-of-way.

■ **CPR and first aid courses:** The American Red Cross will conduct courses in cardiopulmonary resuscitation and in first aid during the spring term at Robert Purcell Union for faculty and staff. The courses, which cost \$35 and \$25 a person, are sched-

uled through university departments. Interested individuals should have their departments contact the Red Cross at 273-1900. The first course, standard first aid, is scheduled for Jan. 23 and 30. The first CPR course is set for Jan. 25 and Feb. 1.

■ **Home study:** Enrollment is open in a number of correspondence courses offered by the Cornell Home Study Program on subjects such as general merchandise, health and beauty aids management and operations, convenience store merchandising and food-store security. There is a fee of \$50 or \$85, depending on the course. Courses usually take about one month to complete. For details, call the program office at 255-3028.

■ **Winter break parking and buses:** Any Cornell parking permit will be valid in all parking areas on campus from Dec. 23 through Jan. 1. Special central-campus parking permits that are valid from Jan. 2 through 19 will be sold for \$15 each to faculty and staff at the Traffic Bureau, 116 Maple Ave., beginning on Dec. 18. There will be no campus buses operating from Dec. 23 through Jan. 1. The Blue Light 1 bus will resume operation on Jan. 18; West Campus, North Campus-Collegetown, A-Express, Blue Lite 2 and Evening East Ithaca will resume their regular runs on Jan. 22. Winter break bus schedules are available from the drivers of buses that serve the campus. Students, faculty and staff may leave their cars in specially marked areas of the A, B and K parking lots, and in the lots at the North Campus Conference Center, West Campus dormitories and in the lot at Stewart Avenue and William Street. Information about transportation and parking during winter break is available from the Office of Transportation Services, 255-4628.

NOTABLES

Professor of plant pathology **Bill B. Brodie**, a research nematologist with the U.S. Department of Agriculture Research Service on campus, has been named one of three ARS "Outstanding Scientists of the Year." The honor includes a \$2,500 cash award and \$25,000 in research support.

Chemical engineering Professor **Michael L. Shuler** is the recipient of the 1989 Food, Pharmaceutical and Bioengineering Division Award given by the American Institute of Chemical Engineers for "his pioneering work on engineering aspects of plant cell tissue culture, bioreactor strategies for utilizing genetically-modified cells and developing a new class of computer models used to describe growth and product formation from living cells."

Roger A. Morse, professor of entomology and a worldwide authority on honey bees, is one of two persons elected this year as Fellows of the Entomological Society of America. He was cited for playing a "central role in helping the bee industry in the United States cope over the years with the various problems of bee predators and diseases: overproduction of honey, swarming and wintering, introducing queens into colonies and, most recently, the impending invasion by the African honey bee."

Daniel G. Sisler, the Liberty Hyde Professor of Agricultural Economics, will receive a honorary doctorate from his alma mater, Purdue University, during commencement ceremonies in West Lafayette, Ind., on Sunday, Dec. 17. A member of the Cornell faculty since 1960, Sisler earned a bachelor's degree in 1956 and a master's degree in 1958 from Purdue and a Ph.D. degree from Cornell in 1961.

Consumers want tough recycling laws, Cornell survey finds

Disposable diapers and razors should be banned, the price of tires and batteries should include deposits and the plastics industry should help communities recycle plastics, according to most consumers who were polled at the 1989 New York State Fair.

"This wasn't a scientific poll, because it was taken among 4,407 people who took the trouble to visit an exhibit on recycling," said Kenneth H. Cobb, a senior extension associate with the Cornell Waste Management Institute, which helped design the state fair poll.

"It does tell us something about the opinions and misconceptions of people who are already interested in recycling," Cobb added, pointing to one popular misconception:

"About two-thirds of the people in our poll thought recycling can eliminate the need for other types of waste-disposal methods. Unfortunately, that's not the case with today's technologies and markets," Cobb said.

More than half of the aluminum used in the United States now is recycled, as is about one-quarter of the paper and cardboard, Cobb noted.

"That's because there are relatively strong markets for those materials," he said. "It's unlikely in the near future that there will be reliable markets for wastes such as oily rags, paper mixed with food and multi-material products. Items for which there are no buyers will still have to be disposed of in other ways."

Cobb, who served on a committee to encourage recycling at the state fair, which was held from Aug. 25 through Sept. 4 in Syracuse, pointed to the "mixed success" of efforts to recycle food-related waste at the fair.

In the fair's International Food Pavilion, where about 15,000 meals were consumed each day, most diners gladly recycled plates, cups and other tableware that was made of polystyrene, which is better known by the trade name Styrofoam.

The 11-day recycling program — assisted by brightly clad "trash maids," a clown and special containers — produced 2,600 pounds of lightweight polystyrene. (The polystyrene will be turned into souvenirs for the 1990 state fair at a plastics recycling plant in Leominster, Mass.)

However, the recycling program missed about half the trash because no current tech-

nology can handle paper products that are soiled with food, the Cornell expert said.

"Recycling is not — and may never be — the complete answer to our solid-waste problems," Cobb commented. "We need to think about reducing packaging even before we think about recycling."

Among the responses to the "Question of the Day" poll at a recycling information exhibit at the state fair were these:

• Should packaging that is not recyclable or reusable be prohibited? Yes, 95 percent.

• Can recycling eliminate the need for other types of waste disposal methods? Yes, 63 percent.

• Do you support the idea of putting a deposit on certain kinds of products (such as tires or batteries) in hopes of discouraging their disposal in the trash? Yes, 86 percent.

• Should the sale of disposable items (single-use products such as disposable razors and disposable diapers) be prohibited? Yes, 83 percent.

• Should society recycle discarded items if it costs more to recycle them than it would to dispose of them by incineration and/or landfilling? Yes, 96 percent.

• Should the plastics industry play a major role in providing assistance to local

communities in recycling plastics? Yes, 96 percent.

• Should disposing of yard waste with regular household trash be prohibited? Yes, 79 percent.

• Will you accept differences in the types of products we buy and use in order to increase levels of recycling? Yes, 95 percent.

"The route to reducing solid waste has to be a two-way street," Cobb said. "As consumers, we have to be willing to purchase products that can be recycled and products that use less packaging in order to encourage the market."

The Cornell Waste Management Institute, a program of the Center for Environmental Research, focuses university resources on education about waste generation and composition, recycling, risk management and public decision making.

The state fair recycling program was a joint effort of Cornell's Waste Management Institute and the Syracuse University Project on Public Participation, in cooperation with the state's Association of Recyclers, Association of Environmental Management Councils and Environmental Action Coalition.

—Roger Segelken

CORNELL
CHRONICLE

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

GRADUATE BULLETIN

January Degrees: Jan. 12 is the deadline for completing all requirements for a January degree, including submission of the final copies of theses and dissertations.

Registration: Spring 1990 registration for graduate students will be held in The Henry, Sage Hall, on Jan. 18, 19 and 22, 8:15 a.m. to 4:15 p.m.

Enrollment: Course enrollment will be held from Jan. 18 through Feb. 9. Bring completed course enrollment forms to Sage Graduate Center.

Fellowships: Deadline is early February for Jacob K. Javits Fellowships for doctoral students in the arts, humanities and social sciences who are U.S. citizens or permanent residents and have fewer than 20 credits. The award is a stipend of up to \$10,000 plus \$6,000 tuition, supplemented by the Graduate School to full tuition. The award is renewable. Applications will be available in early January in graduate field offices and in the Graduate Fellowship Office.

BARTON BLOTTER

Computer parts worth \$2,000 were stolen from two computers in Uris Hall, according to the morning reports of the Department of Public Safety for Dec. 4 through 10.

The thefts were among 15 incidents involving losses of \$7,144 in cash and valuables, including a \$2,000 bracelet lost or stolen somewhere between Malott Hall and Collegetown between 3 and 11 p.m. on Nov. 30.

Other thefts included two rings worth \$775 stolen from the Campus Store, a \$788 camera taken from Sage Hall, a dedication plaque worth \$500 removed from the press box at Hoy Field and a \$354 table stolen from University Hall No. 1. There were five thefts of cash totaling \$201 from four wallets and a desk drawer.

Four persons were referred to the judicial administrator; one for forging a parking permit, two for failure to comply to an order and one for harassment.

Monetary awards, statewide exams suggested to improve high schools

American students lag more than four grade levels behind young people from other nations in science and math because the U.S. school system does not reward effort and learning in high school the way that other countries do, according to a human resource specialist John Bishop.

Therefore, Bishop, a professor at the Center for Advanced Human Resource Studies in the School of Industrial and Labor Relations, has recommended the following:

- Monetary awards should be given to students who excel in Advanced Placement courses.
- Statewide exams should be used to determine college admissions and scholarships.
- Employers should make greater use of high school grades and achievement-test scores when hiring recent high school graduates.

Those and other changes would provide stronger incentives for American high school students to spend more time and energy on their studies, Bishop said. He is the author of the report, "Incentives For Learning, Why American High School Students Compare So Poorly to their Counterparts Overseas," commissioned by the Work Force Quality and Labor Market Efficiency that issued a report in September titled "Investing in People: A Strategy to Address America's Work Force Crisis."

Seven of the commission's 14 recommendations came from Bishop's report.

American high school students are not lazy, Bishop said, pointing to the rigorous way that students engage in after-school jobs and sports. They "do poorly simply because they devote a lot less time and energy to the task of learning." American students are absent almost seven times more than Japanese students, and studies show that Japanese high school students end up studying the equivalent of four more years than American high school students.

Bishop pointed out that Japanese students work hard in high school because their future depends on it, but they slack off in college. The reason is that Japanese employers hire college graduates based on the reputation of their university and on personal interviews rather than on professors' recommendations or academic achievement.

"This implies that studying hard in Japan is not a national character trait, but a response to the way the Japanese reward academic achievement in high school," Bishop said.

When students in Canada, Australia, Japan and Europe approach high school graduation, they take examinations whose scores largely determine their eligibility for college. Those scores remain on the students' resumes for decades. When large companies in Japan and Europe hire students right out of high school, their decisions are based largely on these exam scores.

"Overseas, the rewards for studying hard in high school are quite substantial," Bishop pointed out. "In the United States, by contrast, time spent in school is rewarded with a diploma, but most students realize few benefits from actually studying hard while in school, especially students not bound for college."

One reason is because the American labor market fails to reward such achievement. Although doing well in math, science and English is a good predictor of job performance, studies show that these competencies have little, if any, effect on earnings even eight years after high school.

One way to compensate students for doing better is to reward them for excelling in the Advanced Placement program, Bishop said. "Expanding and upgrading the AP program should be the centerpiece of any effort to promote excellence in American secondary education," he said. The goal should be to double the current 7 percent of seniors who take AP exams their senior year by 1991 and quadruple it by 1996. Bishop suggested that the federal government offer \$100 to students who score well enough to obtain college credit and \$150 for top scores. "If a good deal of publicity were attached to these awards, they would have major symbolic effects," he said.

U.S. secondary education also could be upgraded by recognizing academic and vocational competencies rather than merely by awarding diplomas that acknowledge attendance. Currently, students gain admission to selective colleges based on class rank and grade point averages which are relative to a specific school's curriculum and to other students in the same school, not on an objective standard.

Bishop suggested that student competencies be evaluated against a statewide or national standard periodically to encourage students to work cooperatively with other students, parents and teachers, and to monitor their progress. Using these profiles, schools and parents could gauge how local education compared with others.



Chris Hildreth

John Bishop

Furthermore, if statewide achievement tests were used for college admission and in job decisions, students would be more motivated to learn the curriculum material. Such learning would have a direct effect on their future.

In addition to Bishop's involvement, ILR School Associate Professors Olivia Mitchell and Robert Stern were among the 43 experts asked to submit background papers to the commission. Mitchell's report concentrated on the effects of mandatory benefits packages; Stern's, on employee ownership plans.

—Susan Lang

Surf's up



Chris Hildreth

Some 120 students met in the DeFrees Hydraulics Laboratory to try to catch a wave for their final exam in Assistant Professor Samuel Landsberger's engineering design course. The objective was to make a machine to harness wave energy and lift a one-half-pound weight five feet in 30 seconds. The fastest time was by junior Karen Cassery: 16 seconds.

CU, town agree on improvements for Maplewood Park plumbing

Cornell and the town of Ithaca have agreed to a plan of testing and improvements for the plumbing system at the university's Maplewood Park apartments.

During tests at the new development, which houses 375 graduate students and their families, air leaks were detected in parts of the plumbing system. In theory, such leaks and the concomitant reduction of pressure could impede the expulsion of certain gases through the sewer pipes.

While the town made continuation of Cornell's temporary certificate of occupancy contingent on the improvement plan, it said the problem was not serious enough to consider moving residents out.

"There is absolutely no evidence of any

health risk," said William Paleen, director of Residence Life. "Our own environmental health people have checked the lines for any harmful gases and will continue monitoring the system as we also proceed to locate and fix any of these minor leaks."

Paleen has written Maplewood Park residents two letters apprising them of the problem and of the corrective measures.

Specifically, Cornell has agreed to check every apartment for leaks and to make needed repairs. As a further precaution, it also will install, by Jan. 26, additional plumbing traps and fresh-air vents where the sewer lines leave the buildings. These would further reduce chances of gases backing up into the system.

Fouts resigns; search begins for new head football coach

A search is under way for a successor to Jack Fouts, who took over the reins of the Cornell football program in April, Athletics Director Laing Kennedy said on Dec. 10.

Kennedy made the announcement that Fouts had resigned after they met with members of the football coaching staff upon their return to campus from recruiting trips.

On Dec. 11, the coach added the information that he had resigned at Kennedy's request; in statements issued on Dec. 14, Kennedy and Fouts further clarified the matter.

Kennedy's statement said that, although he and Fouts agree "that the most important thing to us is the future of the Cornell athletic program, we have disagreements about how best to shape that future.

"I did ask Jack to resign as head football coach," Kennedy continued. "I do want him to continue to be involved in Cornell University athletics; I do think he has a great deal to contribute; I did offer him another job in the Athletic Department."

Explaining that he evaluates each sports program at the end of every season, Kennedy added, "My judgment is that the best thing for the future of Cornell football is to look now for new leadership."

Fouts said in his statement that he "was certainly upset at being asked to step down as head football coach, but I did agree it was in the best interest of the program to resign now in order to give my successor time to recruit next year's class."

He also said that "Cornell and Laing Kennedy run a super program, and I intend to continue to give it my fullest support."

In announcing Fouts's resignation earlier, Kennedy said that he "will be forever grateful to Jack Fouts for his contributions to the athletic program at Cornell and particularly for his willingness to assume the head football coaching reins this past season under extremely difficult circumstances. He was the right man for the job, and he earned the respect of everyone associated with the program."

Fouts, who was the Cornell offensive line coach for five years before being elevated to the top spot, said in the earlier announcement that, "When I took the position as Cornell's head football coach, I did so to continue the stability and continuity of the program.

"The Cornell football program is moving



Jack Fouts

forward and we have some great young talent. I have really enjoyed working with these young men over the years. The Ivy League is a great place to work because as coaches you are teachers, and that's what college athletics is all about."

The football team won four games and lost six this year, but finished the season by beating the University of Pennsylvania by a score of 20 to 6 on Thanksgiving morning in a game televised by ESPN.

Fouts came to Cornell in June 1984. He quickly became an important cog in the Big Red coaching staff and received accolades for developing the offensive line. Three offensive linemen were accorded All-Ivy honors during Cornell's Ivy League co-championship season in 1988.

Previously, Fouts had enjoyed tremendous success during 20 years of coaching at his alma mater, Ohio Wesleyan University. In 1967, he was named NCAA College Division Coach of the Year for District II after he led the Battling Bishops to an undefeated season (8-0-1); and, in 1971, he directed his team to the Amos Alonzo Stagg Bowl, compiling a 9-1 overall record. Between 1967 and 1971, his teams won two Ohio Athletic Conference championships while winning 33 games, losing 12 and tying one.

CALENDAR

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

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

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

DANCE

Cornell International Folkdancers

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

Holiday Party, 6 p.m. to midnight with dinner at 7 p.m., Dec. 17, auditorium, Biotechnology Building. All dancers are invited along with family and friends. Bring dish to share for dinner.

Israeli Folkdancing

Israeli folkdancing, Dec. 14, 8:30 p.m., Edwards Room, Anabel Taylor Hall.

EXHIBITS

Johnson Art Museum

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

"Form and Function in African Art," an exhibition on view through Dec. 23, contains masks, staffs and textiles that were created to be part of everyday life and were used in ritual ceremonies, dances and other activities.

Department of Art Faculty Exhibition, featuring the work of current and emeritus members of Cornell's art department, to Dec. 22.

"Council of the Creative and Performing Arts Individual Awards 1986-1989," will be on view through Dec. 22. The exhibition, featuring approximately 50 projects completed by the award winners of the past three years, brings together work from a wide range of departments and colleges within the university.

"Framed," an experimental video installation produced by Bruce and Norman Yonemoto, is the centerpiece of a six-week Asian American Film and Video Festival, through Dec. 22. "Framed" explores racial prejudice and assimilation in American society, utilizing government propaganda films on the Japanese internment campus in its multimedia setting.

Center for Jewish Living

"Portrait of A Land in Turmoil," an exhibit by Avner Moriah, through Dec. 20, Sundays through Thursdays, 1 p.m. to 5 p.m., in the Gallery of Art, Center for Jewish Living, 106 West Ave.

Hartell Gallery

Architecture Reviews, through Dec. 16. The gallery is in Sibley Dome and is open Monday through Friday, 8 a.m. to 5 p.m.

Olin Library

"Subjects into Citizens: Image and Discourse in the French Revolution," a colorful and varied exhibition from Cornell's French Revolution Collection will be on display in Olin Library Monday through Friday, 8 a.m. to 5 p.m., through Jan. 3.

History of Science Collections Olin Library

"1789 and the Chemical Revolution," an exhibit commemorating the 200th anniversary of the publication of Antoine Laurent Lavoisier's "Traite elementaire de chimie," through January. The culmination of Lavoisier's work, this book did much to lay the foundation of modern chemistry. The exhibit, Monday through Friday, 9:30 a.m. to 4:30 p.m., is in 215 Olin Library.

FILMS

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

Thursday, 12/14

"A Boy and his Dog" (1975), directed by L.Q. Jones, with Don Johnson, 7:15 p.m., Uris.*

"Honey, I Shrunk the Kids" (1989), directed by Joe Johnston, with Rick Moranis and Matt Frewer, 9:30 p.m., Uris.*

Friday, 12/15

"Dangerous Liaisons 1960" (1960), directed by Roger Vadim, with Gerard Philipe, Jeanne Moreau and Annette Vadim, 7:15 p.m., Uris.*

"Honey, I Shrunk the Kids," 9:45 p.m., Uris.*

Saturday, 12/16

"Dangerous Liaisons 1960," 9:45 p.m., Uris.*

"Honey, I Shrunk the Kids," 7:15 p.m., Uris.*

Sunday, 12/17

"Eyes on the Prize II: Law and Order," with film maker Louis Massiah, 8 p.m., Uris.*

Monday, 12/18

"Alice Doesn't Live Here Anymore" (1974), directed by Martin Scorsese, with Jodie Foster, Ellen Burstyn and Kris Kristofferson, 8 p.m., Uris.*

Tuesday, 12/19

"Taxi Driver" (1976), directed by Martin Scorsese, with Robert De Niro, Jodie Foster and Cybill Shepherd, 8 p.m., Uris.*

Wednesday, 12/20

"Five Corners" (1987), directed by Tony Bill, with Jodie Foster and Tim Robbins, 8 p.m., Uris.*

Thursday, 12/21

"The Accused" (1988), directed by Jonathan Kaplan, with Jodie Foster and Kelly McGillis, 8 p.m., Uris.*

MUSIC

Bound for Glory

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

RELIGION

Sage Chapel

Service of carols and readings on Dec. 17. Services will begin at 11 a.m. Music will be provided by the Sage Chapel Choir. Sage is a non-sectarian chapel that fosters dialogue and exploration with and among the major faith traditions.

Catholic

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

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

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

Christian Science

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

Episcopal (Anglican)

Sundays, Worship & Eucharist, 9:30 a.m., Rev. Gurdon Brewster, Chaplain, Anabel Taylor Chapel.

Friends (Quakers)

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

Jewish

Shabbat Services: Friday, Reform, 5:30 p.m., Chapel, Anabel Taylor Hall; Conservative, 5:30 p.m., Founders Room; Orthodox, Young Israel (call 272-5810 for times). Saturday, Orthodox, 9:15 a.m., Edwards Room; Conservative/Egalitarian, 9:45 a.m., Founders Room.

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

Korean Church

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

Muslim

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

Protestant

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

Zen Buddhism

Zazen meditation: Thursdays at 5 p.m. in the chapel, Anabel Taylor Hall. For more information or to arrange beginner's instruction, telephone Jon Warland at 257-1404.

SEMINARS

Applied Mathematics

"The C' Closing Lemma for Endomorphisms," Lam Wen, Chicago State University, Dec. 15, 2:30 p.m., 421 Sage Hall.

Biochemistry, Molecular & Cell Biology

"The Heat Shock Response," Susan Lindquist, biology, University of Chicago, Dec. 15, 4 p.m., Large Conference Room, Biotechnology Building.

"Structure and Expression, Fate and Function of Two Drosophila Male Accessory Gland Proteins," Scott Monsma, biochemistry, molecular and cell biology, Dec. 18, 12:20 p.m., Conference Room, Biotechnology Building.

Environmental Toxicology

"The Effects of Dioxin on the Complement System," Kimber White, Virginia Medical College, Richmond, Va., Dec. 15, 12:20 p.m., 304 Femow Hall.

Genetics & Development

"Cytoplasmic Rearrangements and Patterning in the Early Amphibian Embryo," Michael Danilchik, biology, Wesleyan University, Dec. 18, 4 p.m., Conference Room, Biotechnology Building.

Materials Science & Engineering

"Intermetallic Compounds as Structural Materials," Alan Taub, GE, R&D, Dec. 14, 4:30 p.m., 140 Bard Hall.

Microbiology

"Molecular Biology of Aleutian Disease Parvovirus Infection," Ludwig Haas, postdoctoral fellow, Institute of Virology, Hannover Veterinary School, Federal Republic of Germany, Dec. 14, noon, G-3 Vet Research Tower.

Neurobiology & Behavior

"Modulation of Neural Networks," Eve Marder, biology, Brandeis University, Dec. 18, 12:30 p.m., Morison Seminar Room, Corson/Mudd Hall.

Plant Biology

"Cellular Aspects of Pollen-Pistil Incompatibility in Higher Plants," M.K. Kandasamy, plasma biology, Dec. 15, 11:15 a.m., 404 Plant Science Building.

Toxicology

"The Effects of Dioxin on the Complement System," Kimber White, Virginia Medical College, Richmond, Va., Dec. 15, 12:20 p.m., 304 Femow Hall.

MISC.

Alcoholics Anonymous

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

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

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

Cornell Badminton Club

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

Cornell World Tae Kwon Do Assoc.

New members are being accepted for the fall semester. The club meets Mondays, Tuesdays, Wednesdays and Fridays from 6 to 7 p.m. in Martha Van Rensselaer Hall. For more information, call Sandy at 255-7923 or 273-7826.

Cornell Toastmasters

Learn communication and public speaking skills. Club meets Thursdays at 7 p.m. Call 272-0032 for more information.

Fuertes Observatory

Fuertes Observatory, situated on the hill behind Helen Newman Hall, will be open to the public every clear Friday night from 8 p.m. or dark until midnight. Call 255-3557 for information.

Hebrew Conversation Club

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

Lesbian/Bisexual Women's Support

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

Macintosh Users' Group

MUGWUMP, the Macintosh Users' Group for Writers and Users of Mac Programs, meets on the first Thursday and second Wednesday of each month. Meetings are free and beginners are welcome. For more information, call Andrew Merkle, 277-2239.

Writing Workshop

Writing workshop walk-in service: free tutorial instruction in writing. Monday through Thursday, 3:30 to 5:30 p.m. and 7 to 10 p.m.; Sunday, 2 to 8 p.m., 178 Rockefeller Hall; Sunday through Thursday, 10 p.m. to midnight, 340 Goldwin Smith Hall; Sunday through Thursday, 8 to 11 p.m., Clara Dickson Macintosh Computer Room; Sunday through Thursday, 8 to 11 p.m., Noyes Center Browsing Library.

Chronicle schedule

The Cornell Chronicle will publish on Dec. 21, but it will not publish during the winter break. Publication will resume on Jan. 18. Calendar notices for the Jan. 18 issue must be received by Monday, Jan. 8. Calendar items should be sent to Joanne Hanavan, Chronicle Calendar, Cornell News Service, Village Green, 840 Hanshaw Road, Ithaca, N.Y. 14850.

Toy-making scientist seeks secret of quasicrystals

While his classmates at the University of California at Berkeley studied the assigned formulas for Ph.D.s in physics, Veit Elser played with toys — big, colorful, geometric shapes; puzzles he liked to make, and figure out, himself.

Soon after, however, he settled down as a researcher for AT&T Bell Laboratories, keeping just one three-foot-high shape in his living room, as a decoration of sorts.

And there it sat until, one day, the scientific community discovered a new physics puzzle called quasicrystals, capturing Elser's imagination and prompting him to wonder, "Gee, could I apply this toy to quasicrystals?"

The rest, as they say, is history. For Veit Elser is a man who follows his fancy and finds fortune.

The 32-year-old Cornell assistant professor this year became the holder of four grants worth some \$1 million over the next five years. His task: Solve the puzzle of quasicrystals, solid matter whose atomic structure is formed by pentagons that repeat in almost perfect patterns, a configuration once believed to be impossible.

That Elser knows of no use for quasicrystals is absolutely beside the point. "I'd just like to know the structure, just for the hell of it, because it's there, like Mt. Everest," Elser said. "It's fun. That's the most important word. I like to do things that are fun."

Using the Cornell High Energy Synchrotron Source to perform X-ray studies, Elser, who will employ several graduate students, hopes to determine the atomic structure of quasicrystals and answer, "Why, why do the atoms want to do this weird thing?"

"We are confronting an immensely complex structure," he explained during a recent interview in his Clark Hall office, "one that is arguably one of the most symmetrical things in nature."

Since the discovery of quasicrystals in 1984, the phenomena have been generating a tremendous amount of intellectual curiosity, said James W. Mayer, the Francis Norwood Bard Professor of Materials Science and Engineering.

"I've got the giggles about this. . . . It is a totally unexpected intermediate phase between the amorphous and crystalline states," said Mayer, who is studying quasicrystals as time permits.

"It beats me if it's good for anything," he added. "We do not project now an industrial use. What we do project is an understanding of how solids react. And if you

don't know how things react and form, you are doomed."

"We really don't know what we will encounter," said Elser. "But our hope is because the nature of the problem is sufficiently stimulating and challenging, there will be spin-offs that will benefit other areas."

In support of the effort, Elser this month received a \$500,000, five-year David and Lucille Packard Foundation Fellowship in Science and Engineering, one of only 20 awarded nationwide to young academics.

He also received a 1989 National Science Foundation Presidential Young Investigator Award, an AT&T grant and an Alfred P. Sloan award.

The second-year professor is just a little astonished by the opportunity. "You have to understand, I'm a beginner at all this," he said. "I've been sort of forced into this position because I've been given all this money . . . and now it's expected of me to create something."

"A lot of people are warning me I'm going to turn into an administrator. That worries me," he continued. "I'll probably be most engaged in directing research, coordinating students and postdocs and writing progress reports to the various agencies, plus maybe doing some physics myself."

"On the contrary," said David Mermin, director of Cornell's Laboratory of Atomic and Solid State Physics, "this grant will free him from the need to write proposals and solicit funding for five long years."

Elser credits his opportunity to Mermin, who helped write the grant applications, as well as his own willingness to take a risk and follow his curiosity even when it is unconventional. And, most of all, he credits luck.

Less than a decade ago, when Elser was completing his Ph.D. in physics, he was questioning whether he wanted to pursue a career in the field.

"I had trouble finding any interesting problems to think about that would be recognized as being worthwhile problems," he said.

That was why he made geometric puzzles and played with the idea of making a living at toy-making. But in the process, physics clicked.

"This experience with making puzzles, and having it work out, gave me confidence that I could compose my own problems, think more freely about what I could work on," he said.

Shortly after, Elser went to work for



Don Albern

Veit Elser with some of his puzzles.

AT&T Bell Laboratories in Murray Hill, N.J. — and heard the news that would influence the next several years of his life.

A team of metallurgists had set about to develop a light-weight metal alloy that could be used to build stronger airplanes.

They failed. But while examining the atomic structure of their experiment, they discovered it had two characteristics that were thought to be incompatible: pentagons that appeared in an almost periodic pattern.

"You've seen bathroom tile floors with the little hexagons, the honeycomb patterns with six sides?" said Elser. That can be repeated without losing a sense of the pattern. "But you can't do that with a pentagon. It just doesn't work."

At least not according to known principles of physics. Scientists dubbed the accidental discovery a quasicrystal because, as the atoms of a crystal repeat in a definite

pattern, like a wallpaper motif, quasicrystals "almost" repeat.

Using his living-room model and other self-made devices, Elser began what he calls "my life with quasicrystals," demonstrating along the way his view about the role of money: that he doesn't need it to pursue something that interests him.

Once, for example, instead of buying a \$500 atomic model for a study, he and his wife once spent a week making their own, with dice and shoe eyelets.

"I was just so excited . . . I was never held back by resources, by money. I always thought I could wing it," Elser says. "I don't have to have everything custom-made."

"Now, of course," he added, as if considering it for the first time, "I suppose I could spend more money, do things easier in the interest of time."

—Lisa Bennett

First novel becomes Book-of-the-Month Club alternate

Jeanne Mackin loves to travel. From time to time she actually takes to the road, but more often her roamings occur while seated behind a typewriter in a snug, pine-sheltered farmhouse near Buttermilk Falls State Park.

"When researching and writing historical fiction, I go to places where TWA can't fly!" said Mackin, a staff writer for the Cornell Cooperative Extension Consumer News Service. For much of the past five years, Mackin spent the first few hours of her day amid the tumult of the French Revolution and journeying to America with a band of French refugees in order to write her first novel, "The Frenchwoman."

"The Frenchwoman," a tale of a young Parisian woman who becomes a seamstress for Queen Marie Antoinette, has been selected an alternate selection by Book-of-the-Month Club, a coveted distinction that eludes many more experienced novelists, and has been termed "imaginative, fast-paced and impassioned" by Kirkus Reviews.

"Good historical fiction isn't fairy tales, it's a way of exploring the world and how people fit into it," Mackin said. Dealing with loss and with tremendous change is a thread that runs through "The Frenchwoman." As Mackin was writing of one particularly horrific loss — the disappearance of Marie Antoinette's son — the evening news was reporting about the anguished Argentinean Mothers of the Plaza de Mayo searching in vain for their own missing children.

"I firmly believe that if you don't remember the past you repeat it, and historical fiction is very useful for bringing this across," Mackin said. In writing "The

Frenchwoman" she drew on many similarities between past and present. "There's so much going on now that had parallels right before the French Revolution," she said. "Problems of homelessness, unwanted children, the discrepancy between the richest and poorest, the plight of displaced persons — all of these are happening right here, right now."

When Mackin leaves her places of long ago and far away — her second novel, which is under negotiation with a publisher,

is set in 12th century France, but she's mum about the setting of her third and current work — she drives to her Comstock Hall office where she writes about the latest research in child development, consumer economics, financial management, gardening, gerontology, nutrition and home design and safety for the Consumer News Service, which sends its stories to extension agents and news organizations throughout the state.

Mackin has been with the Consumer News Service 11 years in a part-time posi-

tion that allows her to write novels as well as free-lance articles for publications such as The New York Times, Americana, Home, Sunday Woman and American Artist.

One might think that it would be difficult shifting gears from writing fiction to non-fiction, but Mackin doesn't find it so.

"Fiction is imaginative and starts almost dreamlike, whereas the journalism I do is very pragmatic and logical," she said. "I've never studied the theories about right- and left-brain function, but I do feel that I'm using different parts of my brain for the different kinds of writing I do."

Plus, "Writing is writing, and skills are skills," she said. "I've always been turned off by people who want to write but won't take a writing job. A good sentence is a good sentence whether it's fiction or non-fiction. Each type of writing is compelling in its own way. I get as excited about the journalism I do as working on the books."

A soft-spoken woman who grew up in Geneva, N.Y., Mackin graduated from Ithaca College in 1970 and traveled two years in Europe before returning to Ithaca. She now shares a 20-acre farm with her husband, artist and Cornell art Professor Steve Poleskie, two cats, a German shepherd and scores of wildlife — they've identified 23 species of birds that come regularly to their windowsill bird feeder.

When not writing Mackin takes pleasure in walking, tending her flower garden, cooking and, of course, reading.

Mackin will be signing copies of her new novel today, Dec. 14, from 4 to 7 p.m. at the Corner Book Store on South Cayuga Street in downtown Ithaca.

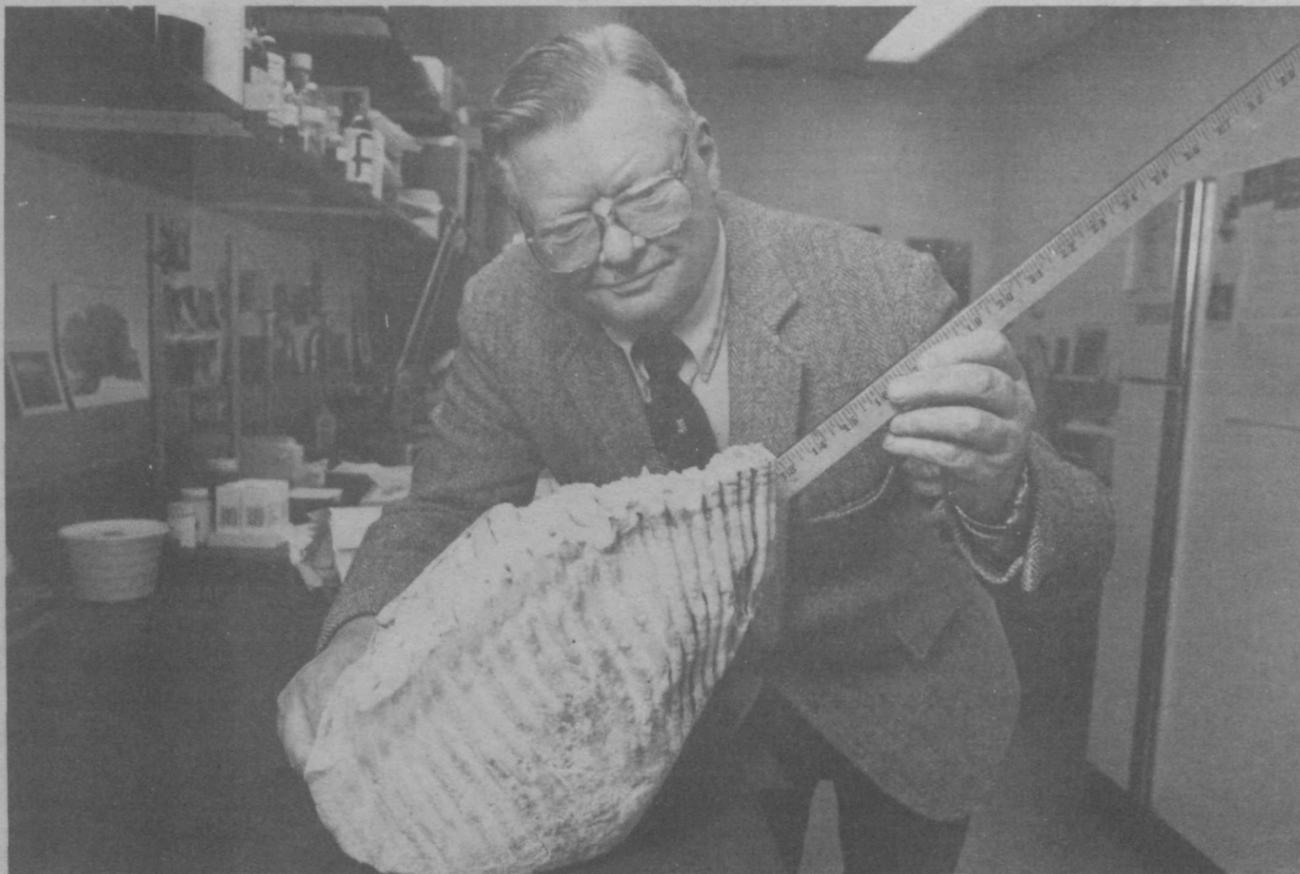
—Metta Winter



Charles Harrington

While Jeanne Mackin works on her third novel, her first novel has been named an alternate selection by the Book-of-the-Month Club.

My, what big teeth you have



Don Albern

Dr. Lennart Krook, a professor of veterinary pathology, examines a tooth that's between 10,000 and 12,000 years old and was found earlier this year in a Binghamton

gravel pit. The distinctive, filelike ridges helped identify the well-preserved tooth as a mammoth's molar, rather than that of a mastadon.

Scholars study growing up in rural America

Two Cornell professors are looking for 130 students in grades 9 through 12 in the Moravia, Newark Valley, Groton and New Berlin high schools to participate in a study of what it's like to grow up in rural America. They hope to discover how to keep young adults in rural communities.

The Program in Rural Youth Development (PRYDe), under the direction of education Professors Dalva E. Hedlund and Richard E. Ripple, aims to find out how the world is viewed by adolescents who are raised in a rural family, go to a rural school and live in a rural community. Researchers want to know what are the hopes, dreams, disappointments, fears and values that guide their lives, and how these factors affect their decisions about where to live and work.

The study comes at a time when almost half of the youth in some rural communities move to a more metropolitan area following high school graduation, according to Hedlund.

Each student participating in the study will be interviewed periodically over the next four years. Findings will be made available to families, teachers, counselors and school psychologists, rural school administrators, school board members, legislators, Cornell Cooperative Extension agents and community policy-makers.

Students interested in participating in the study should contact their high school guidance office.

—Metta Winter

Earthquakes will remain unpredictable, experiment shows

Earthquake faults exhibit a kind of chaotic behavior that makes earthquakes inherently unpredictable, according to two Cornell geologists.

Using a computer model that behaved much like interconnected earthquake faults, the scientists found what they consider "substantial evidence" that such systems exhibit what is called "deterministic chaos." This means that the motion in earthquake-like systems is infinitely sensitive to their initial conditions, making their behavior unpredictable.

The scientists' model system consisted of a simulated pair of blocks, connected by springs, sliding on a surface and driven back and forth by springs connected to a third

driving block. Such a block system behaves much like earthquake faults that stick and slip as the Earth's crustal plates slide past one another.

Graduate student Jie Huang and Donald Turcotte, a professor of geological sciences, described their experiment on Dec. 8 in a presentation at a meeting of the American Geophysical Union in San Francisco.

The phenomenon of chaos, a mathematical way of describing a system's inherent randomness, has become a major field of study over the last decade. Chaotic theory has been used widely to describe the behavior of various systems, ranging from the weather to robotic arms.

The sliding-block-and-spring mechanism

that the Cornell geologists simulated in their experiments has been used by many scientists to understand earthquake motion. However, in their studies, Huang and Turcotte made the friction in the block system inhomogeneous to mimic the complex heterogeneous behavior of fault zones.

Because their block system exhibits chaos, more complex systems of earthquake faults will, too, the scientists reasoned.

"Our results provide substantial evidence that actual faults exhibit deterministic chaos," Turcotte said. "Thus, we eliminate the possibility of exact predictability for earthquakes."

"We've shown that earthquake prediction will have to be approached like the pre-

diction of storms, from a probabilistic point of view, rather than from an absolute deterministic point of view."

According to Turcotte, "Many scientists had believed that if they had enough data and the right equations, they could learn to predict earthquakes. However, the extreme sensitivity of these systems to initial conditions" means that efforts to detect geological and chemical precursors to earthquakes probably will not prove fruitful.

He said that a more fertile area of research would be to understand the behavior of fault zones and dynamical systems and to use statistics to predict the likelihood of an earthquake in a given region.

—Dennis Meredith

Vet College opens clinic to test horses

The College of Veterinary Medicine has opened its Equine Performance Testing Clinic, the only facility of its kind in New York state offering state-of-the-art technology and expertise in evaluating, diagnosing and improving the athletic performance of horses.

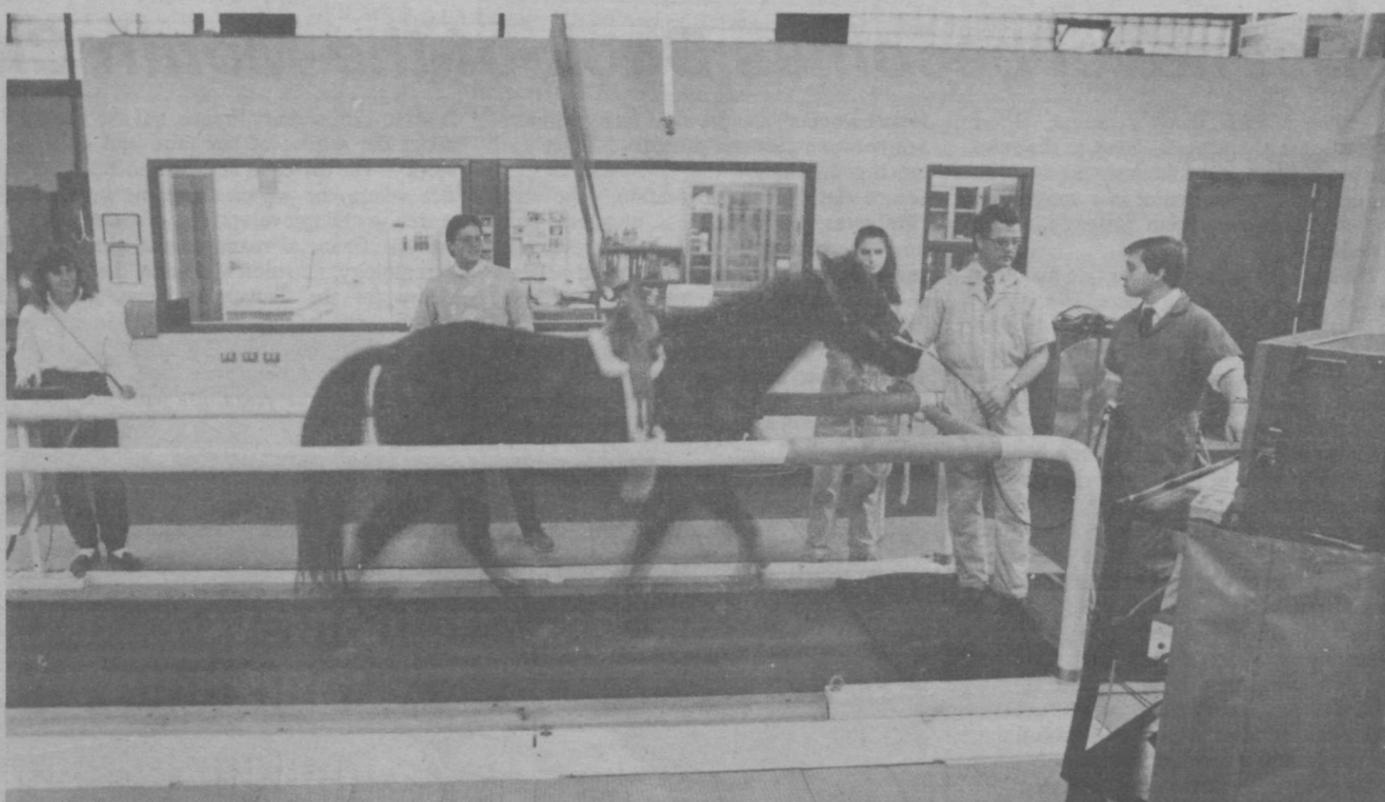
The centerpiece of the clinic is a Swedish SATO high-speed treadmill capable of going up to 35 mph. The treadmill allows veterinarians to assess many conditions in the horse's upper and lower airways and also allows daily workouts of horses regardless of season or weather.

The treadmill will be an integral part of the work conducted in the clinic's three units: the Respiratory Function Testing Unit; the Lameness and Gait Analysis Unit, which will open next year; and the Fitness and Performance Testing Unit, scheduled to open in the near future.

So far the treadmill has been used to assess more than 150 horses, primarily thoroughbred and standardbred racehorses, although hunters and jumpers and even draft horses have been evaluated on the treadmill.

"We can now reach and monitor the equivalent of peak performance in an exercising horse under controlled conditions," said Dr. Richard P. Hackett, head of Cornell's Large Animal Clinic and director of the Respiratory Function Testing Unit. "Also, there's little likelihood of causing a lameness or injury when testing the horse."

The new Respiratory Function Testing Unit is able to measure airflow accurately without interference or added resistance.



David Grunfeld

A horse is put through its paces at the new Equine Performance Testing Clinic by (from left) Dr. Renata Rehder, bioengi-

neer Gary Neilan, undergraduate student Alicia Zambell, Dr. Richard P. Hackett and Dr. Norm Ducharme.

They key piece of equipment is a highly sophisticated flowmeter designed for Cornell's equine researchers. Made from lightweight aluminum and weighing only about two pounds (compared with the old-fashioned flowmeters that weighed 15 pounds), the flowmeter is the only one of its kind capable of accurately measuring the massive peak respiratory flows generated by exercising horses.

For evaluation of problems in the upper airway, an endoscope — a two-meter-long tube housing a video camera — videotapes the movements of the larynx while the horse is resting and as it is exercised up to a gallop. The videotape is later played in slow motion, or even frame by frame, for precise evaluation.

Many people and organizations made the Equine Performance Testing Clinic pos-

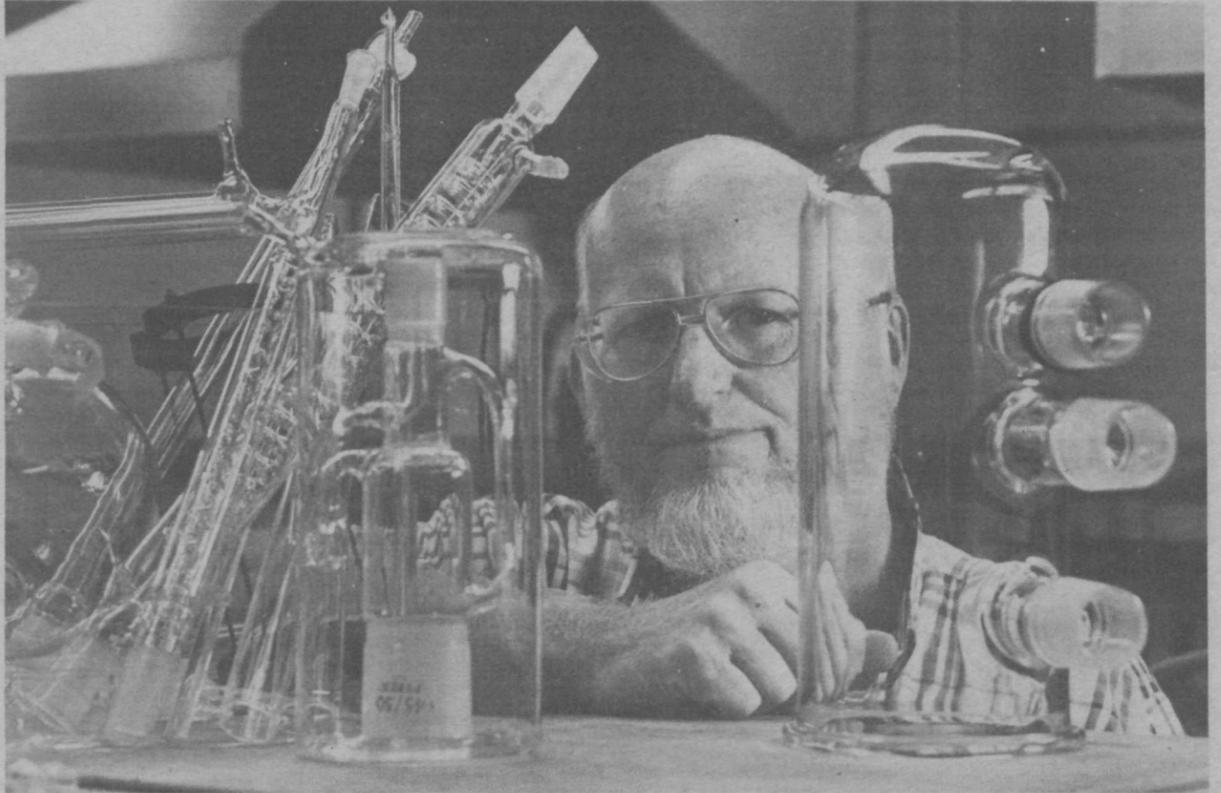
sible, including the alumni of the College of Veterinary Medicine at Cornell, the Mrs. Cheever Porter Foundation, the Harry M. Zweig Memorial Fund and the Finger Lakes Division of the Horsemen's Benevolent and Protective Association. The New York Division of the Horsemen's Benevolent and Protective Association has provided generous support to staff and equip the Respiratory Function Testing Unit.

Artisan at work

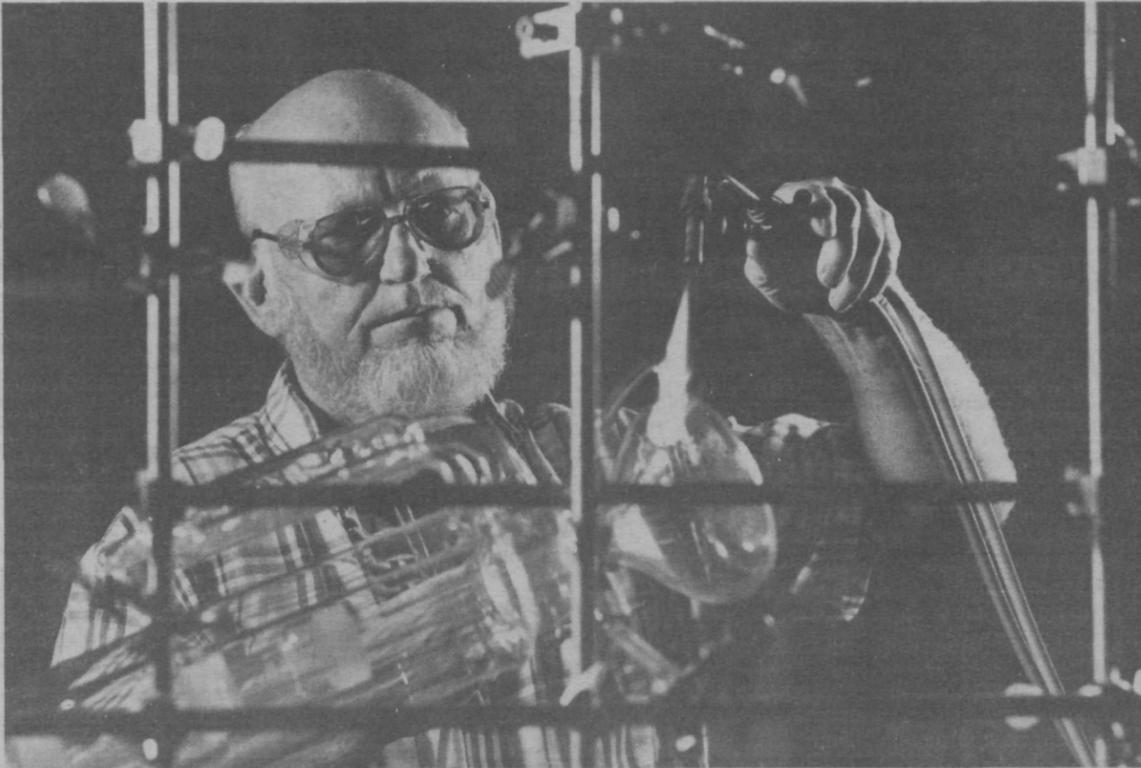
'A glass blower is an artist who is repeatedly pushed to do overnight jobs. Mr. Andrews is important to our department, but his job is one of unsung praises.'

— A Cornell chemistry major

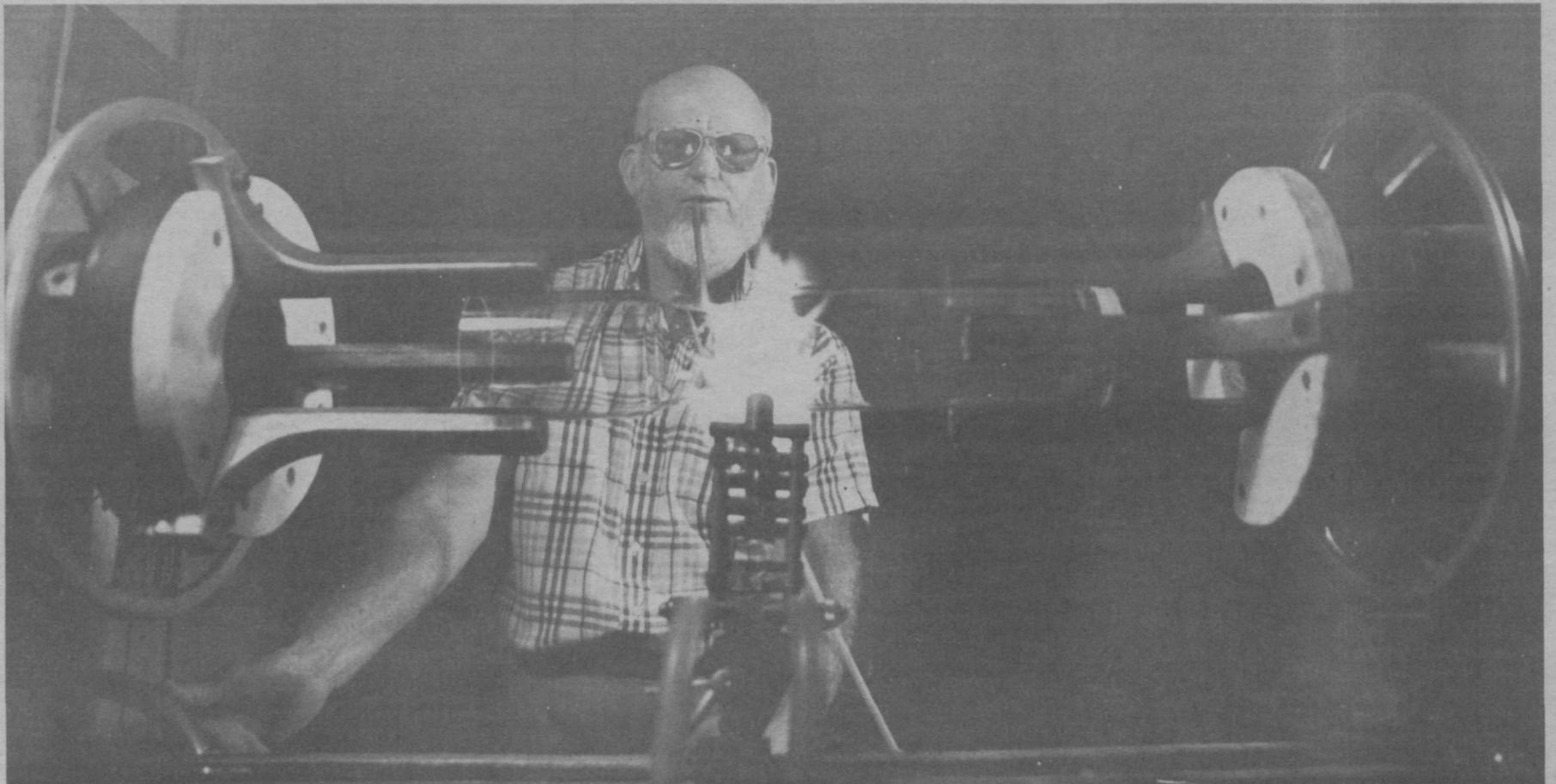
Photographs by Charles Harrington



Paul Andrews in his workshop.



Preheating the bottom of a piece of broken glassware.



Constricting an eight-inch tube to form a round bottom. The blowpipe keeps the glass from collapsing.

When Cornell chemistry professors and students need something done with glass — perhaps repairing small chips in glass tubing or constructing lines with double glass walls for distillation apparatus — they call on Paul Andrews.

Andrews, who became a glass blower in 1949 with Corning, joined Cornell in 1965. He often works his magic in glass based on little more than a professor's rough sketches drawn on crinkled up pieces of tablet paper. Some requests take only a few minutes to complete, while others require several weeks.

"I enjoy it," Andrews said of his work. "Most of it's a challenge. That's all I've ever done. That's what I like, and that's what I do."

—Francine Puckly

Shuttle *continued from page 1*

is to launch a communications satellite, Colman noted.

The crest on each of the 125 silicon chips — one for each year of Cornell's existence at its 125th anniversary next year — is about 700 micrometers high and 550 micrometers wide. A micrometer is one millionth of a meter. A human hair is about 70 micrometers in diameter, and typing paper is about 100 micrometers thick.

Each crest is accurate to the finest detail, including in letters 25 micrometers high Ezra Cornell's words upon establishing the university: "I would found an institution where any person can find instruction in any study." The crest also features tiny sailboats on a lake and mountains and a sunset in the background.

Although the crest's details are too small to be visible to the naked eye, the chip also includes a visible "Cornell" in script letters about one millimeter high. The letters shimmer and change colors as they are moved, because of diffraction of reflected light by a fine grating inscribed within



David Low

NASA photo

them. The grating consists of parallel gold lines 0.7 micrometer thick and 2 micrometers apart. The chips were fabricated by Richard Bojko, a system manager of the NNF's electron-beam facility, using electron beam lithography and high-energy beam etching techniques.

"These commemorative chips are especially appropriate because the NNF contributes important basic knowledge applied in the space program," said NNF Director Harold Craighead. "Basic technologies for microelectronic and optoelectronic components developed here will find their way into countless future satellites, space probes and manned missions."

The NNF is a national facility where government, university and industry researchers produce such devices as experimental optoelectronic components and transistors. It is funded by the National Science Foundation, Cornell and corporations.

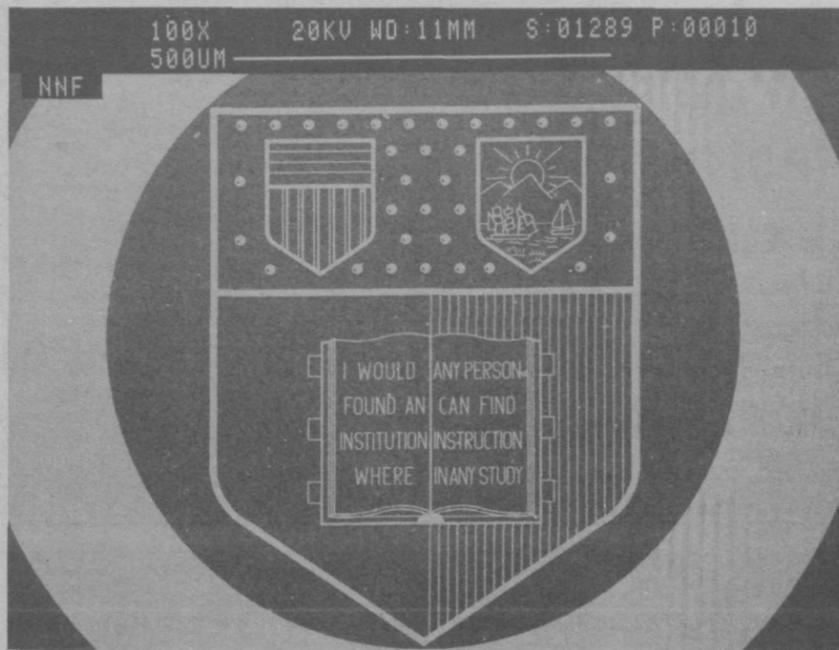
The supercomputer memory board, flown for Cornell's Center for Theory and Simulation in Science and Engineering, contains four-megabit memory chips, the most advanced memory chip on the market. According to IBM officials, the Columbia mission represents the first time four-megabit chips have ever flown in space. Each chip is capable of storing the equivalent of 400 pages of double-spaced typewritten text. The entire 32-megabyte memory board can store the equivalent of almost 29,000 pages of text.

Upon the board's return, it will be installed in one of the CNSF's twin IBM 3090-600E supercomputers as part of an equipment upgrade. The CNSF is the unit of the Theory Center that provides supercomputing facilities for users nationwide.

"The launch of this advanced memory board symbolizes the profound role that supercomputing now plays and will play to support the exploration of space," said Theory Center Director Malvin Kalos. "At every level, space systems depend on supercomputing for design. Many of today's space missions require supercomputers for analyzing the scientific data returned."

Cornell's Theory Center is one of five national supercomputer centers. It is supported by the National Science Foundation, corporations such as IBM, Cornell and the state of New York.

—Dennis Meredith



Richard Bojko

This electron photomicrograph of the tiny gold Cornell crest shows the fine detail achieved by the National Nanofabrication Facility. The lettering and boats are smaller than the diameter of a human hair. The information at the top of the photograph refers to the scale used by the scanning electron microscope that took the picture.

How the microchip was fabricated

To create the tiny Cornell crests on silicon to be launched aboard the space shuttle Columbia, engineer Richard Bojko first rendered the pattern of the Cornell crest on a computer-aided design system. He then fed the rendering data to a computer-controlled, electron-beam-lithography machine, an advanced fabrication device. The machine automatically wrote the crest pattern hundreds of times onto a silicon wafer with its 0.1-micrometer-wide electron beam.

The four-inch-diameter silicon wafer had been first prepared by covering it with successive layers of chromium, gold and a protective layer of organic polymer called a "resist." The chromium served as an adhesive to attach the gold to the silicon.

Wherever the scanning electron

beam wrote on the wafer, the protective resist underwent a chemical reaction that "toughened" it against being dissolved.

After the electron beam had written the patterns, Bojko chemically dissolved the unexposed resist material, leaving the gold surface bare except for the resist-protected pattern. In a process called ion milling, Bojko then bombarded the chip with a high-energy argon beam, eating away the exposed gold down to the silicon base.

Finally, he dissolved away the protective resist material, leaving the completed gold patterns. He cut the wafer into individual chips five millimeters wide and 10 millimeters long, using a diamond-tipped scribing machine.

—Dennis Meredith

Deer *continued from page 1*

cording to present knowledge, dogs and horses) that is spread by the bite of the deer tick. Ticks become infected by feeding on infected white-footed mice. The disease causes skin, arthritic, cardiac and neurologic symptoms in humans. Ticks have been found in southeast New York state, Long Island and along the Hudson River as far north as Essex County. The disease is expected to spread to other regions as ticks are carried by deer and migrating birds.

"We're trying to get an idea of the exposure of deer to these diseases," explained Dr. Christine A. Rossiter, the epidemiologist in charge of the deer survey. "Deer often share the same territory as cattle, horses and other pastured farm animals — and, in the case of Lyme disease, the habitat of the deer tick — and we are trying to learn to what extent deer in New York are affected by or involved in these diseases."

Rossiter emphasized that the diseases do not affect the safety of deer meat. "But they can affect the health of the deer, and they

could be a factor in managing the deer population," she said, noting that deer-hunting quotas take into consideration the number of animals likely to die of natural causes and disease.

The epidemiologist, who also designs management programs for cattle producers participating in the New York State Three-Disease Certification Program (to control Johne's disease, leukosis and bluetongue in dairy cattle), said the deer-sampling program began four years ago in several central New York counties with the assistance of local veterinarians. This year, the Diagnostic Laboratory distributed 2,400 additional test kits to hunters through the New York State Conservation Council, rod-and-gun clubs and veterinarians throughout the state.

Inside the pocket-sized test kit are directions and containers for collecting blood, fecal pellets, skin parasites and a particular section of the deer intestine. Since large-game season began this fall, between 15 and 20 kits a day have been returned to the Di-

agnostic Laboratory in prepaid mailers.

With more than 100 scientists, extension veterinarians and technical experts, the Cornell facility is the official veterinary diagnostic laboratory for New York state and is a central resource for the Northeast. The laboratory operates with funding from the New York State Department of Agriculture and Markets.

Rossiter praised the cooperation of deer hunters, who are not required to take the samples as a condition of their hunting license.

"I know it's difficult for someone who is not a specialist to locate the section of the intestine where Johne's disease bacterium may be found," she said. "And it must be tough to find ticks because the deer fur is thick this time of year, the hunters are in a hurry to process the deer and it's cold out there."

Response of hunters to the deer-testing program "has been 99 percent positive," Rossiter said, noting that the Diagnostic

Laboratory will continue to improve the instructions in the kit and will issue a report on test results when they are ready early in 1990 to the cooperating hunters and Conservation Council representatives, as well as to Agriculture and Markets officials and wildlife biologists.

The New York survey is not a true scientific and random sample because it does not equally represent all segments of the deer population, the epidemiologist said. "If it turns out that some of these infections are present in deer," she said, "we will want to learn more about their role in the epidemiology of these diseases."

Other tests for disease in deer concentrate on limited areas, such as New York's Shelter Island, where hunters are allowed to harvest captive populations, or at check points operated by conservation officials. The Cornell survey is believed to be the first attempt to enlist the cooperation of hunters throughout a state, Rossiter said.

—Roger Segelken

Response *continued from page 1*

percent during those years, keeping current financial-aid policies, and holding tuition increases to inflation plus the increase in national productivity (usually between 1 and 2 percent).

In comments prepared for his FCR address, Barker said he did favor reducing faculty numbers by reassigning lines vacated through attrition. He said such cuts must be selective and decided in consultation with the deans. Adding that "we should not slip back into the old practice of thinking about positions or position dollars," he emphasized that position reductions must be in addition to other economies because fewer people "demand fewer services and less space, computer time and support of every kind."

On salaries, Barker said he favored increases of somewhere between the recom-

mended 10 percent and the projected inflation rate of 5 percent, though he said he'd like to see the base stipend of graduate teaching assistants rise by even more than 10 percent.

He said, however, that in both cases, "We simply cannot expect the full increases we favor to come out of the general-purpose budget, and for that reason, we will require the colleges to find some of the funds to bring these increases to the substantial levels we seek."

Slippage of Cornell's salaries relative to competing universities was emphasized last month when the recommendations were presented by Finance Committee Chairman Richard Schuler, a professor of economics and of civil and environmental engineering.

Barker said, however, that except for certain "weak spots" in some colleges, Cor-

nell loses few professors because of uncompetitive salaries. He added, though, that an expected shrinking supply of future professors, beginning in about five years, is a sound reason for favoring substantial salary increases.

On financial aid, Barker said he shares the FCR's concern that Cornell remain accessible to children of middle- and low-income families. He noted, though, that federal-aid grants are continuing to decline and that Cornell now anticipates spending \$21 million for undergraduate financial aid next year. This would be an 18.2 percent increase over the budgeted figure for this year.

Noting that "an amount equal to 15 percent of revenue from all tuition and fees is now targeted for undergraduate financial aid," Barker said: "We cannot continue in-

definitely with the entwined upward spiral of tuition and financial aid." In fact, he said that the current policy would stand next year, but added that "we will have to apply our policies differently in the years ahead."

As for tuition, the senior provost said that he foresees an increase of between 7 and 8.25 percent, up from this year's \$14,000 to as high as \$15,200. He said increases were held to 6.5 and 6.9 percent for the past two years, partly because of in-year budget cutbacks, and he said that 2 percent cuts had been ordered three times in the past five years.

"At 8 percent, we would be a bit above the increases the FCR endorsed; but, as you see, even at that level, we must fall somewhat short of the other goals you endorsed," he said.

—Sam Segal

CORNELL EMPLOYMENT NEWS

A Directory of Services and Self Help Groups In Tompkins County

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The Self Help Group Phenomenon: Over Six Million Strong

What is a self-help group?

A self-help group is formed when individuals come together to help each other by giving mutual assistance and emotional support to address a common need, overcome a handicap, or deal with a life-disrupting problem.

Members of self-help groups are caring people - ones who give and receive understanding and support that can help us:

- deal with specific problems or conditions;
- reaffirm our own sense of worth;
- think through our problems.

Self-help groups flourish because we find comfort and strength in being with and talking to others who share a common experience.

Support Groups are Usually Small, Quiet and Local

The self-help group phenomenon in the United States is estimated to be about six and a quarter million strong annually, and, other than a few exceptions such as Alcoholics Anonymous, most self-help groups tend to be small, quiet and local.

According to an article in the March 1989 issue of *American Psychologist*, the general public, as well as those in the health-care industry have tended to underestimate the size of the membership of self-help groups.

For example, are you aware of the number of local self-help groups right here in Tompkins County? This issue of *Cornell Employment News* lists the names of over 100 self-help groups or agencies providing support to individuals, but this listing is by no means an exhaustive one.

With this kind of annual participation nationwide, it is predicted that self-help groups will play a central role in the nations' health-delivery system in the coming years. Those who join self-help groups are probably somewhat more motivated (than those who don't join) to take an active role in changing their lives.

Why are support groups flourishing?

1. the traditional family format has changed, thereby reducing the amount of social support available;
2. medical science advances and an ever-growing aging population are causing an increasing number of us to be touched in some way by the medical and psychological problems of old age;

3. public confidence in some of our major institutions - including medical science - has been weakened, combined with our increased desire to have more control over our own health care;
4. the unavailability of mental health services which address problems often experienced by minorities and lower income groups;
5. continued emphasis on cost containment and the search for alternative treatment strategies for promoting wellness;
6. a greater acceptance of social support as a method of maintaining mental health;
7. media dramatization, docudramas, and talk shows such as the *Phil Donahue Show* focus on topics such as spouse battering, rape, cancer, etc. which increases our acceptance of self-help groups.

The Employee Assistance Program Offers Help to Cornell Employees

Cornell employees often seek help with their problems through the Employee Assistance Program. All regular full-time and regular part-time staff and faculty members on the Ithaca campus and their dependents can obtain free, short-term (up to eight hours) confidential assistance for a variety of personal or work-related problems through the EAP.

An EAP counselor can help you or your dependents identify and resolve interpersonal, financial, marital, family, alcohol, drug, or personal-adjustment problems. The counselors are well informed about community resources and, when necessary, can refer you or your family to the appropriate agencies.

Referral: A Large Part of EAP Service

"Referral is a large part of the work we do for employees through the EAP," states Lee Moon, director of Family and Children's Center.

"Referral to a self-help group occurs when people are dealing with a specific issue which is problematic to them," she continues. "Counselors may see clients individually for a time and then refer them to a therapy or support group, although most people attend self-help groups on their own impetus."

Support Groups Help People Deal With a Sense of Isolation

Moon continues that it is clear that support groups help people deal with the sense of isolation they may feel when confronted with a particular set of difficult issues. For instance, a support group for Vietnam veterans is often the first line of

therapeutic intervention if post-traumatic stress is the issue. Vietnam veterans often feel a higher degree of safety when speaking with and hearing others who have had similar experiences.

"In addition to reducing isolation and creating a safe environment, support groups provide a place in which all members can express the feelings associated with a particular issue," says Lee.

"For example, a caregiver to a person with Alzheimer's disease may feel a sense of obligation to the chronically ill person but may also feel frustrated, angry and sad about having to take on the difficult task of caring for a person. A caregiver's support group can provide for expression of these complicated feelings."

What to Consider When Choosing a Self Help Group

Lee Moon, director of Family and Children's Service notes that choosing a support group, like choosing any other therapeutic assistance, must be done with care. Some criteria include:

1. Does the group have a statement of purpose?
2. Does the orientation of the group meet with specific needs of the person attending it?
3. After a reasonable time - EAP counselors often recommend six sessions - does it feel as if continued group attendance makes sense?

Group support is a valuable tool for use when people are dealing with specific issues. A group of this kind provides security, information and feedback. Groups can also provide a singular form of support to be used in conjunction with individual therapy. Care in choosing an appropriate group is important and ongoing assessment of current needs make it a popular and functional form of support.

This directory of services and self-help groups available in Tompkins County has been compiled by the Office of Human Resources based on information from publications prepared by the Tompkins County Mental Health Association, the Tompkins County Youth Bureau and the Parent Education Committee. Thanks also to Family and Children's Service and the Office of Equal Opportunity. A subject index is listed on page 4.

The listings in this insert reflect 1989 information. Any changes or updates may be directed to Cindy Fitzgerald, 111 Day Hall for addition into the next issue.

A Directory of Services and Self Help Groups in Tompkins County

Adoptive Families Association

This group provides support and information to parents with adopted and foster children, people wishing to adopt, and other interested persons including people considering placing children for adoption.

Contact Person: Diane Hillman, 387-9207 or Beth Jolles, 273-9008

Adult Children of Alcoholics

This group helps adults whose lives have been affected by the drinking problems of their parents or dysfunctional families.

Contact Person: Sandy, 272-4475

Group Meeting Time & Place: Sundays at 7:30 p.m., Wednesdays at 5:45 p.m. at the Red Cross Building

Advocates for the Handicapped

This group provides support, information, emergency financial assistance and advocacy to people with disabilities, their families and friends, and other interested persons.

Contact Person: Sherry Thurston, 898-3381

After Suicide

This group provides support to friends and relatives of suicide victims. Members share information and facilitate healing.

Contact Person: Suicide prevention business line, 272-1505
Group Meeting Time & Place: 2nd & 4th Tuesdays, 7:30-9:30 p.m., call for location

AIDS Works of Tompkins County

This group offers workshops, speakers, one-to-one support, support groups, and referrals to people interested in AIDS.

Contact Person: Jennifer Tiffany, 273-5146

AL-ANON

This group helps adults whose lives have been affected by the drinking problems of relatives or friends.

Contact Person: Information Service, 273-1541

Alateen

This group provides information, education and confidential help toward personal recovery, group discussion, study of 12 step program (AA) and spiritual fellowship to 11 1/2 - 19 year olds who are affected by a relative or a friend with a drinking problem.

Contact Person: Cathie, 273-9190; Jennie, 272-4498 or Beth or Heather, 564-7454

Group Meeting Time & Place: 8:30 - 9:30 p.m., Tuesdays at the Presbyterian Church, Heritage Room

Alcoholics Anonymous

A fellowship of men and women who share their experience, strength and hope with each other that they may solve their common problem and help others to recover from alcoholism.

Contact Person: Information Service, 273-1541

Alzheimer's Support Group

This group provides information and support to caregivers and friends of persons suffering from Alzheimer's disease or related dementia.

Contact Person: Susan Kehrl, 273-7494

Group Meeting Time & Place: Family and Children's Service, call for time

Anxiety/Panic Attacks Support Group

This group provides support and coping techniques to people suffering from anxiety or panic attacks. If you are interested in forming or participating in this kind of support group, please call the contact person.

Contact Person: Kathy Magee, 277-2636 (evenings) or 272-3677 (leave message)

Arthritis Action

This group provides people with many forms of arthritis the opportunity to share experiences, feelings and support to cope better with problems of daily living. Family and friends are encouraged to participate.

Contact Person: Brenda Kent, 387-6697

Asthma

This is a support group for parents of children with asthma. They provide a forum for parents to learn more about asthma and to provide support for each other.

Contact Person: Karen McNamara or Pam Stone, 274-4317
Group Meeting Time & Place: 1st Wednesday of every other month 7:30 p.m. at Tompkins Community Hospital

Battered Women, Task Force for

This group offers a forum for women who are being or have been abused to help other women by offering support, sharing experiences and information, and breaking isolation.

Contact Person: Susan Hamman or Jude Keith, 277-3202

Bereavement Support Group

This group provides mutual support through sharing concerns, experiences, and feelings around the death of a loved one. Members help each other with the changes that occur throughout the grieving process. Bereavement education meetings are also available. This group presently serves Hospicare clients.

Contact Person: Pat Seitz, 272-0212

Group Meeting Time & Place: Scheduled periodically in 4 to 10 week sessions, call for location

Biracial Support Group

This group provides support to biracial families and couples. Anyone interested in forming or participating in this kind of support should call the contact person.

Contact Person: Eileen Brown, 277-5536

Birthingright

This agency offers pregnancy tests, education guidance, shelter homes, community resource information, maternity clothes, medical care, legal advice, referrals for professional counseling and adoption information.

Contact Person: 272-9070

Group Meeting Time & Place: 210 Center St.

BOCES - SETRC Parent Workshop

Provides information, resources, and on-going support groups for parents of handicapped children. Ten-week S.T.E.P. (Systematic Training for Effective Parenting) and Teen S.T.E.P. parent workshops are scheduled during the school year.
Contact Person: Trisha Flaccus, 257-1551
Meeting Time & Place: 555 S. Warren Rd.

BOCES Teen Pregnancy/Parenting

A comprehensive academic program that offers and provides the following services: counseling, pre-natal and parenting education, child care, peer support, sexuality awareness, peer support, advocacy and follow-up, case management, and transportation assistance.
Contact Person: Karin Suskin, 273-1055
Group Meeting Time & Place: Biggs Complex A, 1283 Trumansburg Rd.

BOCES - Tompkins, Seneca, Tioga Community School

T-S-T Community School offers special services to pregnant, non-pregnant, dropout, and parenting teens including: comprehensive academic program, counseling, prenatal and parenting education, child-care, peer-support, sexuality education, advocacy, and transportation. Services also include: GED high school equivalency instruction, vocational guidance, apprenticeship programs and counseling.
Contact Person: Trisha Flaccus, 257-1551
Group Meeting Time & Place: 555 S. Warren Rd.

Breaking Silence

This group offers confidential support and information to women who were sexually abused during childhood by people they knew.
Contact Person: Karen, 277-0517 or Cheryl, 315-497-1374

Cancer Patients Education Support

This group offers peer support to cancer patients and their families and friends. Educational information is also offered on a variety of related topics.
Contact Person: American Cancer Society, 273-0430
Group Meeting Time & Place: Meets monthly at various times call for time and location

Cancer Survivor and Caregiver Support Group

This group provides mutual support and networking, sponsors speakers and programs, and works on projects to meet the unique needs of Cornell employees.
Contact Person: Joan Fisher, Office of Equal Opportunity, 255-3976.

Caregiver Support Group

All meetings are open to Cornell employees who are interested in aging issues or who are caring for a frail, older person.
Contact Person: Ruth Raimon-Wilson or Joy Hall, 255-9881.

Cesarian Prevention Movement

This group devotes itself to advocacy and education in order to increase birth options and personal empowerment for people experiencing difficult pregnancies. This group is not anti-Cesarian but helps people avoid unnecessary interventions.
Contact Person: Yvonne LaMontagne, 273-3204
Group Meeting Time & Place: 3rd Tuesday of each month, 7:30 p.m., call for location

Child Sexual Abuse Project

Provides support, advocacy and referrals for sexually abused children and their parents. Programs about the issues of child sexual abuse and the principles of child sexual abuse prevention are available on request. Parents may call or visit the office for consultation about sexual abuse prevention for a particular child or to use the reference and lending libraries which offer books, pamphlets, games, curricula for children, teens, parents and youth workers.
Contact Person: Laurie Johnson, 277-3203, for education or Louise Miller for direct service
Meeting Time & Place: P.O. Box 164, Ithaca

Childbirth Education Association

This organization serves the childbearing family of Tompkins County by preparing them for participation directly in birth of their child and by alerting them to their rights and responsibilities as consumers.
Contact Person: Alison Rice 387-3456
Group Meeting Time & Place: RD#3 Box 271A, Trumansburg

Children Against Sexual Abuse II

This group provides support for sexually abused girls and boys ages 8-11. Referrals also accepted for children 5-8; groups formed when there are enough participants in each age group.
Contact Person: Lousie Miller, 277-3203 or Sarah Needha, 273-7494

Clinical Ecology Support Group

This group provides information, referral, and support for people suffering from or interested in ecological illness or allergy.
Contact Person: Becky Segal, 387-5743

Codependency Anonymous

Self-help toward developing healthy relationships with self and others. Group works through issues dealing with relationships.
Contact Person: Lotti, 273-8153
Group Meeting Time & Place: Sunday 6:00- 7:00 p.m. at the Red Cross Building, Basement (No-Smoking)

Comfort TMJ Support Group

This group provides support and information for people who suffer from chronic pain as a result of head, neck and facial pain usually associated with temporomandibular joint dysfunction (TMJ).
Contact Person: Jennifer Hunter, 347-4670
Group Meeting Time & Place: 3rd Tuesday of the month, 7:00 - 9:00 at the Ithaca Church of Christ, 1210 North Cayuga Street

Community Dispute Resolution Center

This agency provides adult/youth mediation teams to help families in conflict work out solutions to problems about chores, curfews, and other family issues. Mediations can be arranged within one to two weeks. Most family mediations can be completed in two sessions of about two hours each. CDRC also offers periodic workshops in conflict management.
Contact Person: 273-9347
Group Meeting Time & Place: 124 The Commons

Compassionate Friends

This group provides group and one-to-one support, information and education to parents who are grieving because of the death of a child.
Contact Person: Jane Dunn, 273-2280

Cooperative Extension Association

Cooperative Extension has extensive educational materials and programs of interest to parents and those who work with parents, specifically in the areas of nutrition, home energy, financial management and consumer problems.
 -Research-based information on child development, adolescence and parenting is also available to those who call or visit. The *Parent Express* is a 15-month newsletter for parents of newborns through the first year.
 -Programs for groups provided upon request. (e.g. A six-week program that examines roles of parents and teachers and the effective communication techniques to improve the home-school relationship.)
 -Offers S.T.E.P. (Systematic Training for Effective Parenting) classes.
 -The Expanded Food and Nutrition Program (EFNEP) offers nutrition education to families and individuals with limited incomes. EFNEP aides provide maternal health education to pregnant teenagers and teenage mothers. Run "Out-of-Sites" summer nutrition camp.
Contact Person: Susan Perkins, Nancy Potter or Marie Layer, 272-2292
Group Meeting Time & Place: 225 S. Fulton St.

Cooperative Extension, New York State

Several kinds of parenting materials, geared toward different audiences and covering such topics as single parenting, discipline, and sexuality are available for mailing to interested individuals or for review. Three workshop series developed by the Family Matters Project, for parents and people who work with families are available. They are based on the empowerment approach to building upon families' strengths. Also available are workshops for agencies who are working with Black and Hispanic families.
Contact Person: Florence Cherry, 255-7735
Group Meeting Time & Place: G37 Martha Van Rensselaer Hall, Cornell University

Cope and Hope

This group offers emotional support concerning losses and other issues of daily living for senior citizens.
Contact Person: Carol Kimball, 273-1511
Group Meeting Time & Place: Tuesday 2:00 - 3:30 p.m. at the Fireside Room, Presbyterian Church

CU Lesbian/Gay/Bisexual Coalition

This is a coalition and clearinghouse for several groups concerned with sexual preference issues. The groups in this coalition include: Cornellians; Gays, Lesbians, and Bisexuals of Color; Gay Men's Association; and coming out group for men and women.
Contact Person: Elisa Goldberg/Tom Foster, 255-6482

Cornell United for Blind and Sighted

Provides an opportunity for blind, visually-impaired and sighted persons to interact. This group is open to students and employees.
Contact Person: Joan Fisher, Office of Equal Opportunity, 255-3976.

Cystic Fibrosis Foundation

This group provides support and information to persons with cystic fibrosis and their families and friends.
Contact Person: Neal/Pat Howard, 273-1669

Day Care & Child Development Council

A "warm line" (In operation during working hours, calls after hours will be returned within 24 hours) is provided for those needing help with questions and problems about young children

- Lends car seats to income eligible families for up to six months. A small fee is charged to others who wish to rent the car seat for shorter lengths of time.
 -Acts as a resource and referral point for individuals who are willing to care for children.
 -Offers assistance in starting up play groups to provide socializing experiences. (6 to 8 groups are started each year)
 -Offers individual home visits to new parents with special needs.
 -Runs a group for single parents.
Contact Person: Karen Coleman or Lenore Martin, Infant Outreach Worker, 273-0259
Group Meeting Time & Place: 306 N. Aurora St.

Diabetes Community Group

This group is for persons with diabetes and their families and friends to discuss current topics and concerns related to diabetes.
Contact Person: Alma Coats, 274-4421
Group Meeting Time & Place: 4th Wednesday of each month 7:30 p.m. at Tompkins Community Hospital

Displaced Homemakers Center

The Center is a source of information and help, especially for women who are single parents; have been widowed, separated or divorced; or are facing other changes in their lives. Visit or call for counseling and support, employment assistance, education and training, and legal information. Support groups are periodically offered for widows, single mothers, and women coping with separation and divorce. Also available is *The Registry*, a referral service for caregivers to provide in-home help to people who are ill, disabled, or in need of household services or companions.
Contact Person: Hylida Taylor, 272-1520

Down's Syndrome Parent Group

The group offers support, information, education, and referrals for families with a member with Down's Syndrome. Meetings are planned as needed.
Contact Person: Theresa Stanley, 273-5015

DSS - Department of Social Services

This agency provides a broad spectrum of services for parents and children including:
 -STATEWIDE CHILD ABUSE HOTLINE 1-800-342-3720
 -Public Assistance, food stamps, and medical help.
 -Counsels and places children in foster homes, and works to reunite families.
 -Prospective adoptive parents are helped and home studies are made.
 -Certifies day care providers
 -Caseworkers work with families in helping them acquire parenting skills
 -Preventive services work to prevent or stop disruptions in the home
 -Financial support is given to children for routine medical care. This agency works with and helps to fund programs through other community agencies.
Contact Person: Mary Garfield, 274-5297
Group Meeting Time & Place: 1283 Trumansburg Rd., Biggs Center, Building A

Emotions Anonymous

Members of Emotions Anonymous work to get well emotionally and to help others do the same.
Contact Person: Elizabeth, 533-7582; Gordon, 732-7211 or Al, 835-6696
Group Meeting Time & Place: Tuesday 8:00 p.m. Lutheran Church, Ithaca and Thursday 7:30 p.m. 19 Church St., Cortland

Equal Rights for Fathers

The membership in Equal Rights for Fathers is open to any individual interested in improving the divorce experience for fathers, children and the entire restructured family. Fathers share their experiences within the comfort of a small informal group. Guest speakers address various issues and concerns.
Contact Person: Tim Roulan, (H)315-781-0642 or (W)315-536-3346
Group Meeting Time & Place: 4th Thursday of the month at the Women's Community Building

Evening Alzheimer's Support Group

This group provides information, sharing and support to help in coping with loss, caregiving, and understanding of Alzheimer's disease or other dementia.
Contact Person: Denise Kooperman, 387-3128 or Susan Kehrl, 273-7494
Group Meeting Time & Place: 1st Monday evening of every other month 7:00 - 8:30 p.m. at 204 N. Cayuga Street

Family & Children's Service of Ithaca

Services directed specifically to parenting issues:
 -Personal and Family Counseling
 -Parent Aide Service
 -Homemakers Aide Service- Aides spend up to ten hours a week in the client's home providing parent support and helping with household chores, nutrition, and hygiene.
 -Counseling for pregnant teenagers
 -Adoptive services
 -STEP (Systematic Training for Effective Parenting) Training
 -Film and video library on family education
 -Interim Families- Offers short-term emergency placement to runaway or homeless youth and on-going counseling/consultation with youth and their families.
 -Employee Assistance Program (E.A.P.) Offers free and confidential counseling to any employee whose company is a participating member. For more information and to see if your company participates, call 273-1129.
Contact Person: 273-7494
Group Meeting Time & Place: 204 N. Cayuga St.

Farm Family Volunteers

The Farm Family Volunteers meet together to learn helping techniques and to support each other.
Contact Person: Monika Crispin or Nancy Potter, 272-2292

Finger Lakes Alliance for Mentally Ill

This group provides support, education, and information for families with mentally ill members and advocates for improved mental health related legislation, elimination of stigma and improved services for mentally ill people. This group also advocates for more money to be allocated for research to find

the cause of the major mental illnesses, schizophrenia, schizoaffective disorder, manic-depression illness and depression.
Contact Person: Jean Walter, 272-6566 or Gail Sherman, 539-7267

Group Meeting Time & Place: 2nd & 4th Tuesday of the month from 7:00 - 9:00 p.m. at St. Paul's United Methodist

Finger Lakes Epilepsy Association

This group offers mutual support, practical information and education to people with epilepsy, their families and friends.
Contact Person: Bette Bagnardi, 272-7101 (evenings) or Eugenia Hurme, 273-1422 (evenings)

Group Meeting Time & Place: 3rd Thursday of the month 7:00 - 9:00 p.m. at Finger Lakes Independence Center

Gastroplasty Support Group

This group offers support to persons considering a surgical approach to obesity.

Contact Person: Debbie Boynton, 273-3161

Genius-R-Us

This is an interdisciplinary support group for people who are struggling to achieve recognition in their fields. Brainstorming, feed-back, encouragement and sharing. Possible collaborations. Long-term goals include drawing up grant proposals to fund the various projects sponsored by the group.

Contact Person: Caryl Slaughter, 273-4431

Group for Women Who Have Been Sexually Assaulted

This confidential group provides support for women who have been sexually assaulted.

Contact Person: Bonnie Shelley, 273-5589

Head Injury Support Group

This group offers emotional support and education to victims of head injury either occurring at birth, in an accident or as a result of a stroke, and to their families and friends.

Contact Person: Edna Grover, 533-7509 (days) or Dave Farmer, 533-7254 (Evenings)

Group Meeting Time & Place: 2nd Tuesday of month 7:00 p.m. at the Finger Lakes Independence Center, Clinton Plaza

Hearing Impaired Support Group

This group supplies information and training on topics relating to hearing impairment. There is a sub-group for parents of hearing-impaired children.

Contact Person: Trisha Flaccus, 257-1551

Group Meeting Time & Place: SETRC/BOCES, 555 S. Warren Rd.

Heartmates of Tompkins County

This group promotes the well-being of heart patients and their families by helping them cope better with the anxieties associated with heart disease and heart surgery.

Contact Person: John Ware, 273-3241; Chuck Hurlbut, 272-5340 or Henry Aron, 272-5580

HIV Positive Group

A confidential group open to any person who has tested positive for the HIV virus, but has not been diagnosed as having AIDS. The purpose of the group is to provide a mutually supportive environment in which members can discuss their feelings and concerns about their HIV positive status, and where they can together develop and share new skills and information for controlling their own lives and situations.

Contact Person: David Mordovanec, 723-4163 or George Ferrari, 272-1505

Group Meeting Time & Place: 2nd and 4th Tuesday of the month, 7:00 - 8:30 p.m., call for location.

Home Caregivers' Support Group

This group offers information and support for persons who are currently providing care to a frail family member or friend, or who are anticipating providing care in the future.

Contact Person: Susan Kehrl, 273-7494

Ithaca Birth Group

This group provides education, information, and support for pre- and post-natal couples, and their friends and family on pregnancy, childbirth, and early parenting in ongoing eight-week sessions.

Contact Person: Gail Birnbaum, 277-3455 or Jennifer Gray, 387-6694

Ithaca Neighborhood Housing/Pre-K

A neighborhood center for the Hancock Street Project with an emphasis on parental involvement. Classes for parents are offered in aerobics, stress management and cooking. Operates an after-school program for 5-12 years olds, a parent cooperative for two-year-olds and a Big Brother/Big Sister program.

Contact Person: Mary Rogers, 272-4461

Group Meeting Time & Place: Northside Community Center, Hancock Street

Ithaca Youth Bureau

The Youth Employment Service is a source of trained and experienced babysitters and teenagers willing to work. The One-To-One program offers support, referrals and advocacy to parents through a Big Brother/Big Sister program. The Youth Bureau is also offering Parenting Skills Training Workshops for families involved with Family Court.

Contact Person: 273-8364

Group Meeting Time & Place: 1701 N. Cayuga St.

Ithaca Men's Network

This is a group of men supporting each other in the variety of changing roles they are facing in a changing society.

Contact Person: Roger Garrison, 257-3341

La Leche League

This informal group discusses topics including the advantages of breastfeeding, adjustments families make after a baby's arrival, nutrition and weaning off and how to overcome difficulties during breastfeeding.

Contact Person: Terry Cater-Cyker, 257-4247

Lend A Helping Ear

This is a support group for students, employees, staff, faculty and community persons with hearing impairment. The group sponsors speakers, works on projects and attends social events.

Contact Person: Joan Fisher, Office of Equal Opportunity, 255-3976.

Lupus Support Group

This group is not currently meeting, however, education and support are available on a one-to-one basis.

Contact Person: Betty Randolph, 273-4936

Mobility Support Group

This group shares information, ideas and support with others who understand the difficulties and possible solutions of community inaccessibility to those with mobility impairments. An action-oriented group committed to educating the community to be more responsive to those with disabilities.

Contact Person: Brenda Kuhn, 272-2433

Group Meeting Time & Place: Wednesdays, biweekly 6:30 - 9:00 p.m., Finger Lakes Independence Center

Mothers' Group

This group provides support and information for mothers of children who have been sexually abused.

Contact Person: Nicole Carvier or Carol George, 277-3203

MS Group, Finger Lakes Area

This group provides support and information to people with Multiple Sclerosis and their friends and family.

Contact Person: Mary MacCarrick, 273-1558; Diana Pogson, 277-0315 or Maryann Iacovelli, 347-4074

Group Meeting Time & Place: 4th Tuesday of the month, 7:30 p.m. at Finger Lakes Independence Center, 609 W. Clinton Street

NAR-ANON

This group offers support, information and education to friends and relatives of people who are addicted to drugs. It works in close cooperation with Narcotics Anonymous.

Contact Person: Mental Health Association, 273-9250

Group Meeting Time & Place: Mondays, 8:00 p.m.

Narcotics Anonymous

This group uses the twelve steps of anonymous groups to address the disease of addiction.

Contact Person: Mental Health Association, 273-9250

Group Meeting Time & Place: Red Cross Building, call for time

New Voice Club

This group offers support, information and education to people who have suffered from cancer and had laryngectomies.

Contact Person: Domenic Bellavigna, 564-5301

Group Meeting Time & Place: 1st Wednesday of the month at 213 S. Geneva Street

Ostomy Tompkins County Group

This group offers information and mutual support to people who suffer from cancer and have recently had ostomy surgery. Family, friends and interested professionals are also invited to participate.

Contact Person: American Cancer Society, 273-0430 or Jody Marshall, 387-5653

Overeaters Anonymous (OA)

This group offers confidential support to people who have problems with compulsive eating and wish to stop.

Contact Person: Cathie, 273-9190; Susan, 273-0135 or Linda, 273-5376

Group Meeting Time & Place: Mondays, 7:30 p.m., at the Lutheran Parish House; Saturdays, 11:00 a.m. at the Red Cross Building

Parent-to-Parent Support Group

This group offers mutual support, information, and advocacy to parents of children with special needs including developmental delays or disabilities, physical handicaps, and learning problems.

Contact Person: Robin Dubovi, 272-5891

Parents Anonymous

Parents coming together and sharing everyday stresses of being a parent, or individuals who are trying to deal with how they were parented.

Contact Person: Suicide Prevention Business Line, 272-1515

Parents of Belle Sherman Students

Support group for parents. Provides practical information and emotional support concerning difficulties students and parents encounter at Belle Sherman Elementary School.

Contact Person: Marlene Haygood or Martha Smith, 273-4190

Group Meeting Time & Place: 2nd Tuesday evening of each month at Southside

Parents of Premature Infants

This is a group for parents of premature infants or a newborn who has been hospitalized. There are no regular meetings. Interaction occurs mainly through telephone conversations and networking. Help is given in finding appropriate clothes

(extra small size), toys, and other equipment.

Contact Person: Holly Tavelli, 257-1473

Parents of Twins/Multiples

Group discussion of common concerns (a special effort is made to contact/assist new parents of multiples). Equipment list maintained for buying, selling, loaning items and clothing.

Contact Person: Judy Healed, 277-2133 or Jan Douglas, 272-2724

Parkinson's Support Group

This group provides support and information to people with Parkinson's disease and their families and friends.

Contact Person: Mildred Donner, 273-5205 or Dorothy Everette, 257-2263

Planned Parenthood

Provides medical, counseling and educational services including:

-Affordable gynecological care, pregnancy testing and options counseling (free for teens), contraception and extensive infertility service.

-Free teen information program on Wednesdays at 3:15 p.m. for teen women and men on sexuality, birth control, and reproductive health.

-A variety of family life education programs available for youth and their parents on dealing with sexuality, communication, peer pressure, etc. Including mother-daughter, father-son retreats, "In Between" programs. Also, "OK Bears" puppet program on child sexual abuse prevention available.

Contact Person: Anne Terrell or Betsy Crane, 273-1526

Group Meeting Time & Place: 314 W. State St.

Probation Dept. of Tompkins County

Provides informal counseling and referral services to families and youth involved with or on probation.

Contact Person: Lois King, 274-5380

Group Meeting Time & Place: 1283 Trumansburg Rd., Biggs Center, Building A

Recreation Mainstreaming Services

Sponsored by Ithaca Youth Bureau. Trained staff provides year-round sports, leisure and skill building activities for youth age 4-19 with varying disabilities.

Contact Person: 273-4190

Resolve of Central New York

This group offers information, referral, support, counseling, and education to people about infertility and/or pregnancy loss.

Contact Person: Jody, 347-472 or Evelyn, 277-2864

Group Meeting Time & Place: 2nd Tuesday of each month, 7:30 p.m. at St. Pauls Methodist Church

Rest-A-Bit

Provides temporary care for developmentally disabled family members and their siblings. Parents may use this time for taking care of appointments, shopping, spending time alone with a spouse or with their other children, or just to relax. A trained respite provider will be individually matched with the family based on the preferences and needs of all involved.

Contact Person: Suzanne Fine, 272-5891

Group Meeting Time & Place: Special Children's Center, 21 Wilkins Rd.

Self Help for Hard-of-Hearing People

This group provides information, education, and support to people who have a hearing impairment, those who are losing their hearing and friends and family of hearing-impaired people.

Contact Person: Penny Clair, 272-2433

Single Parent's Support Group

This group offers support to single parents of teens and young adults.

Contact Person: Hylda Taylor, 272-1520

Smokers Anonymous

Support and discussion group for anyone interested in quitting smoking or in remaining a non-smoker. A 12-step format is informally used.

Contact Person: Ron Laby, 257-4322

Group Meeting Time & Place: Tuesdays, 7:00 p.m. at the Red Cross Building, 201 S. Clinton St.

Special Children's Center Parent-to-Parent Support Group

This group offers mutual support, information, and advocacy to parents who have a child with special needs including developmental delays or disabilities, physical handicaps, and learning problems.

Contact Person: Robin Dubovi or Bunny McClune, 272-5891

Group Meeting Time & Place: Special Children Center, 21 Wilkins Rd.

Spina Bifida/Hydrocephalus Support

This group offers support to people who have spina bifida or Hydrocephalus, their family and friends. This is a loosely-knit support group.

Contact Person: Dr. Gerhbert Schneidermann, 315-470-7655

Starting Over

This group offers fellowship, social and spiritual support to people without partners because they are separated, divorced, or widowed.

Contact Person: Alice Colquit, 257-7782

Stillbirth & Miscarriage Support Group

This group provides support to people in resolving their grief over the death of a child through stillbirth or miscarriage.

Contact Person: Dawn Churey, 274-4011

Group Meeting Time & Place: 2nd Thursday of the month 7:30-9:30 p.m. at Tompkins County Community Hospital Medical Library

Sudden Death Support Group

This group provides a supportive network for families who have experienced the sudden death of a loved one and are working to resolve their grief.

Contact Person: Russell Hollier, 274-4420

Group Meeting Time & Place: 3rd Wednesday of month 12 noon, call for location

Suicide Prevention and Crisis Service

Provides a 24-hour hotline for people needing to discuss personal problems. This could include parents who fear they might strike out at their children, adolescents in crisis (follow-up, on-site counseling may be given in several area schools), etc.

Contact Person: 272-1616

Support Group for Battered Lesbians

This safe and confidential group welcomes formerly battered lesbians, lesbians now in a battering relationship and women questioning their current relationship. The peer support found in the group mitigates the isolation, shame and guilt integral to abusive relationships.

Contact Person: Cristie, 277-3203

Support Group for Parents of Teens

This group offers support to parents who are troubled by the behavior of their teenagers and would like to learn how other parents have tackled problems during this "growing stage."

Contact Person: Carol, 387-6294

Survive and Thrive

This group is for people who have undergone cancer treatment and are trying to get back into society.

Contact Person: American Cancer Society, 273-0430 or Alice Johnson, 274-4001

Group Meeting Time & Place: 2nd Wednesday of the month, 4:30 p.m. at Tompkins Community Hospital

Survivors

This group offers confidential support and information to women who were sexually abused during childhood by

people they knew.

Contact: Mental Health Association, 273-9250

Teen Pregnancy/Parenting Program

T.P.P.P. offers child-development classes to prenatal and teen parents twice a year in 12 week sessions. Classes also focus on parenting styles, wellness and decision-making.

Contact Person: Karin Suskin, 273-1055

Group Meeting Time & Place: Day Care Council, 306 N. Aurora St.

Tompkins County Health Department

-Offers pre-natal classes one night a week for six weeks from 7:00-9:00 p.m. Participants and their coaches are asked to sign up at least 10 weeks before the expected delivery date.

-Well Baby Clinics provide immunizations, health guidance and well-baby examinations in a variety of locations throughout the county. (Groton & Dryden residents call 898-3376)

-W.I.C. (Women, Infant and Children Supplemental Nutrition Program) Provides supplemental food and nutritional education to pregnant and breastfeeding women, infants and children under 5 years old. Ask for Nancy Peckenpaugh

Contact Person: 273-7272

Tompkins County Mental Health Association

Provides information on mental health clinics, private practitioners, support groups, residential services and treatments. TCMHA also runs a group for the families and friends of mentally ill people who feel frustrated and overwhelmed in their efforts to help a loved one who is receiving mental health services. Questions about the nature of the problem or the kind of treatment he/she is receiving are discussed. Additionally, the Support Group Clearinghouse operates out of the TCMHA. It is a community resource where people can learn about existing support groups and find out how to create new support resources.

Contact Person: 273-9250

Group Meeting Time & Place: Every other Tuesday night 7:00-9:00 p.m. at 313 N. Aurora St.

Tompkins County Mental Health Clinic

Provides counseling for families, couples, individuals and children.

Contact Person: 273-4163

Group Meeting Time & Place: 1287 Trumansburg Rd.

Vietnam Veterans Support Group

This is a professionally led peer support group organized to help people deal with the lasting effects of Vietnam service. Veteran's partners meet separately at the same time and place.

Contact Person: Steve Bieler, 273-4163 or Harry DeLibero, 272-1084

Group Meeting Time & Place: Wednesdays 7:30 - 9:30, call for location

Vision Impairment

This group provides support to people with visual handicaps and their families.

Contact Person: Bruce Watkins, 273-7272, ext. 251

Widows Circle

This group acts as an ongoing support group for widows. Our varied activities provide friendship, emotional and practical support, information and exchange of ideas. We also participate in trips and cultural events. Small support groups for new widows are conducted about twice a year.

Contact Person: Bobbie Engram or Hylda Taylor, 272-1520

Group Meeting Time & Place: 2nd Saturday morning (breakfast) at Henry St. Johns Bldg.; 2nd Tuesday morning (breakfast) at Royal Court

Women Who Love Too Much

This group is for women who have been involved in emotionally destructive relationships. The book *Women Who Love Too Much* by Robin Norwood serves as a model.

Contact Person: Jan, 273-1525

Group Meeting Time & Place: Mondays 7:30 - 9:00 at 318 N. Albany Street, small conference room

Women's Information Network

This group offers networking, information, and education for women who are interested in learning more about women's employment and work-related issues. Networking is the process of using cordial alliances and informal referrals to further one's professional growth, advancement, and success. A different speaker presents a new topic every month.

Contact Person: Program Administrator, 272-1247

Group Meeting Time & Place: 3rd Thursday of the month 7:30 a.m. at the Women's Community Building

Subject Index for Service and Support Groups

Adoption:	Adoptive Families Association; DSS - Department of Social Services of Tompkins County	Diabetes:	Diabetes Community Group	Single Parent's Support Group:	Special Children's Center Parent-to-Parent Support Group; Support Group for Parents of Teens; Tompkins County Health Department
AIDS/HIV Positive:	Aids Works of Tompkins County; HIV Positive Group	Divorced:	Displaced Homemakers; Starting Over	Parkinson Disease:	Parkinson's Support Group
Alcoholism:	Adult Children of Alcoholics; AL-ANON; Alcoholics Anonymous	Down's Syndrome:	Down's Syndrome Parent Group	Pregnancy:	Birthright; BOCES - SETRC Parent Workshop; BOCES Teen Pregnancy/Parenting; BOCES - Tompkins, Seneca, Tioga Community School; Cesarean Prevention Movement; Childbirth Education Association of Tompkins County; Cooperative Extension Association of Tompkins County; Ithaca Birth Group; La Leche League; Parents of Premature Infants; Parents of Twins/Multiples; Planned Parenthood of Tompkins County; Resolve of Central New York; Stillbirth & Miscarriage Support Group; Teen Pregnancy/Parenting Program
Allergy:	Clinical Ecology Support Group	Eating Disorders:	Gastroplasty Support Group; Overeaters Anonymous	Relationships:	Codependency Anonymous; Women Who Love Too Much
Alzheimer's Disease:	Alzheimer's Support Group; Evening Alzheimer's Support Group	Elderly:	Cope and Hope Support Group; Home Caregivers Support Group	Sexual Abuse:	Battered Women, Task Force for; Breaking Silence; Child Sexual Abuse Project; Children Against Sexual Abuse; DDS; Mothers Groups; Group for Women Sexually Assaulted; Support Group for Battered Lesbians; Survive and Thrive
Anxiety:	Anxiety/Panic Attacks Support Group	Epilepsy:	Finger Lakes Epilepsy Association	Smoking:	Smokers Anonymous
Arthritis:	Arthritis Action	Ethnicity:	Biracial Support Group, Black Task Force	Spina Bifida:	Spina Bifida/Hydrocephalus Support
Asthma:	Asthma	Farming:	Farm Family Volunteers	Substance Abuse:	Adult Children of Alcoholics; AL-ANON; Alateen; Alcoholics Anonymous; Codependency Anonymous; NAR-ANON; Narcotics Anonymous
Battered Women:	Battered Women, Task Force for; Support Group for Battered Lesbians	Gay:	Cornell Lesbian, Gay, and Bisexual Coalition	Suicide:	After Suicide; Bereavement Support Group; Suicide Prevention and Crisis Service
Birth:	Birthright; BOCES - SETRC Parent Workshop; BOCES Teen Pregnancy/Parenting; BOCES - Tompkins, Seneca, Tioga Community School; Cesarean Prevention Movement; Childbirth Education Association; Cooperative Extension Association of Tompkins County; Ithaca Birth Group; La Leche League; Parents of Premature Infants; Parents of Twins/Multiples; Planned Parenthood of Tompkins County; Resolve of Central New York; Stillbirth & Miscarriage Support Group; Teen Pregnancy/Parenting Program	Handicapped:	Advocates for the Handicapped; Mobility Support Group	TMJ:	Comfort TMJ Support Group
Bisexual:	CU Lesbian/Gay/Bisexual Coalition	Head Injuries:	Head Injury Support Group	Veterans, Vietnam:	Vietnam Veterans Support Group
Cancer:	Cancer Patients Education Support Group; New Voice Club; Ostomy Support Group; Survive and Thrive	Hearing Impairment:	Advocates for the Handicapped; Hearing Impaired Support Group; Self Help for Hard of Hearing People	Visual Handicaps:	Advocates for the Handicapped; Vision Impairment
Career:	Genius-R-Us; Women's Information Network	Heart Disease:	Heartmates of Tompkins County	Widowed:	Bereavement Support Group; Displaced Homemakers; Starting Over; Sudden Death Support Group; Widows Circle
Caregivers:	Home Caregivers Support Group; Rest-A-Bit	Lesbian:	Cornell Lesbian, Gay, and Bisexual Coalition; Support Group for Battered Lesbians	Women:	Battered Women, Task Force for; Breaking Silence; Women's Information Network; Women Who Love Too Much
Children:	Alateen; Children Against Sexual Abuse; Community Dispute Resolution Center; Ithaca Neighborhood Housing & Pre-K; Ithaca Youth Bureau; Probation Department of Tompkins County; Recreation Mainstreaming Services	Lupus:	Lupus Support Group		
Cystic Fibrosis:	Cystic Fibrosis Foundation	Men:	Equal Rights for Fathers of NYS; Ithaca Men's Network		
Death:	After Suicide; Bereavement Support Group; Compassionate Friends; Displaced Homemakers; Resolve of Central New York; Starting Over; Stillbirth & Miscarriage Support Group; Sudden Death Support Group; Widows Circle	Mental Health:	Emotions Anonymous; Finger Lakes Alliance for Mentally Ill; Tompkins County Mental Health Association; Tompkins County Mental Health Clinic		
		Multiple Sclerosis:	MS Group, Finger Lakes Area		
		Parenting:	BOCES - Teen Pregnancy/Parenting Program; BOCES - SETRC Parent Workshop; BOCES - Tompkins, Seneca, Tioga Community School; Community Dispute Resolution Center; Cooperative Extension Association of Tompkins County; Cooperative Extension, New York State; Cornell Community Infant Center & Ithaca Child-care Center Workshops; Day Care & Child Development Council of Tompkins County; DSS - Department of Social Services of Tompkins County; Equal Rights for Fathers of NYS Finger Lakes Region; Family & Children's Service of Ithaca; Parents Anonymous; Parents of Belle Sherman Students; Parents of Premature Infants; Parents of Twins/Multiples; Planned Parenthood of Tompkins County; Rest-A-Bit;		

CORNELL EMPLOYMENT NEWS

Including Job Opportunities

Volume 1, Number 48

Human Relations Training Ongoing for Students, Staff and Faculty

Sheldon Stoff, a senior training associate with OHR's Training and Development staff, is responsible for working with many groups on campus to further human relations training. By offering workshops, consultation, awareness training, support groups, and conferences, Stoff helps people come together to develop strategies for change.

Stoff served for twelve years as the chairperson of the Department of Education at Adelphi University and has been honored by the National Council of Christians and Jews and the New York Community Institute for outstanding leadership and contributions in the fields of education, and training and development.

Stoff has written the following account of the training process.



Sheldon Stoff
Sr. Training Associate

I am often asked, as a trainer of human relations, how do I begin, how do I structure my training sessions, what happens during a session. The answers probably cannot be totally satisfactorily given in an article such as this but the question should certainly be addressed.

Human relations training is a process that is ongoing involving a desire to look inward, to listen, to think, to reflect, and to try to understand the why's and how's of our attitudes.

Where have our attitudes come from? How have our interpersonal relationships developed? How and why do we treat others (or certain others) in the way we do? Such a process aimed at helping people come together across differences to develop strategies for change do not just happen during a one-day or several-hour session. Change takes time and work.

Introducing the Process of Change

But change does need a beginning and it is with these opportunities to meet with members of the Cornell community to present human relations training that I can begin to introduce the process of change.

When offering a workshop, I begin by reminding myself of the core philosophy that nourishes me. I stick with the view of human relations philosophy that I was raised on beginning with Ralph Waldo Emerson. I personally corresponded with the philosopher Martin Buber for years. I also studied Abraham Maslow and was very fortunate to have as my mentor, a man of unusual wisdom, Dr. Franz Winkler.

The Nobility of Our Actions

I know that if I stay with the fundamental beliefs of these wise teachers and concentrate on positive aspects and the nobility of our actions, that my approach to human relations training with members of the Cornell community will remain on target.

But I must find creative ways of presenting the issues. Martin Buber said that in our general level of conversation, we tend to use an "I-It" relationship which is cold and intellectual. We tend, according to Buber, to treat others as objects or things to be used, manipulated and analyzed.

An "I-Thou" Relationship

Fortunately, Buber also pointed to another possibility and we could approach others with an "I-Thou" relationship. In an "I-Thou" relationship none of the knowledge from an "I-It" relationship is lost but we now add another whole dimension. We can now relate in artistic, intuitive, warm, caring ways. We can now understand inclusion: maintaining ourselves but now also feeling and knowing from the viewpoint of the other person.

Continued on page 4

Payroll Items of Interest...

New Federal Income Tax Withholding for 1990

Many employees' federal income tax withholdings will decrease slightly in 1990, thanks to new federal withholding tables. The new tables have been indexed for inflation as required by the 1986 Tax Reform Act. These tables will be applied to all wages paid on or after January 1, 1990.

Social Security (FICA) 1990 Withholding Changes

The social security tax rate will be 7.65% for 1990. This is an increase from the previous rate of 7.51% in 1989. The wage base is also increasing from \$48,000 to \$50,400. This puts the maximum employee social security tax for 1990 at \$3,855.60—a \$250.80 jump from the 1989 figure of \$3,604.80. Cornell matches the employee amount and, thus, faces the same \$250.80 increase.

Dependent Care Deductions Reported on W-2 Forms

Employees participating in Select Benefits Dependent Care will have 1989 deductions reported on their "Wage and Tax Statements" (W-2's). The total deduction amount will be printed in Box 16 of the W-2 Form and be labeled "DCB."

1989 W-2 Mailings

The Payroll Office has scheduled the 1989 W-2 Forms to be mailed during the week of January 15, 1990. All W-2's will be sent via U.S. mail to the address which is displayed on your paycheck or direct deposit stub. If you have not received your W-2 by January 31, 1990, please call the Payroll Office at 255-5194.

Classification Review Study Questions and Answers

Since we last communicated about the Classification Review Study (CRS), meetings have been held outlining and describing the details of the study to exempt employees. As a reminder, a freeze on reclassifications of exempt positions went into effect on Nov. 30, 1989. A freeze on nonexempt reclassifications will go into effect when we begin the nonexempt process. The exact date of the nonexempt freeze will be communicated through future issues of the Cornell Employment News.

Why are the exempt employees the first group to be reviewed?

Due to the large number of positions to be reviewed, it was necessary to separate the exempt and nonexempt groups. Since supervisors play a key role in the process, and many exempt positions have supervisory responsibility, it will facilitate the study to have those employees complete the questionnaire process first. In doing that, the exempt supervisory group will be better trained to answer any questions the nonexempt group might have. Although we will review the positions in two groups, the implementation date of the results will be the same for both exempt and nonexempt positions.

When will employees receive the questionnaire? Who completes it?

The questionnaire will be mailed to all administrative units to be distributed to all exempt employees by the end of December. The non-exempt group will not receive questionnaires until late spring/summer of 1990. The employee in the position will complete the questionnaire, describing his/her own position as it currently exists.

What information is requested in the questionnaire?

There are three parts to the questionnaire. The first section asks for biographical information, i.e., name, address, working title, payroll title, phone number. The second section asks for a written description of your job, its main function and a list of all its duties. The third part consists of a series of multiple choice questions designed to elicit information on specific components of jobs. Within the multiple choice section additional space will be provided for employees to describe in more detail their answers.

How long will employees have to complete the questionnaire and where will the questionnaire go after they have finished it?

The employees will have approximately 2 weeks to complete the questionnaire. After it is completed, it should be returned to the supervisor for his/her review. The supervisor has an option to write comments in a space provided on the questionnaire. After the supervisor reviews it and comments, it will be returned to the employee for the employee's signature and final review. The supervisor will also sign off on the questionnaire at that point.

Where will the questionnaire go after the supervisor and the employee sign it?

In most areas on campus the questionnaires will be sent to a central college or administrative unit personnel office before it continues on to the Office of Human Resources. This will ensure that all questionnaires have been completed and all questionnaires are accounted for.

What if the supervisor or the central college or administrative unit representative changes what an employee has written on a questionnaire?

Nothing that the employee has written on the questionnaire will be changed. However, if a supervisor is reviewing the questionnaire and feels that there is an inaccuracy or omission in the information, the supervisor will discuss the issue with the employee so both can agree on the appropriate language which the questionnaire will contain.

Continued on page 4

New Racial Harassment Brochure Available

The Office of Human Relations recently published a new brochure entitled Racial Harassment, which was sent to all undergraduate and graduate students at their campus addresses. The brochure includes a definition of racial harassment and Cornell's response to incidents of racial and ethnic

harassment as well as information on campus resources and a message from President Rhodes.

Individuals and departments may obtain copies of the brochure by contacting the Office of Human Relations, 431 Day Hall, 255-5358.



Disability Notebook Disability Services Available to Faculty and Staff

by Joan B. Fisher
Coordinator of Disability Services

Every day calls come to my office from staff, faculty, and students seeking information on a variety of disability issues. Today's column summarizes some of the primary services that are available to staff and faculty.

- Architectural audits and assistance in meeting Accessibility Codes in renovations and new buildings.
- Assistance in getting handicapped parking permits for persons with temporary or permanent disabilities.
- Help in updating resumes and providing practice interviews to employees with disabilities who are seeking career advancement or are returning from being off work on worker's compensation or long-term disability.
- Investigation of situations in which an employee feels he/she may have been discriminated against due to a disability.
- Information on laws pertaining to the employment of persons with disabilities (Section 504 of the Rehabilitation Act of 1973).
- Assistance in job analysis to determine if a person who has become disabled can return to his/her present job, and if so, help determine what modifications or accommodations might need to be provided.
- Counseling, in-house training, or consultation with supervisors and co-work-

ers regarding working with employees with specific disabilities (example: persons with visual, hearing or mobility impairments or persons returning to work after an accident, surgery or serious illness.)

- Counseling for disabled or newly disabled employees who are having problems pertaining to the disability.
- Information for supervisors about interviewing persons with disabilities in a sensitive manner and understanding what may or may not be asked legally.
- Books and pamphlets regarding specific disabilities loaned to persons wanting additional information.

In addition, there are presently three support and/or social groups which may be of interest to persons with disabilities or other interested persons. These include:

- Cornell United for Blind & Sighted (for students and staff with vision impairments and other interested persons)
- Lend A Helping Ear (for students, staff and community members with hearing impairments)
- Cancer Survivor and Caregiver Support Group

For information on any of these services call Joan Fisher at 255-3976 or 255-7665 (TDD).

Cornell Employment News including Job Opportunities will next be published on January 11, 1990. The Office of Equal Opportunity and the Office of Human Resources wish you a happy winter holiday.

Staffing Services, 160 Day Hall, Cornell University, Ithaca NY 14853-2801
Day Hall: (607) 255-5226 East Hill Plaza: (607) 255-7422

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

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

Staffing Services will acknowledge receipt of all material by mail. Hiring supervisors will contact those individuals selected for interview by phone; please include two or more numbers if possible. When the position is filled, candidates should receive notification from the hiring supervisor.

Cornell University is an Affirmative Action/Equal Opportunity Employer.

Job Opportunities can be found on CUINFO

WINTER HOLIDAY SCHEDULE: Due to the Winter Holiday, there will be no Job Opportunities list on Dec 21, 28 or Jan 4. Therefore, requisitions received after noon on Thur Dec 7 through noon on Thur Jan 4 will be posted on Jan 11.

The hiring freeze, which affects the hiring of external candidates for regular positions, will be from November 30-Jan 1. However, interviewing may continue during this period of time and offers, effective Jan 1, can be made. Hiring employee candidates and temporary employees is not affected by the hiring freeze.

Professional

Nonacademic professional positions encompass a wide variety of fields including management, research support, computing, development, finance and accounting, dining services and health care. Submit a resume and cover letter for each position, specifying the job title, department & job number. Employees should include an Employee Transfer Application.

Associate Director, CU Fund (PA9606) HRII University Development-Endowed

Work with the Director in the planning and implementation of the University's annual campaign for alumni support. Responsible for the ongoing operational aspects of annual campaigns: phonathons, direct mail, volunteer recruitment, staff and volunteer training, and certain management functions.

Requirements: Bachelor's or equivalent. At least 5 years successful fund raising experience in alumni campaigning; management skills and refined organizational skills; ability to motivate people and work creatively with volunteers; moderate travel and some weekend assignments are involved. Send cov ltr & res to Cynthia Smithbower.

Director of Volunteer Development (PA9609) HRII University Development-Endowed

Senior fundraising position providing leadership and guidance in the implementation and execution of a national volunteer identification and development program. Works closely with senior fundraising staff, University Trustees, Presidential Councilors, campaign volunteer leaders, and the President's Office. Define and lead overall volunteer development program in support of the University's capital campaign and on-going fundraising programs. Assess campaign needs for various volunteer involvement—CU-wide and college/unit specific. Design appropriate training & dvlpmt programs in coordination with sources existing on and off-campus. Assist in the formulation of policies and procedures related to public affairs volunteers. **Requirements:** Bachelor's or equivalent. Master's preferred. Extensive experience in development, including working with CU volunteers; high level of awareness of issues facing the University in the next decade. Excellent teaching skills. Demonstrated written and oral communications skills. Ability to relate positively with volunteers, staff and faculty and to supervise others. Counseling experience helpful. Strong institutional knowledge of CU and of higher education. Send cover letter and resume to Cynthia Smithbower by December 22.

Senior Civil Engineer, Section Leader (PA9607) HRII Facilities Engineering-Endowed

Provide the engineering support for the physical plant operations of a major research university campus. Supervise a staff of 6 engineers, technicians, and landscape architects in the design, specification, and construction of new or renovated campus infrastructure. **Requirements:** Bachelor's in civil or structural engineering. Minimum of 7 years relevant experience. Must be registered or eligible for registration as a professional engineer in the State of New York. Must be able to communicate effectively, both verbally and in writing. Management experience desired. Send cover letter and resume to Cynthia Smithbower by Jan 19.

Research Support Specialist III (PT9614) HRII Center for Environmental Research-Endowed

Implement and monitor Solid Waste Combustion Institute's \$1.7 Million Research Awards Program. Develop corporate fund raising effort and pursue foundation and additional governmental support. Provide general administrative support to program including writing technical and program reports, and monitor budgets. **Requirements:** Bachelor's minimum, Master's engineering or MBA preferred. Considerable related experience including 2 years of administrative or business experience with an educational program. Ability to understand and communicate technical and scientific issues essential. Send cover letter and resume to Judy Stewart.

Director of Corporate Relations (PA9604) HRII Engineering Dean's Office (Corporate Relations)-Endowed

Work with the Assistant Dean and Directors and Chairmen in college to organize, develop and direct programs to obtain broad industry support for the educational and research activities of the college. Serve as Co-Program Director of Southern Tier Industrial Innovation Extension Service. Perform other duties as assigned by the Dean and Assistant Dean. Mon-Fri, 8-5 plus some eve and wknd hours. **Requirements:** Bachelor's required. An earned graduate degree is preferred. Minimum 3-5 years related development experience. Industrial experience is strongly preferred. Ability to communicate effectively is essential; experience in proposal writing and oral presentations is essential. Send cover letter and resume to Cynthia Smithbower by Dec 15.

Trust Officer (PA9610) HRII Office of Trusts and Estates-Endowed

Administer the University's fiduciary responsibilities in estates, trusts, unitrusts, annuity trusts, and other separately invested funds. Work closely with donors in developing and executing various gift commitments often involving complex financial arrangements. **Requirements:** A law degree or the equivalent combination of education, training and experience which provides the required knowledge, ability and skills. Considerable experience in trust administration, tax accounting, and interpretation of tax regulations. Send cover letter and resume to Cynthia Smithbower by Dec 22.

Senior Graphics Designer/Art Director (PA9503) HRII University Development-Endowed

Create and carry out effective visual themes and concepts for major, university-wide fund-raising communications, including Communique and other newsletters, case statements, brochures, logos, letterhead, annual reports, event invitations and programs, and posters. Use graphic techniques, illustrations, photographs and typography to enhance effectiveness of written messages and to increase constituents' awareness and understanding of CU priorities, needs and programs. **Requirements:** Bachelor's or equivalent in commercial art, fine art or advertising design. 3-5 years experience as an art director, either in a university or advertising agency. Creativity and imagination. Superior ability as a designer and illustrator, with particular understanding of the role of design in motivation. Expert command of all graphic tools. Thorough knowledge of state-of-the-art techniques in printing and their cost effective application. Willingness to develop and maintain familiarity with CU and Public Affairs structure and priorities. Strong interpersonal skills, including flexibility and sensitivity to needs of diverse clients. Demonstrated ability to meet job requirements. Ability to adjust output to heavy demand as it occurs.

Project Leader II (PT9603) Level 36 CIT/IR-Endowed

Responsible for maintenance, changes and enhancements of Student Information System. Assist in definition and implementation of interfaces with SIS.

Requirements: Bachelor's or equivalent required. 3-5 years of experience in programming, analysis, design and project management required. Considerable experience with large interactive application systems required. Proven ability to deal effectively with users, programmers, peers and management required. Knowledge of IBM MVS operating system and JCL required. Experience with student records system or other student-related systems desirable. Experience with microcomputers as user workstations desirable. Knowledge of CMS, PL/1 and ADABAS/Natural desirable. Send cover letter and resume to Judy Stewart.

Technical Specialist I (PT8109) Level 36 CIT/Network Resources-Endowed

Provide high level problem diagnosis support to the Network Operation Center and it's clients. Install and maintain network router

software, tables, files and monitoring tools. Consult with network clients on software interface issues. Act as liaison to national networks for operational software issues.

Requirements: Bachelor's or equivalent with appropriate coursework in related field. 3-5 years experience with network software with emphasis on TCP/IP and UNIX. Knowledge of several of the following areas is highly desirable: DECNET, synchronous and asynchronous data streams, token ring, ethernet and Appletalk. Send cover letter and resume to Judy Stewart.

Project Leader I (PT9602) Level 35 CIT/IR-Endowed

Oversee the user area and insure that the system is performing to specifications agreed to by the user department. Organize, schedule and supervise workflow of subordinate programmers working on user area applications. Maintain close communication with personnel from various user offices so that more efficient solutions to problems can be developed. Investigate and evaluate outside software systems.

Requirements: Bachelor's or equivalent combination of education and 3-5 years experience. Extensive computer and systems experience, including considerable experience in the design of major systems is necessary. A thorough technical knowledge of COBOL, PL/1, IMS, ADABAS, NATURAL and CU operating systems is required. Send cover letter and resume to Judy Stewart.

Systems Analyst III (PT9401) Level 34 HRII DL-Quality Milk Promotion Services-Statutory

Analyze, design, develop, implement and document computer applications for Quality Milk in a network and micro environment having interaction with other hardware and software systems. Work with staff to analyze project data.

Requirements: Bachelor's or equivalent with 3-5 years experience required. Statistical experience desirable. 1-2 years experience in analytical/problem solving with micros. Strong background and knowledge of DBASE III+ as well as experience in editing existing DBASE program required. Knowledge of word processors, utility programs, MS-DOS operating system, and IBM compatibles required. Strong interpersonal and communication skills. Send cover letter and resume to Judy Stewart.

New Technologies Specialist (PT9105) Level 34 CIT-MOS Consumer Services-Endowed

Coordinate the definition, development and implementation of new information technologies programs, such as facsimiles, high performance workstations and local area networks.

Requirements: Bachelor's or equivalent; experience in area supervision preferred. Experience with complex applications and platforms of a wide range of integrated information technologies critical. Ability to work with public and determine priorities. Excellent communication & writing desirable. Send cov ltr & resume to Judy Stewart.

Systems Programmer/Analyst III (PT7101) Level 34 Information Technologies-Endowed

Design, develop, modify, implement and document fairly complex software programs and applications packages for major operating systems on small and large-scale computer systems. Provide user support in identifying technical problems.

Requirements: Bachelor's or equivalent with computer related courses required. 3-4 years programming and machine architecture experience; knowledge of system utility and control languages (e.g., DCL and shell scripts). Sound knowledge of several operating systems (e.g., UNIX, VMS), Assembler language and at least 2 major programming languages (e.g., FORTRAN and C). Knowledge of UNIX and other workstation operating systems. Send cover letter and resume to Judy Stewart.

Applications Programmer/Analyst III (PT7302) Level 34 Lab of Nuclear Studies-Endowed

Diagnose and fix accelerator problems related to control systems software. Coordinate general accelerator-related application program development by physicists and engineers.

Requirements: Bachelor's in Physics or equivalent experience with computer courses. Strong physics background necessary. 3-5 years related experience. Experience in lab and research-oriented equipment. Send cover letter and resume to Judy Stewart.

Instructional Support Coordinator (PT9604) Level 33 Information Technologies-Endowed

Support faculty in the use of information technologies to improve instruction. Seek, evaluate and disseminate courseware; coordinate instructional accounts in mainframe environments; support technologies such as computer projections.

Requirements: Bachelor's or equivalent experience. 2-3 years experience preferably in an educational setting or with instructional software. IBM and MAC microcomputer experience. Excellent organizational and communication skills (oral and written). Ability to work effectively with faculty. Creative, resourceful problem solver. Send cover letter and resume to Judy Stewart.

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

Under direct supervision, design, develop, modify, maintain and document straight forward applications software in support of a major administrative system.

Requirements: Bachelor's or equivalent with computer related courses. 2-3 years related experience. Knowledge of applications for interactive and batch administrative systems, data base management systems, machine architecture, system utility programs, VM/CMS. Knowledge of at least 2 languages—PL/1, Natural and COBOL. Send cover letter and resume to Judy Stewart.

Systems Programmer/Analyst II (PT9507) Level 33 CRSS-Endowed

Maintain the Space Sciences Sun Microsystems server and network and a Vax 750 computer operational. Develop and maintain necessary software to fulfill the operational requirements of Astronomy/Space Science users. Be responsible for the trouble shooting of hardware problems. Provide software consulting.

Requirements: Bachelor's or equivalent. 2-3 years experience in computer operation and programming. Knowledge of the Unix operating system and/or Fortran Program is essential. Send cover letter and resume to Judy Stewart.

Systems Programmer/Analyst II (PT9508) Level 33 Materials Science Center-Endowed

Support the Center's computing facility. The duties will include system administration of a UNIX-based Convex minisuper computer, maintenance of peripherals and local area networks, and assistance with the computing needs of the MSC researchers.

Requirements: Undergraduate degree in computer science, engineering or physical science. Ability to design, develop and maintain complex software. Ability to install and maintain complex hardware systems. Must have programming experience in C and FORTRAN. Assembly language experience helpful. Must be able to communicate and interact well with faculty and graduate students. Familiarity with IBM PC or Apple Macintosh or UNIX. Send cover letter and resume to Judy Stewart.

Systems Training Specialist (PT8801, PT8802) Level 33 University Development-Endowed

Provide training for division staff in the use of the Public Affairs Computer System (PACS) and supporting equipment. Analyze user needs for computer and general office systems with the goal of optimum information sharing capability.

Requirements: Bachelor's or equivalent. 1-2 years related experience in personal computers (IBM or Mac) and mainframe computing. Network/LAN experience helpful, as is familiarity with Development and the CU PACS. Excellent written, oral communication, and teaching skills with ability to communicate computer applications in non-technical terms. Send cover letter and resume to Judy Stewart.

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

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

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

Applications Programmer/Analyst II (PT5133) Level 33 Finance and Business Office-Statutory

Develop, install, maintain, document, & modify administrative systems software. Under general supervision, provide admin. systems applications programming/analysis support for various areas. Assist in insuring efficient and effective use of computer resources.

Requirements: Bachelor's with computer-related courses or the equivalent combination of experience is required. Knowledge of CU mainframes, JCL, MVS, CMS, COBOL, Natural and ADABAS. Knowledge of IBM System 36 and its functions. 2-3 years experience with machine architecture, programming languages, production procedures and system utility programs desirable. Send cover letter and resume to Judy Stewart.

Technical Consultant I (PT9303) Level 32 School of Hotel Administration-Endowed

Under the supervision of the area manager, provide assistance in the installation and maintenance of application software and hardware enhancements. Provide consultation with students, faculty and staff on computer problems; trouble shoot micro/mini computer problems. Assist users with technical problems and assist the area manager when requested.

Requirements: Bachelor's or equivalent in computer technology. At least 2 years experience in programming in 2 or more high level languages: Experience in computer technology covering DOS, Apple, Macintosh, VMS and Unix operating systems. Excellent communication skills and service-oriented attitude extremely important. Willingness to learn new skills and adapt to rapidly advancing changes in hotel and computer technology necessary. Send cover letter and resume to Judy Stewart.

Applications Programmer/Analyst I (PT9301) Level 32 Financial Systems Development-Endowed

Develop, maintain, and document administrative systems software. Provide user support for various computing environments (micro/mini/mainframe). Assist in insuring efficient and effective use of computer resources.

Requirements: Bachelor's or equivalent with computer related courses required, or a minimum of 1-2 years related experience with hardware/software, programming languages, production procedures and system utility programs. Mainframe JCL, MVS operating environment, CMS, DOS, and ADABAS with some IBM system 36 experience. Send cover letter and resume to Judy Stewart.

Applications Programmer I (PT9007) Level 32 Cooperative Extension-Statutory

Develop, modify, implement, maintain and document software applications on University mainframes and micro-computer system in support of CU Cooperative Extension's use of electronic technology.

Requirements: Bachelor's or equivalent in Computer Science, Engineering or Mathematics preferred. 1-2 years of experience in computer programming. Previous experience with C or Pascal languages, and with UNIX and VMS preferred. Experience with SAS and MACSYMA desirable. Send cover ltr & resume to Judy Stewart.

Applications Programmer/Analyst I (PT6908) Level 32 School of Hotel Administration-Endowed

Provide computer, database and research support to faculty and students in developing and maintaining large databases and in the preparation and dissemination of research reports. Design and create files and programs to maintain the computerized database center. Provide on going support in areas of statistics and user system design.

Requirements: Bachelor's or equivalent with background in computer, statistics or related areas required. Minimum 1-2 years previous experience. Knowledge of Macintosh, IBM PC, Mainframe database manipulation, statistics and statistical packages. Must have excellent oral and written communication skills. Ability to work independently, generate ideas and professionally represent the school in the computer/database areas. Ability to handle pressure and meet deadlines. Good interpersonal skills. Send cover letter and resume to Judy Stewart.

Manager of Parking Communication & Field Svcs (PA9704) HRII Transportation Services-Endowed

Supervise the programs and operations of the Traffic and Information booths and field enforcement of parking facilities. Act as liaison with various university departments and work closely with the Traffic Bureau Manager to develop programs and services and implementation of transportation policies.

Requirements: Associate's or equivalent required, Bachelor's preferred. 3-5 years previous supervisory experience; training experience desirable; excellent written and oral communication skills, familiarity with office and information systems; previous experience in a university setting. Send cover letter and resume to Cynthia Smithbower by Dec 21.

Research Support Specialist I (PT9706) HRII CRSS-Endowed

Manage a large chemical lab. Design and construct apparatus. Coordinate research experiments and present data. Write/develop computer programs and supervise lab staff and graduate students.

Requirements: Bachelor's or equivalent in the physical sciences or engineering. Master's desired. Experience with gas handling systems, analytical instrumentation (including computer use) and metal/glass fabrication techniques essential. Electronics background desirable. Computer experience preferred. Send cover letter and resume to Judy Stewart.

Building Coordinator and Incinerator Facility Mgr (PA9702) HRII Diagnostic Lab-Statutory

Manage maintenance and renovation projects for Diagnostic Lab, including working with architects and University project coordinators. Responsible for managing the Incinerator Facility, including supervision of 1 individual. Ensure trouble-free operation and compliance with state and federal regulations in regards to handling and disposal of regulated medical waste.

Requirements: HS diploma plus 2 years formal education in mechanical, construction or electrical engineering or equivalent. 1-2 years related experience in managing construction or renovation of larger buildings will be helpful. Experience in computer based record keeping systems helpful. Send cover letter and resume to Cynthia Smithbower by Dec 21.

Development Assistant I (PA9701) HRII NYSSILR, School Relations-Statutory

Assist in fund-raising initiatives; planning and implementing private and public fund-raising strategies. Monitor gifts through public affairs gift tracking system, assist in coordinating direct mail alumni gift solicitation, organize and host special solicitation programs, major accounts, research special and major gift prospects, coordinate with CU development clearance system. Develop and sustain personal relations with key leadership through personal contact and letters.

Requirements: Bachelor's or equivalent. Minimum 1 year related experience. Excellent typing skills, i.e., familiarity with Mac, Microsoft Word and file. Excellent interpersonal, organizational and communication (phone, written, verbal) skills. Send cover letter and resume to Cynthia Smithbower by Dec 21.

Budget Analyst (PC9624) HRII Finance and Business Services-Statutory

Provide budget and financial analysis in the development and execution of the state colleges and dept budgets. Produce reports; generate financial analyses; provide leadership on assigned projects; develop and maintain effective working relationships, understanding the State system & complying with regulatory requirements.

Requirements: Bachelor's or equivalent in business administration or related field preferred; MBA or Master's in related field desirable. 2 years related experience in university accounting, budgeting, and/or administration is preferred. Good communication (oral and written) skills essential. Must be able to work accurately and effectively with a multiplicity of financial data; computer systems skills are necessary. Must be able to demonstrate ability to work as part of a team. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Budget Analyst II (PC9625) HRII CALS Dean's Office (Administrative Services)-Statutory

Assist in the development, execution and financial management of the College of Agriculture and Life Sciences budget. Assist the Director in planning overall budget of college income funds and state appropriated funds.

Requirements: Bachelor's or equivalent in accounting or business

administration. 2-3 years progressively related experience in budgeting. Good communication (oral and written) skills. Working knowledge of microcomputers necessary. Experience in Lotus 1-2-3, DBASE III, FOXBASE, mainframe to microcomputer applications and familiarity with CU budget process desirable. Send cover letter & resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Program Manager (PA9601) HRII Hotel Administration-Endowed

Under general direction of the Assistant Dean, Executive Education (ADEX), plan, develop, publicize; market and sell, and oversee delivery of Advanced Management Program, and customized programs for companies, associations, and other organizations in the United States. Responsible for organizational and financial success of programs. Supervise and direct work of Program Coordinator.

Requirements: Bachelor's required, hotel preferred, MPS or MBA advantageous. Requires minimum of 3 years hotel, or human resource development-related experience. Knowledge of executive education principles and programs beneficial. Public speaking, marketing, selling, and good interpersonal skills essential. Send cover letter and resume to Cynthia Smithbower by Dec 22.

Project Coordinator (PA9602) HRII Veterinary Administration/Facilities and Services-Statutory

Plan and manage college renovation projects, prepare budget estimates for proposed projects, assist in overseeing building repair and maintenance, responsible for coordinating elimination of safety hazards and security compromises & special projects as assigned.

Requirements: Minimum of an Associate's or equivalent combination of education and experience. Bachelor's desired. 3-4 years in building maintenance and construction. Ability to interpret and understand construction drawings. Estimating experience preferred. Send cover letter & resume to Cynthia Smithbower by Dec 22.

Night Manager (PA8104) HRII Campus Store-Endowed

Functional supervision of all night time operations including store and vault security, coordination of closing procedure and computerized processing. Will act as General Manager when the store is open at night. Responsible for interviewing, hiring, training, scheduling, supervising, and evaluating student employees, and coordinating efforts of entire night crew. Hours are 3 p.m. - 9 p.m.

Requirements: Bachelor's or equivalent. 2 years retail and supervisory experience required. Written and verbal communication skills essential. Send cover letter and resume to Cynthia Smithbower.

Teaching Support Specialist II (PA9605) HRII Plant Breeding and Biometry-Statutory

Provide support for instruction of various statistics courses, statistical consulting, assist in teaching large courses in Biometrics Unit primarily in statistics and biometry (601 and 602).

Requirements: Master's in statistics, coursework in computer science. Some teaching and research experience necessary. Send cover letter and resume to Cynthia Smithbower by Dec 22.

Development Assistant, Real Estate (PA9608) HRII University Development-Endowed

Provide programmatic assistance to the Real Estate and Property Gifts Program. Assist Director with marketing efforts for the program. Develop prospecting system and closer working relationship with college, unit and regional public affair/development staff. Assist in the preparation and research associated with gift proposals. Insure prompt communication with development staff and follow-up among the various offices that are involved with gifts of property, i.e., Trust Office, Real Estate Department, Counsel's Office, Insurance Department and appraisers and advisors to the donor. Assist in coordination and implementation of real estate council activities, staff involvement, visiting lecturers, the Job Network, symposiums and the annual Real Estate Conference. Contact appropriate colleges, staff, faculty and/or units to determine the level of interest and use of offered gifts-in-kind, i.e., collections, antiques and equipment. Provide donor and staff with appropriate information relating to tax consequences and appraisal requirements.

Requirements: Bachelor's or equivalent. 1 year related experience. Excellent written and oral skills. Strong organizational and interpersonal skills. Experience in fundraising, planned giving, marketing, public relations and real estate would be desired. Send cover letter and resume to Cynthia Smithbower by Dec 22.

Research Support Specialist II (PT9616) HRII Agricultural and Biological Engineering-Statutory

Maintain large database on microcomputer for Small Business Energy Efficiency Program. Design computer programs to analyze data and create statistical reports. Communicate with state officials, technicians in the field, and country Extension agents. Provide overall computer support and training to the statewide program. Some overnight travel a few times a year.

Requirements: Bachelor's in mathematics or computer science. Master's desired. Minimum 2 years experience in database management or computer support position. Proficient knowledge of dBase III Plus, Lotus 1-2-3 and Wordperfect 5.0 on IBM PCs. Experience with electronic communications required. Ability to prioritize and work under minimal supervision. Good organizational and interpersonal skills. Send cover ltr & resume to Judy Stewart.

Financial Analyst I (PC9413) HRII Veterinary Administration-Statutory

Provide support to the Director of Financial Services and Veterinary College Administration with financial and other data analysis and reporting. Develop and maintain College database resources and procedures.

Requirements: Bachelor's or equivalent in accounting or business administration. Associate's or equivalent combination of education and experience required. 2-3 years related experience. Very strong analytical ability. Able to manage long-term goals within a context of busy day-to-day deadlines. Good working knowledge of PC/MS-DOS and spreadsheet and/or database programs. Strong interpersonal and communication (written) skills. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Senior Writer II/Editor (PC9504) HRII University Development-Endowed

Take ultimate responsibility for producing 4 to 6 annual issues of Communique—University Development's chief communication to 12,000+ donors and volunteers—either delegating or taking direct responsibility for all stages from conception through publication. Write proposals, biographies, and draft presidential correspondence. Manage department in director's absence, provide guidance to staff members on fund-raising and communications issues, and represent department at occasional meetings.

Requirements: Bachelor's or equivalent. 2-3 years related writing/editing experience. Experience in publications management. Sophisticated knowledge of fund-raising and communications strategies. Superior writing and editing ability. Ability to sustain high work quality and meet deadlines during peak work-load periods. Familiarity with CU's academic and administrative departments helpful. Send cover letter, resume and writing sample to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Applications Programmer II (PT5801) HRII Hotel Administration-Endowed

Utilizing a microcomputer and university mainframe (SAS/SPSSx), provide programming and consulting support for research and instructional computing.

Requirements: Bachelor's or equivalent, coursework in computing or related fields. 2-3 years experience. Substantial knowledge and experience of SAS or SPSSx. Knowledge of hospitality software desirable. Familiarity with microcomputer hardware and software. Light typing. Send cover letter and resume to Judy Stewart.

CADD Coordinator (PT8901) HRII Facilities Engineering-Endowed

Lead the department's effort in Computer Aided Design and Drafting (CADD). Provide the coordination for design and drafting using computer-based drawing tools. Working with Facilities Engineering designers and engineers, draft engineering & architectural drawings.

Requirements: Bachelor's or equivalent in engineering, construction, or architectural technology. Minimum 2-3 years related work experience. Proficient in the production of computer generated drawings. Knowledge and experience in the management of CADD records necessary. Excellent communication skills. Send cover letter and resume to Judy Stewart.

Research Support Specialist I (Lab Manager) (PT8502) HRI Physiology-Statutory

Independent, resourceful individual sought to manage (under faculty supervision) and supervise grant-related research, teaching, and technical training activities of physiology lab. Assist in planning of experiments using in vitro microperfusion of renal tubules; Ramsay assays for fluid secretion; electron probe analysis of small fluid volumes; intracellular measurements with ion-selective microelectrodes. Participate in other research related activities.

Requirements: Bachelor's in biology, chemistry or other science or equivalent. 2-3 years experience preferred. Send cover letter and resume to Judy Stewart.

Professional Off-Campus**Extension Support Specialist II (PT9704) NYC Cooperative Extension-Statutory**

Assist in the planning, implementation and evaluation of a series of nutrition activities related to the Heart Health Program in East Harlem.

Requirements: Bachelor's or equivalent in food/nutrition, health education or home economics. Master's preferred. 2-4 years demonstrated ability as a teacher. Ability to communicate both orally and in writing. Organizational skills, ability to work independently and as a member of a professional team. Ability to speak Spanish. Send cover letter and resume to Nilda Tirado, NYC Cooperative Extension, 15 East 26 Street, New York, NY 10010.

Professional Part-time**Technical Consultant III (PT9615) Level 34 CIT-Endowed**

Present current CIT services and programs to CU departments and groups; plan and execute informational events; document CIT services and products to meet specific user needs; help evaluate current CIT services and define new services.

Requirements: Bachelor's or equivalent experience. Breadth of technical knowledge; exceptional communication skills. 3-5 years experience assisting individuals to use information technologies in a university environment. Send cover ltr and resume to Judy Stewart.

Professional Temporary**Applications Programmer/Analyst I (PT9707) Level 32 Public Safety-Endowed**

Under direct supervision, design, develop, modify, maintain and document computer applications as needed for the Division of Campus Life. Temporary until 7/1/90.

Requirements: Associate's or equivalent with computer related courses. 1 year programming experience preferred; some working knowledge of applications for batch and interactive systems, JCL, database concepts. Hardware experience on IBM systems/36 and micros preferred. COBOL and 1 other programming language required. Send cover letter and resume to Judy Stewart.

Technical

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

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

Research Aide, GR18 (T9609) Entomology-Statutory**Minimum Biweekly Salary: \$513.94**

Assist in lab and field research on management of biting and non-biting flies, including chemical, biological, and cultural control. Maintain insect colonies and rearing facility. Field research with external parasites of livestock.

Requirements: HS diploma or equivalent experience; eligibility for NYS certified commercial pesticide applicator's license; valid driver's license. 1 year experience with insect rearing and identification necessary. Experience with dairy cattle or other large animals desirable. Send cover letter and resume to Judy Stewart.

Technician, GR18 (T9611) Plant Breeding and Biometry-Statutory**Minimum Biweekly Salary: \$513.94**

Analyze potato tubers; perform sampling, greenhouse culture, inoculation, evaluation of plant reactions; grow plants in greenhouse, extract seeds, inoculate and transplant seeds. Plant, harvest and maintain seed plots and trials.

Requirements: Associate's degree, courses in plant breeding or related discipline desired, pesticide applicator's license. Class 3 NYS driver's license which can be obtained on the job. 1 year experience in agriculture research operation; experience driving a tractor. Able to lift 60 lbs. Send cover ltr & resume to Judy Stewart.

Animal Health Technician, GR20 (T9705) Veterinary Medical Teaching Hospital-Statutory**Minimum Biweekly Salary: \$558.78**

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

Requirements: Associate's in animal health technology, NYS Licensure or eligible. 2 years experience working with small animals preferred and an interest in teaching critical care techniques. Send cover letter and resume to Judy Stewart.

Receiving Technician Floater, GR20 (T9613) Diagnostic Lab-Statutory**Minimum Biweekly Salary: \$558.78**

This position backs-up all specialized functions in the Receiving Section as well as provides primary interface with clients, faculty and other staff in the Veterinary College on problem submissions. Review submission forms for completeness and appropriateness, label and prepare specimen submissions for testing. Perform preliminary data input to lab computer. Assist the Medical Records section with the result data input. Resolve special submission problems. Assist in development and distribution of information regarding correct specimen collection and mailing procedures to assure clients receive useful test results. Back-up to Serum Splitter. Back-up for Export Technician and Referral Technician. Open, sort and distribute mail.

Requirements: Associate's or Bachelor's in animal science or related animal health field. Licensed Animal Health technician preferred. 1-2 years related experience in veterinary practice or in large animal health facility helpful. Excellent interpersonal and communication skills. Send cover letter and resume to Judy Stewart.

Technician, GR20 (T9610) Poultry and Avian Sciences-Statutory**Minimum Biweekly Salary: \$558.78**

To organize and perform research in avian reproductive endocrinology. Experimental approaches require the ability to work independently and to provide technical expertise in a variety of methodologies including molecular endocrinology techniques, RIA, some animal work and data analysis.

Requirements: Bachelor's in biology or biochemistry. 1 year experience in lab procedures. Send cover ltr & resume to Judy Stewart.

Electronics Technician, GR20 (T9501) Theory Center-Endowed**Minimum Biweekly Salary: \$558.78**

Responsible for installing and maintaining computer-related equipment and other Theory Center equipment.

Requirements: Bachelor's or equivalent in electronics. 1 year experience wiring various networks helpful; computer experience helpful but not required; ability to work independently essential; good communication skills.

Technician, GR20 (T9505) Floriculture and Ornamental Horticulture-Statutory**Minimum Biweekly Salary: \$558.78**

Assist the faculty supervisor in conducting a research and extension program in turfgrass science. May be responsible for supervising 1 or 2 workstudy students. 2 year position.

Requirements: Bachelor's or equivalent in plant science or related field. Minimum 1-2 years experience in a turf related position. Must be willing to travel to distant areas in the State. Must be able to work independently and must be willing to work with chemicals, fertilizers and pesticides. Must have and maintain a valid New York State driver's license. Must obtain Pesticide Certificate within 3 months.

Computer Operator, GR21-24 (T9506) Information Technologies/Computer Resources-Endowed**Minimum Biweekly Salary: \$582.29**

Operate large scale computer systems and associated peripheral equipment; monitor data communication networks; consult with vendor customer engineers and department support staff; shift work including weekends.

Requirements: Associate's or equivalent combination of education and experience in large system environment. Minimum 3 years computer operating experience; related data communications experience helpful. Knowledge of computer hardware, software, operating systems, and programming languages. Valid NYS driver's license. Able to lift 50 lbs.

Computer Operator, GR22 (T9607) Animal Science-Statutory**Minimum Biweekly Salary: \$607.04**

Responsible for computer night shift, putting out daily run, distribute output and listings, run tests and jobs submitted by programmers and keep shelves supplied with forms. Mon-Wed, 11:30 p.m.-8:00 a.m.; Thur and Fri, 11:30 p.m.-7:30 a.m.

Requirements: Associate's or equivalent in data processing. 3 years experience desirable particularly with IBM mainframe. Send cover letter and resume to Judy Stewart.

Technical Part-time**Animal Health Technician, GR20 (T9504) Veterinary Medical Teaching Hospital-Statutory****Minimum full-time equivalent: \$558.78**

Take radiographs, process films of animal patients and research materials as required. Mon-Fri, 5:30 p.m.-9 p.m.; Sat 8 a.m.-4 p.m.

Requirements: NYS Licensed Animal Health Technician and/or Licensed Radiologic Technician. Minimum 1-2 years experience handling animals preferred.

Technician, GR20 (T9202) Biochemistry-Statutory**Minimum full-time equivalent: \$558.78**

Assist with culturing bacteria; perform enzyme purification and assay. Perform general lab duties. 30 hours per week.

Requirements: Bachelor's or equivalent required; coursework in biochemistry and microbiology desired. 1 year practical lab experience in a biochemical/microbiological lab including chromatography, spectrophotometer, and gel electrophoresis.

Technician, GR21 (T9703) Microbiology-Statutory**Minimum full-time equivalent: \$582.29**

Assist with enumeration, isolation, and characterization of bacterial isolates and with record keeping and data analysis tasks associated with grants and contracts of the PI. Mon-Fri, 20 hours per week.

Requirements: Bachelor's or equivalent in microbiology or related discipline. 1-2 years related experience. Good organization ability and experience with isolation, maintenance, and characterization of bacterial cultures are required. Knowledge of procedures employed in bacterial physiology and genetics is desirable. Send cover letter and resume to Judy Stewart.

Technician, GR21 (T9612) Avian and Aquatic Animal Medicine-Statutory**Minimum full-time equivalent: \$582.29**

Provide technical assistance in ultrastructural studies of fish pathology. Assist in all phases of transmission and scanning electron microscopy sample preparation, examination of specimens, photography, ultramicrotomy, preparation of prints of electron micrographs. Develop histochemical assays for ID of cell types in fish histo sections. 30 hours per week between 8 a.m.-5 p.m.

Requirements: Bachelor's required in 1 of the biochemical sciences. 1-2 years related experience in all phases of scanning and transmission electron microscopy. Experience in immunoperoxidase techniques desired. Send cover ltr and resume to Judy Stewart.

Technical Temporary**Clinical Lab Technician (T9502) University Health Services**

Temporary full or part-time days, rotating Sat half-day. Perform diagnostic tests in Hematology, Chemistry, Urinalysis and Serology. Phlebotomy experience necessary.

Requirements: Medical technology training required, ASCP certification preferred. Hospital experience preferred. Appointment for 3-4 months. Send cover letter and resume to Tami Hastings.

Office Professionals

Approximately half of all University openings are for Office Professionals. Individuals with secretarial, word processing (IBM PC, Macintosh, Wang, Micom), data entry, technical typing, or medium to heavy typing (45-60+ wpm) are encouraged to apply.

Submit a signed employment application and resume. Requests for referral and/or cover letters are not accepted from external candidates unless specified in the ad. Qualified applicants will be invited for a preliminary interview at our EHP office.

Office Assistant, GR17 (C9712) Purchasing-Endowed**Minimum Biweekly Salary: \$495.36**

Provide general office support for the department. Answer telephones; keyboarding; filing; handle mail. Other duties as assigned.

Requirements: HS diploma or equivalent. Excellent organization, interpersonal and communication (telephone) skills. Light typing.

Office Assistant, GR17 (C9701) CIT Services-Endowed**Minimum Biweekly Salary: \$495.36**

Perform switchboard and receptionist duties. Maintain schedules and mailing lists.

Requirements: HS diploma or equivalent. 6 months-1 year experience working with the public in a service capacity. Excellent telephone answering and managing skills. Computer experience preferred.

Office Assistant, GR17 (C9601) Center for Environmental Research-Endowed**Minimum Biweekly Salary: \$495.36**

Responsible for mail distribution and telephone coverage (take messages, track schedules) for busy office of 50 staff people; develop and maintain mailing/database list; provide word processing, photocopying, and scheduling support; assist in general accounting operations.

Requirements: HS diploma or equivalent. 1 year related experience. Able to understand and operate System 85, deal with public and work under some degree of pressure. Macintosh experience preferred. Medium typing.

Secretary, GR18 (C9709) Plant Breeding and Biometry-Statutory**Minimum Biweekly Salary: \$513.94**

Provide secretarial support for faculty in Biometrics Unit. Type correspondence, course materials; and technical manuscripts; schedule statistical consulting appointments; photocopy; serve as backup answering telephones and handling mail.

Requirements: HS diploma or equivalent. Some college coursework preferred. 1 year related office experience. Familiar with word processing; preferably on IBM PCs or MACs. Technical typing desirable. (training provided). Good interpersonal and organizational skills. Medium typing.

Office Assistant, GR18 (C9713) Floriculture and Ornamental Horticulture-Statutory**Minimum Biweekly Salary: \$513.94**

Serve as department receptionist and resource person with responsibility for facilitating communication between faculty, staff, students, other CU departments and the public. Provide general word processing support; act as seminar secretary and Career Opportunity/Placement Program Secretary; maintain smooth operation of daily department activities.

Requirements: HS diploma or equivalent. Some college coursework preferred. 1 year experience with IBM/PC and Wordperfect. Excellent organizational and grammatical skills. Knowledge of transcription machine required. Medium typing.

Secretary, GR18 (C9605) Division of Nutritional Sciences-Statutory**Minimum Biweekly Salary: \$513.94**

Provide secretarial support to 3 faculty and staff for Extension programs. Perform wordprocessing for forms, correspondence, reports, brochures, etc.; data entry using dBase III; produce dBase reports; coordinate and organize conferences and meetings; respond to requests for resources and information; direct phone calls; requisition supplies; monitor accounts; keep calendars. Mon-Fri, hours flexible. Continuation contingent upon funding.

Requirements: HS diploma or equivalent plus secretarial training. 1-2 years equivalent experience. Wordprocessing experience (Wordperfect). Good organizational, interpersonal and communication skills. Requires use of IBM compatible PC and laser printer. Familiar with dBase preferred. Heavy typing.

Office Assistant, GR18 (C9609) Lab of Ornithology-Endowed**Minimum Biweekly Salary: \$513.94**

Provide general administrative, office and secretarial support for the Library of Natural Sounds. Oversee purchases; answer phone; type, file correspondence; maintain inventory. Other duties as assigned.

Requirements: HS diploma or equivalent. Some college coursework preferred. 1 year related experience. Word processing

required, database management and spreadsheets helpful. Strong interpersonal skills essential. Good telephone skills necessary as well as the ability to work independently and in a hectic environment. Must be accurate and pay attention to details. Medium typing.

Accounts Assistant, GR18 (C9603) Controller's/Accounting-Endowed**Minimum Biweekly Salary: \$513.94**

Provide assistance in maintaining account records and generating payments. Responsible for financial data entry into the accounting system and for accurate inputting of large, continuous volume of data from a variety of input forms.

Requirements: HS diploma or equivalent. Some college coursework preferred. Data entry certificate highly desirable. 1-2 years data entry experience. Experience with CU accounting procedures preferred. Able to work well with a variety of individuals. Pay attention to detail, work accurately while meeting a variety of deadlines. Heavy typing.

Senior Evening Circulation Assistant, GR18 (C9611) NYSSILR-Catherwood Library-Statutory**Minimum Biweekly Salary: \$513.94**

Share in the responsibilities, under the direction of the evening supervisor, for keeping the library open. Regular circulation desk and monitoring activities; security; lock-up; reserve processing; collection maintenance. Evening/weekend hours to be arranged.

Requirements: HS graduate with some college or business school education or equivalent related experience. 1 year library experience is desirable but comparable work involving serving the public and dealing with a variety of users, and handling detail may be substituted. IBM PC experience is desirable. Excellent organizational and interpersonal skills essential. Light typing.

Secretary, GR18 (C9617) Pharmacology-Statutory**Minimum Biweekly Salary: \$513.94**

Provide support to Administrative Manager. Type complex technical manuscripts, abstracts, correspondence, etc.; operate word processor, minicomputer; answer and screen calls; arrange meetings and travel; handle mail; maintain files; perform library reference tasks. Other duties as assigned.

Requirements: HS diploma or equivalent. Some college coursework preferred. 1 year experience. Excellent interpersonal and communication skills. Knowledge of medical terminology, word processing and minicomputers desirable. Heavy typing.

Office Assistant, GR18 (C9616) Neurobiology and Behavior-Statutory**Minimum Biweekly Salary: \$513.94**

Serve as the Bio. Sci. 101-104 contact person for both student and other members of the CU community with course related business and all staff members requesting assistance. Prioritize and complete office tasks. Oversee part-time secretary's duties; desk-top publish course-related material and correspondence.

Requirements: HS diploma or equivalent. Some college coursework preferred. Minimum 1 year related experience. Familiarity with word processing and office ordering procedures. Medium typing.

Secretary, GR18 (C9614) Civil and Environmental Engineering-Endowed**Minimum Biweekly Salary: \$513.94**

Provide varied secretarial/administrative support to an Endowed Chair faculty member; provide secretarial/administrative support to 3 faculty involved in American Society for Civil Engineers (ASCE) Committee, Journal editing and Headquarter support. Assist in service-oriented main office duties as assigned.

Requirements: HS diploma or equivalent. Some college coursework preferred. Minimum 1 year related word processing/secretarial and computer experience. Excellent organizational, interpersonal and communication (oral/written) skills essential. Independent judgment, attention to detail and ability to work under pressure. Computer knowledge desirable (IBM compatible & Mac). Heavy typing.

Office Assistant, GR19 (C9622) Finance and Business Services-Statutory**Minimum Biweekly Salary: \$535.78**

Provide accounting, clerical and administrative support for accounts receivable and transactions section of the Business Services unit.

Requirements: HS diploma or equivalent. Some college coursework preferred. 2 years accounting experience; preferably statutory accounting system. Excellent communication and organizational skills. Computer/terminal experience helpful. Light typing.

Secretary, GR19 (C9615) JGSM-Endowed**Minimum Biweekly Salary: \$535.78**

Provide word processing and administrative support to faculty members and faculty support sides using Mass 11 and the Macintosh. Entails a broad set of responsibilities: execute and complete administrative work; coordinate faculty recruiting with Chairpersons; assist JGSM Affirmative Action Officer on affirmative action and faculty searches, etc.

Requirements: Associate's or equiv. preferred. Minimum 2 years secretarial/office experience. Familiarity with computers, word processing and the Macintosh. Good organizational skills. Heavy typing.

Accounts Assistant, GR19 (C9621) HDFs/Family Life Development Center-Statutory**Minimum Biweekly Salary: \$535.78**

Maintain accounting system for the Family Life Development Center. Responsibilities include 10-20 active college, state and restricted fund accounts representing a \$2M budget.

Requirements: HS diploma or equivalent. Some college coursework in accounting preferred. 2 years related office experience. Experience with statutory accounting system preferred. Familiar with Macintosh. Medium typing. Send employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Administrative Aide, GR19 (C9623) CISER-Endowed**Minimum Biweekly Salary: \$535.78**

Provide administrative and clerical support for the Director and Institute personnel. Process payroll; appoint personnel and maintain personnel records; prepare monthly financial reports for several CISER grants; make travel arrangements; help coordinate the submission of research proposals with Administrative Manager; maintain CISER databases.

Requirements: HS diploma or equivalent. Some college coursework preferred. 2 years related experience. Computer proficiency (IBM PC) in Wordperfect 5.0 required. Knowledge of dBase III+ and Lotus 1-2-3 desirable. Excellent interpersonal and organizational skills. Able to work independently and set priorities. Mainframe experience preferred. Medium typing. Internal applicants only. Submit employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Advertising and Promotion Assistant, GR19 (C9503) C.U. Press-Endowed**Minimum Biweekly Salary: \$535.78**

Provide assistance to the department in all aspects of advertising and promotion. Type letters, reports, etc.; handle mail; answer inquiries (telephone and letter). Other duties as assigned.

Requirements: Associate's or equivalent. Knowledge of wordprocessing. Good writing skills. Close attention to detail. Heavy typing. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Accounts Assistant, GR20 (C9704) Grounds-Endowed**Minimum Biweekly Salary: \$558.78**

Provide comprehensive administrative accounting and financial analytical support to the Superintendent and 3 other supervisory staff; monitor and audit accounting statements and income/expense records for accuracy; research problems and initiate corrective action; prepare spreadsheets, reports and material purchase orders on computer; perform cost analysis on construction jobs and budget.

Requirements: Associate's or equivalent in accounting, business management or equivalent. 2 years full-time paid business experience, with a minimum of 1 year supervisory experience in an office environment preferred. Detailed knowledge of word processing, preferably on Macintosh Plus; computer. Good communication, organizational and interpersonal skills. Medium typing. Submit employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Administrative Aide, GR20 (C9008) Geological Sciences-Endowed**Minimum Biweekly Salary: \$558.78**

Provide administrative assistance to Chairman and Administrative Manager. Heavy typing, with complicated formulas; IBM PC, Macintosh; answer phones; handle mail; some editorial work; general office assistance.

Requirements: Associate's or equivalent. IBM PC XT-Word Perfect, Macintosh (helpful but not necessary). 2 years related experience helpful. Strong organizational, interpersonal (written and oral), communication skills. Knowledge of CU University policies and procedures preferred. Heavy typing.

Personnel Assistant, GR20 (C9207) Computer Science-Endowed**Minimum Biweekly Salary: \$558.78**

Provide administrative support to Director of Administration and coordinate personnel functions within a large academic/research department.

Requirements: Associate's or equivalent combination of education and experience. 2-3 years directly related administrative experi-

ence. Attention to detail, organizational skills and ability to work autonomously a must. Excellent communication, interpersonal and problem solving skills. Able to work effectively with diverse groups essential. Demonstrated experience and aptitude with microcomputers and database management systems a plus. Medium typing.

Administrative Aide, GR20 (C9707) Floriculture and Ornamental Horticulture-Statutory**Minimum Biweekly Salary: \$558.78**

Provide administrative support and secretarial support for Chairperson and Administrative Manager. Manage correspondence, calendar and telephone for Chairperson; arrange meetings, travel and department activities; coordinate faculty search and promotion packages; prepare catalog copy, annual reports and grant proposals; work with confidential and sensitive information (budget and personnel); serve as liaison to students, faculty, visitors. Perform personnel and payroll functions of department.

Requirements: Associate's or equivalent, 2 years related experience. Outstanding organizational, communication and interpersonal skills. Able to interact effectively with a wide variety of personalities, exercise sound judgment, initiative and flexibility. PC experience required. Heavy typing. Internal applicants only. Submit employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Accounts Assistant, GR20 (C9706) Floriculture and Ornamental Horticulture-Statutory**Minimum Biweekly Salary: \$558.78**

Provide support to Administrative Manager in areas of accounting, budgeting, purchasing and payroll. Process requisitions and vouchers; monitor monthly operating statements; maintain internal accounting system and provide accounting analysis.

Requirements: Associate's in business or accounting or equivalent. 2 years CU accounting experience desired. Excellent organizational, communication and interpersonal skills required. PC experience essential. Able to work under pressure and independently. Medium typing. Submit employee transfer application, cover ltr & resume to Esther Smith, Staffing Svcs, EHP, Ithaca, NY 14850.

Administrative Aide, GR20 (C9705) Agriculture and Life Science Dean's Office-Statutory**Minimum Biweekly Salary: \$558.78**

Provide administrative and clerical support to the Associate Dean. Serve as liaison to a wide variety of students, faculty, staff and alumni visiting the Dean's office. Arrange meetings; keep appointment calendar; type correspondence; answer telephones; provide backup support for secretary and Executive Staff Assistant.

Requirements: Associate's or equivalent with IBM PC and Wordperfect. Excellent communication (oral and written) organizational, and interpersonal skills essential. Able to perform in an active, diverse environment, to present a professional image, and to work independently under pressure. Accuracy and attention to detail and ability to meet deadlines is important. Medium typing. Submit employee transfer application, cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Accounts Assistant, GR20 (C8613) Finance and Business Services-Statutory**Minimum Biweekly Salary: \$558.78**

Perform reporting and accounting functions associated with Federal Retirement, Federal Life Insurance and Thrift Savings Plan Programs; process NYSERS documentation; assist in reconciliation of accounts.

Requirements: Associate's in accounting, or equivalent. Working knowledge of IBM PC. Good organizational and communication skills required. Knowledge in personnel and benefits counseling desirable. Able to work independently and set priorities. Light

Sales Assistant, GR20 (C9409) Campus Store-Endowed**Minimum Biweekly Salary: \$558.78**

Provide technical information to customers in the area of photography and general customer service in the Campus Living Shop. Assist the Assistant Director of General Merchandise with buying technical

Human Relations

Continued from page 1

In this article for *Cornell Employment News* I can only touch upon the surface of the possibilities of using the "I-Thou" relationship in human relation training programs. But in an attempt to provide an example of a typical "I-It" relationship, let me relate a lesson I once observed in a classroom.

The setting was a first grade classroom and the teacher was dealing with numbers. She held up a pencil, repeated the number "one," added a second pencil and then said the number "two." She was teaching a simple understanding based on the manipulation of pencils with no real encounter with them.

A Lesson in "Oneness"

The second setting - at a later date - took place in another school and I was able to observe a lesson with the same numbers by a teacher who understood "I-Thou" encounters.

This also was a first grade class but now the teacher took a tangerine off her desk and spoke in terms of "one," "oneness," and "unity." The tangerine now represented the world she told the children.

Slowly she peeled the tangerine and then dramatically split it in half. Two came from one! We now had a northern hemisphere and a southern hemisphere.

Then the teacher slowly pulled each segment of the tangerine away and had it represent a nation. We saw Canada, England, and the United States of America, etc. now laid out on the desk.

All are Parts of the Whole

She then brought the segments back together again. We were all parts of the whole. All people were related in unity.

The teacher followed with a fairy tale, again emphasizing the number "one." "One" was encountered and embraced all day long. The concept was

no longer something superficial to be simply manipulated. It had depth of meaning that was now appreciated. Teaching, in all its forms, was to be a matter of consequence in the daily lives of the students.

So it was with all lessons in that second classroom. Life was a matter of significance and loving encounter with people and the world was the top priority. So it must be with human relations workshops. The original meaning of "knowing," to "embrace lovingly," must be returned to center stage!

An Imbalance in Our Relationships

In addition to working with Buber's "I-Thou" philosophy, when I train I also am aware of Heidegger's statement that "We are all suffering from a distorted schooling. He and most philosophers and psychologists were aware of the imbalance in our educational system and in most of our relationships.

These relationships were usually "I-It" and therefore were simple and easily measurable. But these simple and easily measurable relationships also embodied a dangerous distortion which would lead to chaos.

We live in a time when only intellect is prized, honored and taught. The resulting imbalance affects all of life's concerns and easily accounts for some of the crucial problems of distorted cognition.

Experiencing Fullness of Relationships

Important for this article is the idea that when we seek only "I-It" relationships, it becomes easier to understand the prevalence of racism, sexism and manipulations in our lives. In our workshops we speak of and experience the fullness of relationships with all the attending awakening, caring and yes, even love.

Perhaps Franz Winkler summed it up when he stated that "true self-recognition emerges from an equilibrium between analytical intellect and comprehending intuition. To achieve such equilibrium, we must seek to strengthen our hard-won intellectual faculties." And we need to come together to begin the process of change.

Classification Review

Continued from page 1

The supervisor and the employee must ultimately concur that the responses on the questionnaire reflect the position's duties and responsibilities before the questionnaire can be signed by both parties and sent along in the review process.

What if a supervisor and the employee in the position cannot agree upon language which reflects all of the position's duties?

Once again, the supervisor cannot unilaterally change the language that the employee has used to describe his/her position. However, it is expected that the supervisor and the employee will openly discuss any areas of discrepancy and come to an agreement on appropriate language.

In more serious (extreme) cases, a third party, such as the college personnel officer may need to assist. Members of the Office of Human Resources will also be available to assist the parties in resolving these matters.

Will my personal performance be assessed as a result of the CRS?

The CRS has nothing to do with personal performance reviews. The questionnaire is not a review of how well employees perform their jobs. The CRS is a review of positions and not people.

Is it appropriate for employees to use their present job descriptions to assist them in completing the questionnaire?

Yes. However, keep in mind that many job descriptions which exist today have become outdated and inaccurate. Furthermore, the questionnaire asks for much more detailed information about a position than a standard job description can provide, and the questionnaire asks for these details in the employee's own words. Employees who do refer to their present job descriptions when completing the questionnaire should use it only as a guide.

Job Opportunities

Continued from page 3

as assigned. 32 hours per week. **Requirements:** HS diploma or equivalent. Up to 1 year related experience. Basic reading and computation skills. Good interpersonal and communication skills.

Office Assistant, GR16 (C9618)
Johnson Museum-Endowed
Minimum full-time equivalent: \$477.46
Operate museum reception desk in lobby. Provide information to visitors; sell cards, catalogues, and posters; answer telephone; take accurate messages for staff members; relay accurate information to weekend supervisor; provide security for museum lobby; and be available to work special events during evening hours. Sat and Sun, 9:45-5:15; evening plus substitution.
Requirements: HS diploma or equivalent. Some college coursework preferred. 1 year related experience necessary. Interest and involvement in art or related areas preferred, as well as familiarity with the Ithaca community. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Stockkeeper, GR17 (C9710)
Division of Nutritional Sciences-Statutory
Minimum full-time equivalent: \$495.36
Maintain food, equipment and supplies for DNS labs, seminars and other events. Clean, maintain, and secure lab supplies, appliances, and equipment. Schedule repairs as required. Mon-Fri, 8:30-4:30, 35 hours per week.
Requirements: HS diploma or equivalent. Practical training in foods desirable. Coordinate and prioritize several tasks. Must be able to work independently, exhibit initiative and address changing needs. Valid NYS driver's license required. Able to lift and carry heavy bags. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Office Assistant, GR18 (C9510)
Mail Services/Materials Management & Campus Svcs-Endowed
Minimum full-time equivalent: \$513.94
Operate the mail and communication systems in the Day Hall Mail Room. Advise customers of cost efficient alternatives when utilizing mail or express mail services; serve as relief clerk for: Announcements, Barnes Hall Post Office and Messenger Mail, as required. Mon-Fri, 20-35 hours per week.
Requirements: HS diploma or equivalent. Some college coursework preferred. 1 year related experience. Customer service orientation and excellent communication skills required. Knowledge of the rules and regulations of the U.S. Postal Service, United Parcel Service and other express mail services is preferred. Basic personal computer skills and familiarity with the CU Campus is helpful. Able to operate mail and communication equipment (electronic scale, postage meter, computer, facsimile machine) required. Send cover letter and resume to Esther Smith, Staffing Svcs, EHP, Ithaca, NY 14850.

Office Professionals Temporary

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

Receptionist (S9611)
Information Technologies
1 year, Casual, 19 hours per week. Act as receptionist. Answer phone, copy, processing of department forms. Macintosh skills are helpful but not necessary. Confidentiality a must. Send cover letter and resume to Karen Raponi, Staffing Svcs, EHP, Ithaca, NY 14850.

Office Assistant (S9301)
Material Science Engineering
Assist Administrative Aide in daily operations of office. Medium typing, utilizing Macintosh skills on a daily basis. Errands to campus

libraries and some photocopying. Part-time, 20 hours a week. Send cover letter and resume to Karen Raponi, Staffing Services, EHP, Ithaca, NY 14850.

Ticket Deliverer (S9601)
Travel Office
Hourly Rate: \$4.25
Deliver airline tickets to various campus locations. Casual position, 10-15 hours a week. Please contact Karen Raponi, Staffing Services, EHP, Ithaca, 255-2192.

Casual Office Assistant (S9502)
Master of Engineering
6-10 hours, preferably afternoons. Utilizing Macintosh skills to enter data on the database. Open mail, file, prepare mailings. Confidentiality a must. Contact Karen Raponi, Staffing Svcs, EHP, at 5-2192.

General Service

Submit a signed employment application and resume. Requests for referral and/or cover letters are not accepted from external candidates unless specified in the ad. Qualified applicants will be invited for a preliminary interview at our EHP office.

Custodian, SO02 (G9706)
Buildings Care-Endowed
Hiring Rate: \$6.00
Provide general custodial care of buildings and grounds in immediate vicinity of assigned area. Sun-Wed, 11pm-7:30am; Thur 11pm-6:30am.
Requirements: Basic reading and writing skills. Able to operate a variety of heavy power equipment, lift 50 lbs and climb an 8 ft ladder.

Custodian, SO02 (G9705)
Residence Life-Endowed
Hiring Rate: \$6.00
Provide general custodial care of buildings and grounds in assigned area. Mon-Thur, 7:30 a.m.-4 p.m.; Fri 7:30 a.m.-3 p.m.
Requirements: Basic reading and writing skills. Able to operate a variety of heavy power equipment, lift 50 lbs and climb an 8 foot ladder. Daily contact with students.

Food Service Worker, SO02 (G9702)
Dining-Endowed
Hiring Rate: \$6.00
Prepare, present and serve food items for Co-op, cash, catering or special events. Shift subject to change. 40 hours per week.
Requirements: HS diploma or equiv. 1 year related experience. Working knowledge of food preparation and presentation. Able to operate choppers, slicers, mixers, ovens, steam kettles, pressure steamers & various hand tools. Good customer relation skills.

Dish Machine Operator, SO02 (G9703)
Dining-Endowed
Hiring Rate: \$6.00
Wash dishes, utensils, pots and pans. Stock assigned areas. Shift subject to change. 40 hours per week.
Requirements: HS diploma or equivalent. Able to learn proper use of dishwashing equipment and cleaning agents. Able to lift 35 lbs.

Nurse's Aide, SO03 (G9708)
University Health Services-Endowed
Hiring Rate: \$6.28
Assist clinicians and nurses. Prepare patients for medical exams; clean and stock examining rooms; prepare solutions and provide routine bed care in the overnight unit. 40 hrs per week. Some eves.
Requirements: HS diploma or equivalent. Nurse's Aide/Health Assistant certification desirable. Recent health related services experience. Strong interpersonal and communication skills. Able to work independently.

Bell Captain, SO03 (G9403)
Statler Hotel-Endowed
Hiring Rate: \$6.28
Provide pickup and delivery service; offer information to help guests; work closely with the sales department and front desk. Some nights and weekends.
Requirements: HS diploma or equivalent. Basic reading and writing skills. Valid driver's license with no infractions. Able to work easily with public.

Head Custodian, SO04 (G9704)
Building Care-Endowed
Hiring Rate: \$6.58
Participate in, direct, supervise and evaluate work of 7-10 custodians in assigned area (50% cleaning/50% supervision). Provide general custodial care of buildings and grounds in assigned area; ensure timely opening of assigned buildings; order and account for in-house supply inventories. Mon-Thur, 6am-2:30 pm; Fri, 6am-1:30pm.
Requirements: HS diploma or equivalent. 2 years custodial experience required, supervisory experience preferred. Able to lift 50 lbs and climb 8 foot ladder.

Short Order Cook, SO04 (G9701)
Dining-Endowed
Hiring Rate: \$6.58
Prepare and serve food directly to customers from short order area. Shift subject to change. 40 hours per week.
Requirements: HS diploma or equivalent. 6-12 months related experience. Familiar with short order equipment. Able to prepare variety of short preparation foods under pressure. Good customer relations skills.

Cook, SO06 (G9707)
Residence Life-Endowed
Hiring Rate: \$7.20
Clean, prepare and cook food for University-owned fraternity. Clean all food preparation areas, cooking areas and assist in keeping storerooms and refrigerator sanitary; aid student steward in menu planning and food purchases as needed; must be able to work with little supervision and with student volunteers. 39 hours per week.
Requirements: HS diploma or equivalent. 1-3 years quantity cooking experience. Able to follow recipes accurately, operate standard food preparation and cooking equipment. Experience in large quantity preparation is essential. Some years experience as a cook. Good organizational skills. Able to supervise student help.

Baker, SO06 (G9402)
Dining-Endowed
Hiring Rate: \$7.20
Prepare full variety of baked goods including rolls, breads, cakes, cookies & pastries. Decorate baked goods. Shift subject to change.
Requirements: HS diploma or equivalent. 1 year related experience. Working knowledge of choppers, dough sheeters, ovens, mixers, proofing cabinet and various hand tools. Good interpersonal, communication and organizational skills.

Assistant Cook, SO06 (G5816, G9301)
Dining-Endowed
Hiring Rate: \$7.20
Under general supervision, prepare and present a full variety of foods, as assigned, through own efforts and through supervision of staff. Shift subject to change.
Requirements: HS diploma or equivalent. 1-2 years experience in food preparation; knowledge of food cooking processes (grilling, frying, roasting, steaming) in an institutional environment preferred. Skilled in presenting and garnishing food. Working knowledge of use and maintenance of charbroilers, steam jacket kettles, pressure steamers, ovens, slicers, mixers, choppers and various hand tools. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

Cook, SO08 (G8905, G5820)
Dining-Endowed
Hiring Rate: \$7.91

Prepare and present a full variety of foods including soups, sauces, casseroles, meats and vegetables through own efforts and through supervision of staff. Shift subject to change.
Requirements: HS diploma or equivalent. 3-5 years experience in preparing full range of entrees; knowledge of food cooking processes (grilling, frying, roasting, steaming) in an institutional environment preferred. Working knowledge of use and maintenance of charbroilers, steam jacket kettles, pressure steamers, ovens, slicers, mixers, choppers and various hand tools. Supervisory skills desirable. Send cover letter and resume to Esther Smith, Staffing Services, EHP, Ithaca, NY 14850.

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

Dairy Worker, SO04 (B9702)
Animal Science-Statutory
Hiring Rate: \$6.58
Under general supervision, milk cows in milk parlor, set-up and take down milk equipment, assist other dairy cattle and research areas as required. 8 a.m.-4:30 p.m., some weekends.
Requirements: HS diploma or equivalent. Class 5 NYS driver's license. Knowledge of dairy farm operations with 2-3 years related experience. Able to lift 100 lbs. Send cover letter and resume to Cynthia Smithbower by Dec 21.

Groundsworker, SO04 (B9701)
Grounds-Endowed
Hiring Rate: \$6.58
Perform general landscape maintenance and landscape construction tasks; may be assigned other groundsworkers, both regular and seasonal, to aid in carrying out assignments. Mon-Fri; Frequent nights and weekend work during winter snow season.
Requirements: HS diploma or GED equivalent; courses in agronomy, horticulture or related fields desirable. Pesticide Applicators license desirable; experience in commercial landscape maintenance, landscape construction and related equipment. Minor equipment repair experience desirable. Valid driver's license. Send cover letter and resume to Cynthia Smithbower by Dec 21.

General Service Part-time

Dish Machine Operator, SO02 (G9604)
Dining-Endowed
Hiring Rate: \$6.00
Wash dishes, utensils, pots and pans. Stock assigned areas. 30 hours per week.
Requirements: HS diploma or equivalent. Able to learn proper use of dishwashing equipment and cleaning agents. Able to lift 35 lbs.

General Service Temporary

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

Custodian
Building Care-Endowed/Statutory
Temporary Rate: \$5.00
Continuous recruitment will be done in the department of Building Care for temporary custodians. Providing general custodial care of buildings and grounds in immediate vicinity of assigned area. Mon-Thur 6:00am-2:30pm, Fri 6:00am-1:30pm. Periodically 2nd and 3rd shift hours are available.
Requirements: Basic reading and writing skills. Able to operate a variety of heavy power equipment, lift 50 lbs and climb a 6 foot ladder. Contact Karen Raponi, Staffing Svcs, EHP, 5-2192 for an interview.

Academic

Assistant or Associate Professor
Human Service Studies
Teach evaluation research methods, and human service administration; supervise grad students & conduct research in human services **Requirements:** PhD in social sciences with significant experience in research methods. Priority will be given to candidates who have a developed research program in the field of health and human services. Experience in designing and conducting evaluations of education or human service programs including administrative or managerial issues would be helpful. Previous experience in a multicultural setting is desirable. Send CV and 3 letters of reference by Jan 31, 1990 to Jerome M. Ziegler, Chair, Faculty Search Committee, Department of Human Service Studies, NYS College of Human Ecology, CU University, Ithaca, NY 14853.

Assistant Reference Librarian
Uris Undergraduate Library
Full time position including regularly scheduled evening and weekend hours. Serve at Reference desk and participate in Uris Library's Bibliographic Instruction program; participate in on-line searching activities & in the selection of monographs in assigned subject areas. **Requirements:** MLS; aptitude for and interest in teaching and reference work with undergraduates; excellent interpersonal and written/verbal communication skills; some background in on-line searching; reference and/or teaching experience helpful. Send cover letter, names of three references, and resume to Ann Dyckman, Director of Personnel, CU Library, 201 Olin Library, CU University, Ithaca, NY 14853 by Jan 10, 1990.

Molecular Immunologist
Microbiology, Immunology and Parasitology-NYS College of Veterinary Medicine
Senior faculty position in immunology.
Requirements: PhD, DVM/PhD or MD/PhD and several years research experience. This position is part of a major commitment by the department to use molecular approaches in biomedical research. Send CV, outline of future research plans and the names and addresses of 3 references to Dr. Roger J. Avery, Chairman, Department of Microbiology, Immunology and Parasitology; College of Veterinary Medicine, 616 Veterinary Research Tower, CU University, Ithaca, NY 14853-6401 by February 15, 1990. (607) 253-3400

Veterinary Extension Associate III
Veterinary Diagnostic Lab
Assist in the further development, implementation and maintenance of the current Bovine Leukosis Bluetongue and John's Disease eradication and New York State certified herd-free programs. **Requirements:** DVM or equivalent, a minimum of 3 years field, extension or pathology services; an MS or PhD in epidemiology would be highly desirable. Send resume and/or contact Dr. Donald H. Lein, Director, Diagnostic Lab, NYS College of Veterinary Medicine, CU, Ithaca, NY 14851 (607) 253-3900 by Feb 1, 1990.

Research Associate II, CA04
Plant Breeding and Biometry
7 month position. Investigate interspecific barriers in Lycopersicon. **Requirements:** PhD in plant breeding or horticulture. Detailed knowledge of fertility barrier mechanisms in the solanacea; at least 1 year experience using starch electrophoresis for isozyme analysis; familiarity with word processing, spread sheet and data processing packages on IBM and MAC and ability to program in FORTRAN and BASIC. Contact Dr. Martha Mutschler-Chu, Plant Breeding and Biometry, 303 Bradford Hall, CU, Ithaca, NY 14853. (607) 255-1660.

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