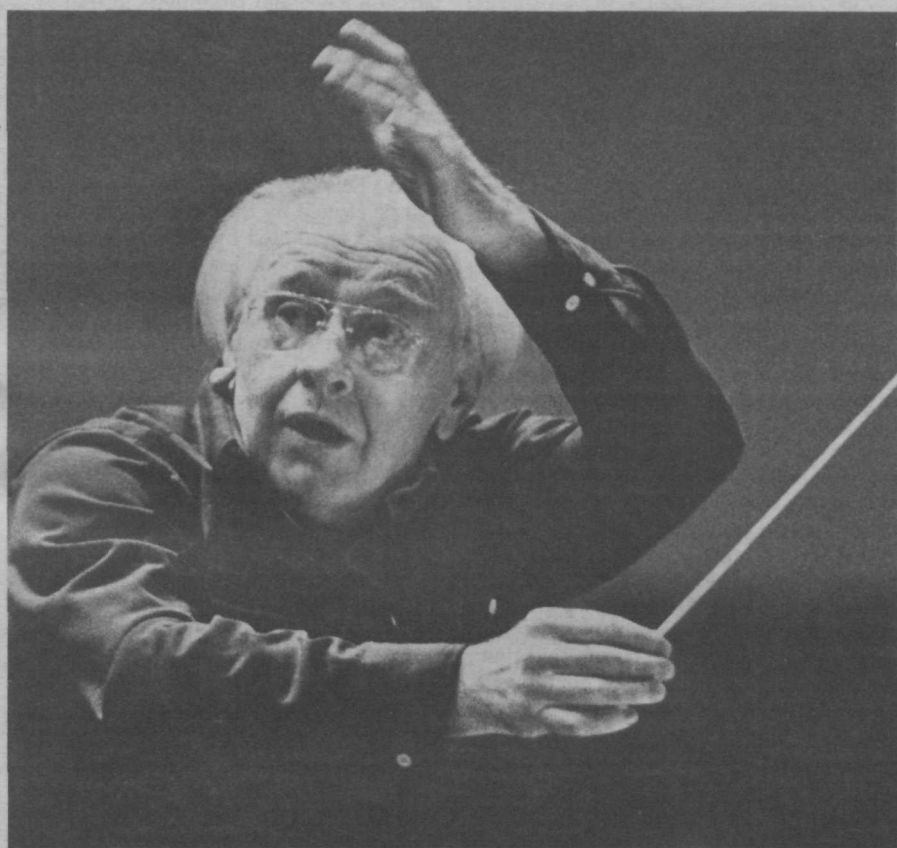
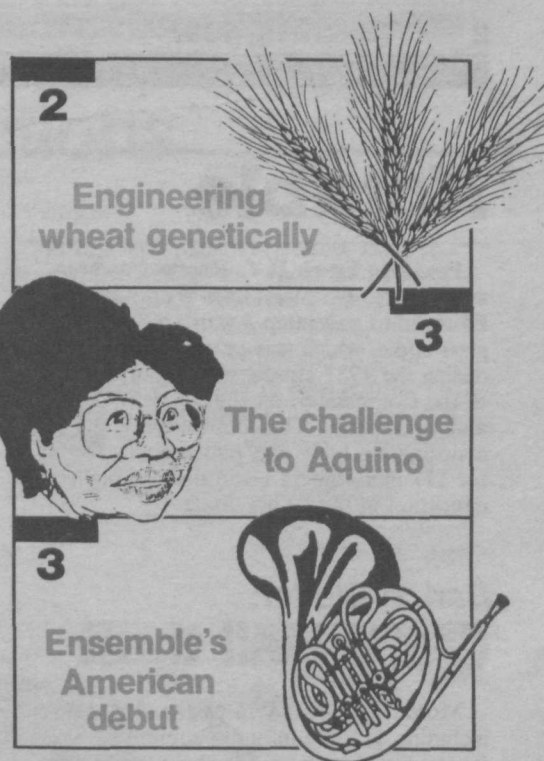


Cornell CHRONICLE

Volume 18 Number 26 March 19, 1987



Karel Husa in rehearsal for last Sunday's concert in Bailey Hall, the culmination of the 19th Festival of Contemporary Music.

Claude Levett

Faculty power over students cited as harassment factor

Many professors are not aware of the power they have over students and the effect this power has on student perceptions of what is sexual harassment by faculty, according to Catherine L. Murray-Rust, a member of the university's Advisory Committee on the Status of Women.

Murray-Rust stressed this point at a meeting of the Faculty Council of Representatives last week when she discussed the findings of the survey conducted last year of upper-class and graduate female students.

Sixty-one percent of the 786 respondents said they had experienced some sort of "unwanted sexual attention."

Murray-Rust, an associate librarian, said, "Faculty are in position where they can really harm or help a student if they chose to" and, as a result, students are afraid to stand up for their rights.

"What distinguishes sexual harassment from flirting is the element of power," she said.

Murray-Rust pointed out that what would constitute flirting or normal social interaction among peers is often construed as sexual harassment of a student by a faculty member. Even a male faculty member's luncheon invitation to a female student can place the student in an awkward position.

She cited unwanted comments about physical beauty, attractiveness of clothes and private social life and references such as "honey" as other examples of the problem.

She said that, instead of the current focus on the need for victims—who are already afraid—to report incidents, "much more needs to be done with potential harassers" and with sensitizing the entire faculty to the problem.

She said the survey shows that "students believe there is a coverup" by faculty and university officials, that they "all get together and protect friends."

Murray-Rust said that, although there is no way of telling from the Cornell survey, similar surveys across the country show that actually a very few men are responsible for most incidents of harassment. "These persons are responsible for harassing a large number of women simultaneously or sequentially," she said.

Several faculty present, including Professor Urie Bronfenbrenner and Provost Robert Barker, said steps must be taken to sensitize the faculty to the overall issue and its subtleties.

Bronfenbrenner suggested that academic

Continued on page 8

Oxygen may become solid at high pressure: researchers

Using diamonds, rubies, gold dust and the world's most powerful X-ray source, Cornell researchers have made significant advances in exploring the effects of super-high pressures on matter.

In a series of papers to be delivered March 19 and 20 at a meeting of the American Physical Society in New York, they will announce:

- The first evidence that oxygen may become a solid metal at high pressures.
- The discovery of a new form of silicon that appears at pressures over 780,000 times atmospheric pressure.
- The discovery of three new forms of germanium, two of which appear above a million atmospheres, the first time new forms of any material have been discovered at such pressures.
- The highest pressures ever achieved with a vicelike "diamond anvil" that uses synthetic diamonds rather than natural ones, an achievement that could open the way for cheaper, stronger apparatuses for achieving high pressures.

The advances were reported by a research team led by Professor Arthur L. Ruoff, director of the Department of Materials Science and Engineering. Members included Serge Desgreniers, Yogesh K. Vohra, Keith E. Brister, Steven J. Duclos and Samuel T. Weir.

Ultrahigh pressure research has enabled scientists to produce and detect numerous new forms of solids, said Ruoff, and these findings have contributed to better theories of chemical bonds and the behavior of electrons in solids. He also said that the study of the earth's depths and of the structure of other planets had benefited from such high-pressure studies.

The diamond anvil that scientists use to achieve high pressures typically consists of a pair of brilliant cut diamonds, each with a tiny flat area polished off its tip. Mounted on this flat area—which is about the

diameter of a human hair (100 micrometers, or millionths of a meter)—is a tiny steel gasket with a hole about one-quarter the diameter of a human hair drilled in the middle.

The substance to be tested is added to the hole, and the diamonds are mounted on a powerful vice, tip to tip with the gasket between them. When the diamonds are clamped together using a system of screws, scientists can achieve pressures well over one megabar, the equivalent of 980,000 atmospheres.

To measure the immense pressures in diamond anvil cells, scientists usually include in the sample chamber a substance that changes in a known way as pressure increases. For example, they may add an infinitesimal chip of ruby, which fluoresces at a wavelength that changes with the pressure. Or, they may use a small sample of gold powder, which reduces in volume at a calibrated rate as it is squeezed.

In one paper, Desgreniers, Vohra and Ruoff report the first studies showing that oxygen may become a metal at one megabar.

In their experiments, the researchers subjected oxygen samples to pressures up to 1.3 megabars using their diamond anvil apparatus. As had previous researchers, they saw the sample change from yellow to red to opaque as the pressure increased. Then, at 1 megabar, the oxygen sample became reflective to infrared light, taking on the shine characteristic of metal.

"We still have to test the electrical conductivity of such a sample, to make sure that it is a metal," said Vohra. "But this discovery is nevertheless striking, because it shows that oxygen is actually a very exotic material at high pressures."

The discovery of the new form of silicon by Duclos, Vohra and Ruoff represents the latest in a series of changes silicon is known to undergo at high pressures. These changes



Claude Levett

Steven J. Duclos, a graduate student in the Department of Materials Science and Engineering, prepares to demonstrate a "diamond anvil" used to test the effects of very great pressure on materials.

in structure occur because the atoms in the silicon crystal shift and rearrange themselves in different ways as they are squeezed closer and closer together. Researchers already had discovered that silicon changes to such forms as "diamond cubic," "beta-tin," "primitive hexagonal" and "hexagonal closest packed" with successive pressure increases. The Cornell scientists found that the transformation to the new structure, called "face centered cubic," occurs at about .78 megabars.

They detected the new structure by subjecting the diamond anvil to the intense beam of X-rays generated as a byproduct of

Cornell's high-energy physics particle accelerator, the Cornell Electron Storage Ring, operating at more than 5 billion electron volts. This "synchrotron radiation"—the most powerful beam of X-rays available—is created by the bending of the particle beam as it speeds around the storage ring. The X-ray beam is diverted into the laboratories of the Cornell High Energy Synchrotron Source (CHESS), where scientists use it to deduce the structure of a substance by studying how it diffracts the X-rays.

"Significantly, this is the lowest-atomic-number, or lightest, element that has ever

Continued on page 8

Notable

President **Frank H.T. Rhodes** has been awarded the Corning Glass Works Higher Education Leadership Award, a Steuben glass apple, which was presented to him during the 1987 annual meeting in Albany of the Commission on Independent Colleges and Universities. The commission is the coordinating body and public policy forum for 117 independent institutions of higher education in New York State.

Barton Blotter: Clark Hall theft

More than \$20,000 in cash and goods, including \$11,480 in audio equipment, was reported stolen on campus between March 5 and March 15, according to the morning reports of the Department of Public Safety.

The theft of the audio equipment from Clark Hall was discovered March 8 and may have occurred anytime since October 1986. Other thefts include a \$1,685 electronic balance taken from Martha Van Rensselaer between March 5 and March 10, and \$4,200 in travelers checks taken in the Memorial Room of Willard Straight Hall on March 12 from the jacket of Frederick P. Lennartsson of Linköping, Sweden.

Eight thefts of cash and valuables amounting to \$208, mostly taken from wallets, were reported among the 24 thefts for the period.

Eight persons, including three involved in alleged sexual abuse incidents Feb. 15 at Phi Gamma Delta fraternity, face charges before the judicial administrator.

The three were charged with violations of the Campus Code of Conduct which could result in dismissal from the university. The charges are "to threaten or use physical force to endanger, injure, abuse, intimidate or coerce another person" and "to harass, abuse or threaten another by means other than the use or threatened use of physical force."

Five other persons referred to the judicial administrator were charged with criminal mischief, forgery and petit larceny, and two were charged with failure to comply with the order of a Public Safety officer.

Computerized copies of the most current daily report may be called up on CUINFO under the title SAFETY. CUINFO terminals are situated in the main lobbies of Day Hall, Gannett Clinic and the Olin, Mann and ILR libraries.



The final exam schedule is now available on CUINFO.

Cornell CHRONICLE

EDITOR:
Carole Stone

CIRCULATION MANAGER:
Joanne Hanavan

Published 40 times a year, Cornell Chronicle is distributed free of charge to Cornell University faculty, students and staff by the University News Service. Mail subscriptions, \$25 per year; two-year subscriptions are \$45. Make checks payable to Cornell Chronicle and send to the Cornell Chronicle, Village Green, 840 Hanshaw Road, Ithaca, N.Y. 14850-1548. Telephone (607) 255-4206.

Second-Class Postage Rates paid at Ithaca, N.Y.

POSTMASTER: Send address changes to the Cornell Chronicle (ISSN 0747-4628), Village Green, 840 Hanshaw Road, Ithaca, N.Y. 14850-1548.

It is the policy of Cornell University to support actively equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The university is committed to the maintenance of affirmative action programs that will assure the continuation of such equality of opportunity.

Young Ithaca pianist to perform

With the aid of well-known Ithaca mezzo-soprano Marina Gilman, the young Ithaca pianist Ishmael Wallace will present a program of piano music and songs of his own composition in Barnes Hall, March 22 at 4 p.m.

Wallace, who is 15 years old and is best known locally for a series of operettas produced at First Street Playhouse won first prize last year in the New York State Federation of Music Clubs' piano competition.

He studies piano with Phiroze Mehta at Ithaca College and composition with Steven Stucky at Cornell.

Marina Gilman, who is director of the vocal coaching program at Cornell and sings frequently with the Ithaca Opera Association and in recitals, will sing Wallace's "She Appears to Me, Present," a set of four songs based on poems by Pedro Salinas, Giuseppe Ungaretti, Cecilia Meireles and Dino Campana.

The remainder of the program will be Beethoven's piano sonata Op. 109, Olivier Messiaen's "Canteyodjaya," Chopin's Ballade in A flat, and Ravel's "Le Tombeau de Couperin."

Future factories to be lecture topic

A preview of semiconductor factories in 1995 will be offered by Billy L. Crowder, director of manufacturing research for International Business Machines Corp. at Yorktown Heights, March 30 at 4 p.m. in B-14 Hollister Hall.

Crowder's lecture, "World Class Technologies Mean World Class Manufacturing Challenges," is sponsored by the Office of the Vice President for Research and the College of Engineering.

"IBM has a unique view on the challenge of making products manufacturable and on the ways in which universities can meet this challenge with Ph.D.-level engineers and scientists," said Joseph M. Ballantyne, vice

president for research and advanced studies. "I am very pleased that Dr. Crowder will give this lecture here."

"World class technologies will be characterized by increasing structural complexity, decreasing feature sizes, increased levels of integration and decreased vertical dimensions," according to Crowder, who earned a Ph.D. from Cornell in 1963.

"Future products will require improved reliability, yield, performance and quality at a reduced cost and a reduced time cycle to build. Future factories will be required to have increased flexibility," said Crowder, promising to outline the major trends in manufacturing in the next decade.

BTI lectures: wheat, photosynthesis

The possibility of boosting the quality and productivity of wheat through genetic engineering and the role of an enzyme essential for photosynthesis in plants are the subjects of the next two "Distinguished Lectures" of the Boyce Thompson Institute for Plant Research.

Speaking on the genetic engineering of wheat on April 2 will be Richard B. Flavell, a molecular biologist with the Plant Breeding Institute in Cambridge, England. On April 8, George H. Lorimer of the Central Research and Development Department of E.I. DuPont de Nemours & Co. will discuss his research on the enzyme in plants that transforms carbon dioxide into plant material.

The lectures, each to be held at 2 p.m. in James Law Auditorium on campus, will address major opportunities to improve the world's plant agriculture, according to BTI President Ralph W.F. Hardy.

Commenting on Flavell's lecture, "The Molecular Genetics of a Wheat Chromosome," Hardy said, "Wheat is one of most important grains produced in the world."

Flavell's lecture, he added, will highlight "the status of this frontier of plant biotechnology, which may lead to the next green revolution in the world's wheat production."

As for Lorimer's lecture, Hardy said that photosynthesis, which uses solar energy to fuel plant growth, is the "single most important process that provides food for all life as well as being the historic source of all fossil energy."

"Central to the photosynthetic process is an enzyme that fixes carbon dioxide," he continued. "Lorimer's group is the world leader in the molecular understanding of this life-supporting enzyme. His lecture will identify approaches that may double the yield of most crop plants through genetic engineering of this particular enzyme."

Johnson alumni to meet in Paris

French Industry Minister Jacques Misonrouge will be the keynote dinner speaker at the second annual overseas reunion for alumni of the Johnson Graduate School of Management in Paris on March 21.

The dinner and speech are part of a two-day series of events built around the theme of "the effective international manager." The overseas reunions were initiated last year "in an effort to establish lifetime relationships with Cornellians living overseas and members of the international business community," said Curtis W. Tarr, dean of the Johnson School.

Included among events will be two executive seminars. The first, on current eco-

nomie conditions in the United States and Europe, will be led by Robert H. Smiley, a professor of economics and policy at the Johnson School. He has strong ties with the European Economic Community and is a member of the European Association for Research in Industrial Economics.

The second seminar will focus on strategies, planning and implementation in today's corporate world. Jerome E. Hass, a professor of managerial economics and finance at the Johnson School, will lead that seminar. He has served as a consultant to the Executive Office of the President of the United States, to other federal bodies and to numerous corporations.

Obituaries

Frederick T. Bent

A memorial service for Fredrick T. Bent, a specialist in public administration and a member of the Cornell faculty since 1958, was held on March 6 at the Unitarian Church of Ithaca. Bent died March 2 at Tompkins Community Hospital. He was 65.

Bent, an authority on Middle Eastern affairs, was working on a book about American-Lebanese relations at the time of his death.

He served as director of the Graduate School of Business Management at American University of Beirut from 1978 to 1981 while on leave from Cornell. He had taught in Beirut in 1951-55 while serving as chairman of the Department of Public Administration.

His Middle East associations also include teaching at Middle East Technical Univer-

sity in Ankara, Turkey in 1962-64, and serving as part-time adviser to Bahrain's minister of finance from 1973 to 1977. He also worked with the U.S. Agency for International Development and the Ford Foundation, and was a consultant to several Middle Eastern governments.

Before joining what is now Cornell's Johnson Graduate School of Management, Bent taught at Coe College and the University of Pennsylvania.

He earned a B.A. at Ohio State University in 1943, and a M.A. in 1947 and a Ph.D. in 1954 at the University of Chicago. Bent served in the U.S. Army from 1943 to 1946.

Survivors include his wife, Nancy Petten-gill Bent of Ithaca; and three children, Rodney G. Bent of Washington, D.C., Laurie Angiolillo-Bent of Freehold, N.J., and Timothy D. Bent of Cambridge, Mass.

Briefs

■ **Inventory Closings:** The Cornell Campus Store (central campus) will be closed March 25 for inventory. The store will re-open March 26. Entrepot (lower level) and Willard Straight Copy Center will delay opening on March 26 until 2 p.m.

■ **Nominations for the Advisory Committee on the Status of Women:** The ACSW reviews university policies and procedures as they affect women as students, staff and faculty members.

The committee recommends changes to the associate provost and the Office of Equal Opportunity, reviews reports on the status of women and identifies issues and strategies for addressing concerns. In recent years, issues have included sexual harassment, comparable worth, career development, dual-career couples, management training for supervisors, dependent care, parental leave and computers in the workplace.

Meetings are held the second Tuesday of every month during the academic year, 3 to 5 p.m., in the Day Hall Board Room.

The committee is comprised of 21 members who hold staggered three-year terms. This year, two new representatives will be elected by the existing committee and two appointed by the president. To nominate someone for membership (self-nominations are welcome) or for more information, call Carolyn McPherson, coordinator of Women's Services, Office of Equal Opportunity, 255-7596.

■ **W-4 Form information seminars:** A videotape prepared by the Internal Revenue Service, to be followed by a question-and-answer period, will be shown every hour on the hour from 8 a.m. to 4 p.m. March 23 and 24 in the auditorium in Martha Van Rensselaer Hall to help employees file their W-4 Forms. The new forms must be filed by Oct. 1, 1987. For more information, call Reba Taylor, statutory payroll, 255-7812, or Carlo Troise, endowed payroll, 255-5194.

■ **Foreign student summer program:** Summer Crossroads 1987, a week-long program for foreign students interested in living with an American family for a week and meeting with local community leaders in the arts, government, business and media, as well as with other foreign students, will be held in Colorado Springs, Colo. from June 5 to 13 and in Los Angeles, Calif. from May 30 to June 6.

A limited number of partial travel grants are available. Information and applications are available from the International Students and Scholars Office, 200 Barnes Hall and are due by April 1.

Crossroads is open to graduate students planning to return home no later than May, 1988.

Clarification

In an article about the university budget, last week's Chronicle gave two different figures for the number of full-time graduate and professional students at Ithaca for fall 1986. The correct figure is 5,259. This semester, there are 5,109 such students at Ithaca.

Showing of film, Maas interview scheduled for TV

James B. Maas, chairman of the Psychology Department and a professional film maker, will be interviewed on the theme of his new documentary "Where Have All the Teachers Gone?" on ABC's Good Morning America on March 20. The programs airs from 7 to 9 a.m. and can be seen in Ithaca on cable channels 2 and 6.

The documentary, produced by Cornell's Psychology Film Unit, explores the frustrations of teachers who are leaving their profession. It will be distributed nationwide at 10:30 p.m. on April 5 by the Public Broadcasting Service.

Locally, WSKG-TV in Binghamton plans to broadcast the film at 8 p.m. on April 9, followed by a viewer call-in show. WCNY-TV in Syracuse plans to air the show at 4 p.m. on April 11.

Aquino seen facing critical presidential elections

Philippine President Corazon Aquino's ability to carry out her reforms remains questionable, Don Kirk of the newspaper USA Today told a Cornell audience March 12.

"She herself is a member of the landed gentry, and it is a question whether she will be able to carry out land reform by breaking up landed estates," Kirk told faculty and students in the Southeast Asia Program, where he is a visiting fellow.

"A second major question is whether she can solidify her power. She has fended off three coups attempts, two of which were

more like comic opera affairs. Now a critical issue is whether she can solidify her power before the senate and house elections in May."

Kirk, special projects correspondent for USA Today and a foreign correspondent in Asia for 15 years, has made numerous reporting trips to the Philippines. He has interviewed Aquino and the man she toppled from office, former President Ferdinand Marcos.

Kirk said that several Aquino ministers are leaving the cabinet to run for the senate and the house in an effort to put her loyal-

ists in congress where she needs support.

"But it could happen that Cory will not win a majority in either the senate or the house," he said.

Kirk said the May elections may not be as peaceful as the February voting, which overwhelmingly approved Aquino's new constitution.

"In February, they were voting for a piece of paper, a constitution," he said. "That election did not involve the human conflicts, the personal vendettas that accompany elections between people in the

Philippines."

He said land reform is a major campaign issue in the Philippines, where the national debt stands at \$27 billion and where 40 percent of the 56 million Filipinos are unemployed or underemployed.

"Everyone is in favor of land reform, but how do you implement it?" Kirk asked. "If you break up the big sugar and coconut plantations, how can small units compete in the international markets where sugar already is in trouble?"

— Albert E. Kaff

Statler work may mean layoffs

Nine Statler Hall employees may face layoffs over the next six months because of the renovation project at the School of Hotel Administration.

Custodial, maintenance, grounds, and supervisory personnel are among those who will be affected by the second phase of displacements.

Last summer, 113 employees were laid off when the inn, club, and related operations were closed. After a four-month process, 99 of the 113 were placed in other campus jobs or were retained by the Statler. The rest retired or resigned to seek jobs elsewhere, according to Allan A. Lentini, director of business and administration in the School of Hotel Administration.

E. Peter Tufford, manager of employee relations at Cornell, said the hotel school received "tremendous cooperation from all segments of the university in placing the displaced workers last year." He added, "We worked closely with the UAW to be sure that everyone who wanted to be placed could be retained by the university."

Eight of the nine positions are in the bargaining unit.

A new task force of hotel school administrators and staff of the university's personnel office is trying to reassign the employees

affected this year. The nine were notified March 18 by Lentini and other hotel school administrators.

When the inn and school reopen in summer 1988, there will be about 150 positions available, according to Lentini.

Six of the nine employees — four maintenance workers and two custodians — face a June 19 layoff, while the other three may be retained through summer, Lentini said.

Lentini praised them for their continued loyalty to the university, knowing that this second phase of layoffs was expected.

"Our hope is that many jobs will be opening up on campus over the next several months," Lentini said, adding that "employees may be eligible for some of those positions. Our primary goal is the fair treatment of all employees during this period. We hope to place everyone, but we cannot guarantee that we will be able to find jobs for each of the affected employees," he said.

Any employee who is unable to find another job at Cornell will be eligible for unemployment benefits, and university personnel staff will work with each employee to provide complete information about the options and benefits available during a layoff period.

Envoy outlines 7 Asian nations' cooperative pact

A mighty river flows through three nations, washing their silt into the Bay of Bengal and forming a new island. So which country owns the island?

South Asia's seven nations, divided by political disputes and burdened with poverty, established a regional association two years ago to deal with development problems in their area where one billion people live.

"It's a modest beginning with many ifs and buts because of political differences among member nations," Bishwa Pradhan, Nepal's ambassador to the United States, told faculty and students here March 16.

Ownership of the new island is one question currently dividing members of the South Asian Association for Regional Cooperation, the world's newest grouping of nations.

Starting in Nepal's Himalayan Mountains, the Ganges River flows through Bangladesh and India and washes tons of silt into the Bay of Bengal. Each country claims title to a desert island formed by the silt.

"The association is the catalyst in reducing tensions on bilateral problems," Pradhan said. "Our leaders meet every year to review and exchange views on bilateral and multilateral questions apart from regional matters."

"My king has stated that the association underscores the determination of the seven countries to rise above differences and divisions so that their people can live a life free not only from wants but also from fear and tensions."

The Nepal envoy said that the two kings, four presidents and one prime minister who rule in South Asia are presiding over plans to reduce poverty, underdevelopment, illiteracy, unemployment and the population explosion in the member nations of Bhutan, Nepal, Bangladesh, Pakistan, Sri Lanka, Maldives and India.

Pradhan's visit was supported by Cornell's South Asia Program and its Graduate Student Activities Funding Commission and the Nepal Association at Cornell.

— Albert E. Kaff



The English Brass Ensemble, which will make its American debut April 2 at 8:15 p.m. in Barnes Hall.

Ensemble to make U.S. debut

The Department of Music is sponsoring two upcoming events, both open to the public free of charge.

Garah Landes, the top prize winner of the 1985 Artists International Competition, which sponsored his New York debut at Carnegie Recital Hall, will perform March 29 at 4 p.m. in Barnes Hall auditorium.

Landes will perform J. S. Bach's "Chromatic Fantasy" and Fugue in D Minor, BWV 903 and Sonata No. 7 in B-flat Major, Op. 83 by Sergei Prokofiev in the first half, followed by Franz Liszt's "Fantasy on Themes from 'Rienzi,'" Sonnetos del Petrarca No. 47, 104 and 123 and his "Mephisto Waltz."

And works by Karel Husa will be played

by The English Brass Ensemble in the ensemble's American debut April 2 at 8:15 p.m. in Barnes Hall. The ensemble was formed in 1974 when its members were students at various music colleges in London. Since then, this group of brass chamber music players has performed throughout England and in Australia, Spain, Finland and Israel.

The ensemble is comprised of Paul Archibald and Richard Martin, trumpets; James Handy, horn; James Goulray, tuba; and David Whitson, trombone. They will perform Husa's "Landscapes" and "Diver-timento" and a work by Husa's student Byron Adams, "Serenata Aestiva."

Colombian Film Festival slated

As a prelude to an interdisciplinary conference on Colombian culture later this spring, a Festival of Colombian Film will be held March 19 through April 28, with six recent artistic motion pictures made either in Colombia or by Colombians to be shown each week (excluding spring break).

All showings will be at 4:30 p.m. in Urish Auditorium. The schedule is as follows: "Tiempo de morir (Time to Die)," script by Gabriel Garcia Marquez, March 19; "Pisangana," March 31; "Condores no entierran todos los dias (A Man of Principle)," based on a novel by Gustavo Alvarez Gardeazabal, April 7; "Visa U.S.A.," April 14; "La maison de Araucaima," based on a novel by Alvaro Mutis, April 21; "A la salida nos vemos (See You on the Way Out)," April 28.

Not normally available through distributors in the United States, the films will

come directly from Colombia's official film agency, FOCINE, as part of an effort to make known that country's growing film industry.

For further information, contact Professor John Tittler, Department of Romance Studies, Goldwin Smith Hall, 255-4048.

Spring Break bus schedule

The Office of Transportation Services announces spring break bus schedule changes.

CU Transit will cease West Campus bus service from March 23 through March 27. Regular West Campus service will resume March 30.

Blue Light bus service will also cease operation during spring recess. Route 1 will cease operation from March 21 through March 28, and will resume operation March 29. Blue light bus route 2 will cease operation from March 23 through March 27, resuming operation on March 30.

All other bus routes on campus maintain their regular scheduled service.

Ithaca-Dryden route changed

CU Transit Inc., operator of TOMTRAM routes, announces a change in the Ithaca-Dryden bus routes 9 and 10 to provide afternoon bus service to the newly opened County Public Service Building on Warren Road.

Commuters from the Cornell campus outbound to Dryden on route 9 should be aware that they should board the bus at Day Hall at 1:25 p.m., reaching the Green Street Shelter at 1:35 p.m.

Route 9 bus proceeds directly to the Pyramid Mall, arriving at 1:49 p.m., then arriving at the Public Safety building at 1:54 p.m. Route 9 outbound to Dryden resumes its regular route and schedule at this point. The inbound Dryden-Ithaca route 10 bus arrives at the Public Safety Building at 3:40 p.m. Bus service is routed to the Pyramid Mall at 3:47 p.m. then proceeds directly to the Green Street Shelter at 4:01 p.m.

Inquiries should be addressed to 255-RIDE or 274-5370.

Cornell CHRONICLE

The Chronicle will not be published during Spring Break. There will be no paper March 26. The next issue of the Chronicle will appear April 2.

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.

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

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

DANCE

Cornell Folkdancers
March 22, 7:30 to 10:30 p.m., Martha Van Rensselaer Hall.

Israeli Folkdancing
Thursday evenings, 8:30 p.m. Anabel Taylor Hall Auditorium.

EXHIBITS

Hartell Gallery
An Exhibition of Landscape: Photographs by visiting artist Barbara Bosworth, through March 27, Monday through Friday from 8 a.m. to 4:30 p.m., Sibley Hall.

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. Call 255-6464 for further information.

Wyndham Lewis: Vorticist and Later Works: The exhibition features works by Lewis, leader of the English Vorticist group, an avant-garde art movement active in Britain before World War I, through May 3.

Blue Laughter: a series of sketches, videos, prints, photographs, and three dimensional objects on the theme of television by Apinan Poshyananda, through March 31.

Works by Black American Artists and African Art: Works by Afro-American artists and objects from the museum's collection of African art, through April 19.

Gallery closed: The George and Mary Rockwell Galleries of Asian Art on the fifth floor will be closed until the end of March to facilitate the installation of new carpeting and wall coverings.

Olin Library
Modern Poetry and Art: Illustrated Poems in Books and Broadsides: Poets including Daniel Berrigan, Robert Lowell and Archie Ammons are illustrated by artists such as Leonard Baskin, Robert McGovern and Corita Kent, through March 19, first floor of Olin Library. Hours: Monday-Friday, 8 a.m.-noon; 1 to 5 p.m.

FILMS

Unless otherwise noted, films are sponsored by Cornell Cinema. An (*) indicates admission is charged.

Friday 3/20
"Desert Bloom" (1986), directed by Eugene Corr, with Jon Voight, JoBeth Williams, and Ellen Barkin, 9:45 p.m., Uris Hall.

"King of Hearts" (1967), directed by Phippe De Broca, with Alan Bates and Pierre Brasseur, 7:30 p.m., Uris Hall.

Saturday 3/21
"Desert Bloom," 7:30 p.m., Uris Hall.

"King of Hearts," 9:45 p.m., Uris Hall.

Sunday 3/22
"The Black Stallion" (1979), directed by Carroll Ballard, with Mickey Rooney and Kelly Reno, 2 p.m., *Uris Hall.

"The Hustler" (1961), directed by Robert Rossen, with Paul Newman, George C. Scott and Piper Laurie, 8 p.m., Uris Hall.

Monday 3/23
"Steaming" (1984), directed by Joseph Losey, with Vanessa Redgrave, Sarah Miles and Diana Dors, 8 p.m., *Uris Hall.

Tuesday 3/24
"Tout Va Bien" (1972), directed by Jean-Luc Godard, with Jane Fonda and Yves Montand, 8 p.m., Uris Hall.

Wednesday 3/25
"La Nuit De Varennes" (1983), directed by directed by Ettore Scola, with Marcello Mastroianni, Harvey Keitel and Hanna Schygulla, 8 p.m., Uris Hall.

Thursday 3/26
"Enormous Changes at the Last Minute" (1985), directed by Mirra Bank and Ellen Hovde, with Ellen Barkin, Lynn Milgram and Maria Tucci, 8 p.m., Uris Hall.

Friday 3/27
"The Bitter Tears of Petra Von Kant" (1972), directed by Rainer W. Fassbinder, with Margit Carstensen, 10:15 p.m., Uris Hall.

"Oklahoma!" (1955), directed by Fred Zinnemann, with Gordon MacRae, Shirley Jones and Gloria Grahame, 7:15 p.m., Uris Hall.

Saturday 3/28
"The Bitter Tears of Petra Von Kant," 7:15 p.m., Uris Hall.

"Oklahoma!," 10 p.m., Uris Hall.

Sunday 3/29
"The Railway Children" (1971), directed by Lionel Jeffries, with Dinah Sheridan and Jenny Agutter. Co-sponsored with the Ithaca Youth Bureau. 2 p.m., *Uris Hall.

"Quest for Fire" (1982), directed by Jean-Jacques Annaud, with Everett McGill and Ron Perlman, 8 p.m., Uris Hall.

Monday 3/30
"The Kindergarten" (1986), directed by Yevgeny Yevtushenko, with Klaus Maria Brandauer and Sergei Gusak, 8:00 p.m., *Uris Hall.

Tuesday 3/31
"The Apple War" (1973), directed by Tage Danielson, with Max Von Sydow. Co-sponsored by CIPRG. 8:00 p.m., Uris Hall.

LECTURES

Africana Studies
"Cross-Currents in Contemporary Afro-American Music," Dwight D. Andrews, Mellon Postdoctoral Fellow, Rice University, March 19, 4:30 p.m., Hoyt W. Fuller Room, Africana Studies and Research Center, 310 Tripphammer Road.

Applied Mathematics
"Bifurcations Near an Orbit of Steady Solutions: The Secondary Bifurcations of Taylor

Vortex Flow," Gerard Iooss, Department of Mathematics, University of Nice, March 20, 4 p.m., 322 Sage Hall.

"Experimental Analysis of Approximation Algorithms," David S. Johnson, AT&T Bell Laboratories, March 20, 12:20 p.m., 207 Upson Hall.

Artbreaks
Thomas W. Leavitt, director of the Johnson Museum, will discuss Pop Art on March 19 from noon to 1 p.m. as part of "Artbreaks," a lunchtime lecture series.

Astronomy
"From Virgo to Hydra-Galaxies in Two Clusters & In Between," Walter Huchtmeier, Max-Planck Center, Bonn, 4:30 p.m., March 19, 105 Space Sciences Building.

Classics
"The Writing Machine of Simonides," Townsend Lecture series on "The Gods of Writing," Marcel Detienne, director, Ecole Des Hautes Etudes, Paris, March 31, 4:30 p.m., 156 Goldwin Smith Hall.

Human Service Studies
"How 'Listening' is Used To Control Others," Donald Barr, associate professor, Human Service Studies, March 19, 4:30 p.m., 245 Warren Hall.

Materials Science and Engineering
"Nucleation and Growth Far From Equilibrium in the c-Si/a-Si/1-Si System," Jeff Tsao, Sandia Co., March 19, 4:30 p.m., 140 Bard Hall.

"Micro-mechanics of Toughened Ceramics: Crack Bridging and the Toughness of Cermets," Bernard Budiansky, Harvard University, April 1, 4:30 p.m., 140 Bard Hall.

"Applications of Refractory Metals in Submicron Si Structures," Dale Brown, April 2, 4:30 p.m., 140 Bard Hall.

Mechanical and Aerospace Engineering
"Lifetime Statistics for Kevlar Filaments in Creep-Rupture," Peter Schwartz, March 31, 4:30 p.m., 282 Grumman Hall.

Near Eastern Studies
"Modern Hebrew Literature," Gershon Shaked, Hebrew University, Jerusalem, March 19, 4:15 p.m., 374 Rockefeller Hall.

Society for the Humanities
"Pride and Pedigree," Professor Harriet Ritvo, Department of Humanities, MIT, March 19, 4:30 p.m., James Law Auditorium, Sherman Hall, Veterinary School.

Southeast Asia Program
"Traditional Technologies and Government Intervention: Irrigation in West Sumatra," John Ambler, doctoral candidate, Department of Rural Sociology, 12:20 p.m., March 19, 102 West Ave. Extension

"Java Under the Japanese Occupation," Aiko Kurasawa, SEAP graduate student, April 2, 12:20 p.m., 102 West Ave. Extension.

MUSIC

Bound for Glory
Records from the studio on March 22 and March 29

Music Department
Ishmael Wallace, piano recital and songs by Wallace performed by Marina Gilman, March 22, 4 p.m., Barnes Hall Auditorium.

Garah Landes, piano, featuring works by J.S. Bach, Prokofiev, and Liszt, March 29, 4 p.m., Barnes Hall Auditorium.



Once again, a fearsome dragon is engulfed in flames.

RELIGION

Sage Chapel
There will be no services at Sage Chapel March 22 due to spring break.
Robert Johnson, director of Cornell United Religious Work, will preach at Sage Chapel March 29 at 11 a.m. His sermon topic will be "Van Gogh as Preacher."

Music for the service will be provided by the Sage Chapel Choir under the direction of Donald R.M. Paterson, university organist and Sage Chapel choirmaster.

Catholic
Mass: Every Saturday, 5 p.m., every Sunday, 9:30 and 11 a.m., and 5 p.m., Anabel Taylor Auditorium.

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

Sacrament of Penance, Saturdays from 3 to 4 p.m., G22 Anabel Taylor Hall, or by appointment, 255-4228.

Christian Science
Testimony Meeting: Every Thursday, 7 p.m. in the Anabel Taylor Founders Room.

Episcopal (Anglican)
Every Sunday, 9:30 a.m., Anabel Taylor Chapel.

Friends (Quakers)
Sunday, 9:45 a.m., adult discussion, 11 a.m. meeting for worship, Edwards Room, Anabel Taylor Hall.

Jewish
Morning Minyan: Young Israel House, 106 West Avenue. Call 272-5810.

Conservative/Egalitarian Services: Friday 5:30 p.m., Saturday 9:45 a.m., Anabel Taylor Hall Founders Room.

Orthodox Shabbat Services: Friday evenings, Young Israel House, 106 West Avenue. Call 272-5810. Saturday, 9:15 a.m., Anabel Taylor Edwards Room.

Reform Services: Friday Evenings 5:30 p.m., Anabel Taylor Chapel.

Korean Church
Every Sunday, 3 p.m. Anabel Taylor Chapel.



For those who missed it, Dragon Day took place March 13 this year.

Claude Levett

Muslim

Sunday through Thursday, 1 p.m., 218 Anabel Taylor Hall. Friday 1 p.m. Anabel Taylor Edwards Room.

Protestant

Protestant Cooperative Ministry: Every Sunday, 11:15 a.m., Anabel Taylor Chapel.

Zen Buddhism

Zazen meditation: every Thursday 5:10 p.m., Anabel Taylor Chapel. Beginner's instruction every Tuesday 6:30 p.m., at Ithaca Zen Center, 312 Auburn St. For more information call 277-4364.

SEMINARS

Agriculture

"Physiological and Molecular Approaches to an Understanding of the Ovulatory Cycle of the Domestic Hen," Patricia Johnson, Department of Animal Sciences, University of Illinois, March 19, 4:30 p.m., 300 Rice Hall.

Agronomy

"Concentrations of Mg, K, Ca, Zn, Fe in Vegetable Crops in Relation to Human Nutrition," D.L. Grunes and R.S. Karunaratne, U.S. Plant, Soil and Nutrition Laboratory, March 31, 4 p.m., 135 Emerson Hall.

Biochemistry

"Gene Regulation in Yeast — The Bio in Biochemistry," Gerry Fink, Department of Genetics, American Cancer Society, MIT, March 20, 4:30 p.m., 204 Stocking Hall.

Boyce Thompson Institute

"A genetic transformation system for identifying mating-type (i.e. incompatibility) genes in the genes in the basidiomycete schizophyllum commune," Robert Ullrich, Department of Botany, University of Vermont, March 25, 3:15 p.m., Boyce Thompson Institute.

"Molecular Genetics of a Wheat Chromosome," Richard B. Flavell, Department of Cytogenetics, Plant Breeding Institute, Cambridge, England, April 2, 2 p.m., James Law Auditorium, Schurman Hall.

Chemistry

"Integrated Chemical Systems: Modified Electrodes and Photoelectrochemical Systems," Allen J. Bard, University of Texas at Austin, March 19, 11:15 a.m., 200 Baker Laboratory.

"Highly Excited Vibrations of Polyatomic Molecules and Clusters," Benny Gerber, Hebrew University, March 19, 4:40 p.m., 119 Baker Laboratory.

"Some Magnetic Moments," Alex Pines, University of California at Berkeley, March 20, 4:40 p.m., 119 Baker Laboratory.

"Integrated Chemical Systems: Modified Electrodes and Photoelectrochemical Systems," Allen J. Bard, University of Texas at Austin, March 31, 11:15 a.m., 200 Baker Laboratory.

Chemical Engineering

"Pressure Tuning Spectroscopy of Metal Cluster Compounds and Organometallics," Robert Roginski, University of Illinois, March 19, 4:15 p.m., 145(a) Olin Hall.

"Mutual Diffusion in Concentrated Polymer Solutions," Professor C.J. Durning, Columbia University, March 31, 4:15 p.m., 145(a) Olin Hall.

Computer Services (Lunchtime Bytes)

"Applications of Microcomputers to Chemical Education," Charles Wilcox, Jr., John Wiesenfeld and Jon Clardy, Department of Chemistry, March 19, 12:20-1:10 p.m., 100 Caldwell Hall.

"Bilingual Word Processing," J.S. Noblitt, Modern Languages and Linguistics, April 2, 12:20-1:10 p.m., 100 Caldwell Hall.

Ecology and Systematics

"Interfacing Ecosystem Experiments and Long-term Monitoring," David W. Schindler, Freshwater Institute, University of Manitoba, April 1, 4:30 p.m., Morison Seminar Room, A106 Corson/Mudd Hall.

"Evolution of Aggressive Behavior in Salamanders," Kissa Nishikawa, Department of Zoology, University of California at Berkeley, April 2, 12:30 p.m., Morison Seminar Room, A106 Corson/Mudd Hall.

Environmental Research

"Federal Ground Water Policy: Time for New Initiatives," Keith Porter, director of the Center for Environmental Research's Water Resources Institute, will lead a discussion March 19, noon, 470 Hollister Hall. Call 255-7535 for reservations.

Environmental Toxicology

"Naturally Occurring Poisonings in Domestic Animals," John King, Department of Veterinary Pathology, March 20, 12:20-1:10 p.m., 304 Fernow Hall.

Floriculture and Ornamental Horticulture

"Establishing Naturalistic Urban Landscapes - Part II," Rick Manning, graduate student, March 12, 12:15 p.m., 37 Plant Science Building.

"Clinoptilolite Zeolite: A New Medium for Turfgrass Growth," Gregory Ferguson, Department of Agronomy, April 2, 12:15 p.m., 37 Plant Science Building.

Food Science and Technology

"Physicochemical Considerations in Mineral Availability," Professor Fergus M. Clydesdale, Department of Food Science and Nutrition, University of Massachusetts, March 31, 4:30 p.m., 204 Stocking Hall.

Geological Sciences

"Genetic and Developmental Analysis of Sex Determination in Drosophila," Rolf Nothiger, Zoology Institute, University of Zurich, March 19, 3 p.m., 135 Emerson Hall.

Jugatae

"Insect Responses to Fungal Infections," Professor Tariq, Boyce Thompson Institute, March 30, 4 p.m., Morison Seminar Room, A106 Corson/Mudd Hall.

Law

"A Hundred Years of Privacy: Constitutional Right or Judicial Invention?" Philippa Strum, Brooklyn College; Jeremiah Gutman, ACLU; David Lyons, philosophy; Dorothy Nelkins, Science, Technology and Society. March 31, 4:30 p.m., Hollis Cornell Auditorium, Goldwin Smith Hall.

Microbiology

"An Alternative Nitrogen Fixation System in Azotobacter Vinelandii," Paul Bishop, Department of Microbiology, North Carolina State University, March 19, 4:30 p.m., 124 Stocking Hall.

Natural Resources

"A Closed System for Trout Culture," William D. Youngs, Department of Natural Resources, March 19, 12:15-1:15 p.m., 304 Fernow Hall.

Nutrition

"Ethical Considerations Related to Conducting Morbidity and Mortality Intervention Studies," an open discussion, March 19, 12:45 p.m., 130 Savage Hall.

"Nitrosamines and Human Cancer: Thoughts on Causation and Prevention," Peter Magee, editor of "Cancer Research," Temple University, March 23, 12:20 p.m., 100 Savage Hall.

"Endocrine Control of Lactational Infertility," Alan S. McNeilly, Centre for Reproductive Biology, Edinburgh, Scotland, March 26, 12:45 p.m., 100 Savage Hall.

Ornithology

"The Annual Cycle and Community Composition: Comparisons Between Ontario Deciduous Forest, Australian Eucalypt Forest and Tropical Rain Forest," Alan Keast, Department of Biology, Queens University, March 30, 7:45 p.m., Laboratory of Ornithology, Sapsucker Woods.

Peace Studies

"Technical Trends and Strategic Policy," Lt. Col. Thomas Johnson, U.S. Military Academy at West Point, March 20, 12:15 p.m., 153 Uris Hall.

"The Cuban Missile Crisis Then and Now," James Blight, Harvard University, April 1, 12:15 p.m., 153 Uris Hall.

Pharmacology

"Solution Structure Determination of Murine Epidermal Growth Factor by ¹H-Nuclear Magnetic Resonance," Gaetano Montelione, Department of Chemistry, March 30, 4:30 p.m., D101L Schurman Hall.

Planning

"Chinese and U.S. Food Systems Compared: Lessons for Third World Countries, and Perhaps a Model," Thierry Brun, INSERM, Paris, March 20, 12:15 p.m., 115 Tjaden Hall.

Plant Biology

"Organ-Specific Expression of Glutamine Synthase Genes," Gloria Coruzzi, Rockefeller University, March 20, 11:15 a.m., Boyce Thompson Institute Auditorium.

Plant Breeding

"Patterns of Genetic Variation in Mexican Peppers," Fernando Loaiza, graduate student, March 31, 12:20 p.m., 135 Emerson Hall.

Plant Pathology

"Molecular Genetics of Appressorium Formation," Srirama Bhairi, 4:30 p.m., 222 East Roberts Hall.

Poultry Biology

"MHC-Chromosome Dosage Effects on Cellular Expression of MHC Glycoproteins and B Lymphocyte Development," Mary E. Delany, Department of Poultry and Avian Sciences, April 2, 4:30 p.m., 300 Rice Hall.

Textiles and Apparel Design

"Fiber Identification and Its Application," Walter McCrone, McCrone Research Institute, March 31, 12:20 p.m., 317 Martha Van Rensselaer Hall.

Vegetable Crops

"The Potential for a New French Fry Industry in New York State," Donald E. Halseth, Department of Vegetable Crops, March 19, 4:30 p.m., 143 Plant Science Building.

"Is Sustainable Agriculture Possible in the Wet Upper Amazon Region of Peru," Charles Staver, graduate student, April 2, 4:30 p.m., 143 Plant Science Building.

Veterinary Medicine

"Mechanisms of Immunity in Brucellosis," Alex J. Winter, Department of Veterinary Microbiology, Immunology and Parasitology, March 20, 12:15 p.m., G-3, Veterinary Research Tower.

Women's Studies

"American Women's History: Present Status, Future Directions," A roundtable discussion. Participants include: Joan Jacobs Brumberg, associate professor, HDFS and director, Women's Studies Program; Ileen DeValt, assistant professor, Industrial and Labor Relations; Robert Harris, associate professor and director, Africana Studies and Research Center; Ann Lane, professor, history and director, Women's Studies Program, Colgate University and Joel Silbey, professor, Department of History, March 19, 4:30 p.m., Faculty Commons, Martha Van Rensselaer Hall.

THEATRE

Theatre Cornell

"Loose Ends," by Michael Weller, directed by Bruce Levitt at the Willard Straight Theatre April 9-11, 16-18 and 23-25, at 8 p.m. and a matinee April 12 at 2:30 p.m. Tickets for Thursday evening and Sunday matinee performances are \$4.50 for adults, \$3.50 for students and seniors. Friday and Saturday performances are \$5.50 for adults, \$4.50 for students and senior citizens. Tickets are available at the Willard Straight Box office, or by calling 255-5165.

MISC

Garden Plots

Small and large garden plots are available for the season for a nominal fee from the Cornell Garden Plot Committee. Plots are located in three places: near Cornell Quarters, on Ellis Hollow Road and off Hanshaw Road on the Warren Farm. Send a stamped self addressed envelope to Cornell Garden Plots, Box 843, Ithaca, NY 14851.

Foreign Student Career Workshop

"Job Hunting for Foreign Students—Immigration Concerns" is a workshop that will be conducted by representatives at the International Students and Scholars Office. The workshop will be held on March 19 from 7:30 p.m. to 9 p.m. in 217 Ives Hall.

Calendar continued on page 7

Job Opportunities

Administrative and Professional

The minimum salaries listed are for recruitment purposes only.

VICE PROVOST FOR ACADEMIC PROGRAMS, (PA099) Provost

The Vice Provost works directly with the Provost to integrate University programs and initiatives that deal with academic matters. The Vice Provost will have principal responsibility for working with the Commission on Undergraduate Education, with the deans and associate deans of the colleges, with the directors of various academic and academic support programs, as well as with certain foundations and the Academic Affairs Committee of the Board of Trustees. The Vice Provost will also be consulted by the President in the selection of projects for awards from the Presidential Fund for Undergraduate Education.

The Vice Provost working closely with other Vice Provosts and Vice Presidents, will serve as a member of the President's Executive Staff, and will represent, in those settings, the interests of the academic community. Within this context, the Vice Provost is expected to provide leadership in the development of academic programs with special attention to those dealing with undergraduate education. On many occasions the Vice Provost will serve as the spokesperson for the University on matters of academic policy.

Qualifications: The ideal candidate will be a tenured member of the Cornell academic community. The individual should have a strong interest in the development of academic programs with special emphasis on undergraduate programs. A capacity to work with faculty members, students and staff to develop innovative programs and to create effective strategies for program implementation is essential.

Appointment will be for a three or (preferably) for a five-year term. Nominations and applications should be received by Robert Barker, Provost, 300 Day Hall, by March 20, 1987.

TRADES SUPERVISOR, (PT101) Animal Science

Resp. for Plant Oper. Div. incl. utilities, bldgs., grounds maint. & security at the Animal Science Teaching & Research Center. Plan, schedule & supv. personnel; project & prepare budget.

Req.: BS in Engr. plus 10-15 yrs. exp. in maint. & service oper. or related exp. Water treatment license, computer technology training, PNEUMATIC cntrl. trng. Exc. supv. interper. & comm. skills req. Send cover letter & resume to Judi Pulkinen by 4-3.

AREA COORDINATOR, (PC102) John S. Knight Writing Program

Supervise Macintosh writing facility. Teach WP to undergraduates; hire & train 25 student employees; support ongoing & special computing projects; create & maintain datasets; train staff; evaluate new equip. & software; maintain all program computing equip. & supplies; provide security.

Req.: BA/BS related field or equiv. 2 or more yrs. with Macintosh equip. Expertise in dataset manipulation, creation & WP. Exc. writing & supv. skills. Desktop-publishing background helpful. Demonstrated ability to train staff. Send cover letter & resume or call in confidence to Esther Smith by 4-15.

DEVELOPMENT OFFICER II (PA103) Johnson Museum

In conjunction with Dir. of museum & Dir. of Univ. Development, will assemble an annual development plan for museum; identify museum prospects & provide support in their involvement, solicitation & recognition; manage key projects pertaining to prospect strategy of museum.

Req.: BS with development exp. (pref. in area of individual giving-2 or 3 yrs.). Able to communicate effectively & persuasively; strong org. & writing skills; able to work effectively with others on all levels. Knowl. of art & museums highly desir. & familiarity with IRIS & WP helpful. Send cover letter & resume to Cynthia Smithbower by 3-31.

COMMUNICATIONS ENGINEER, (PA447) Computer Services-Repost

Assist in development & implementation of data comm. facilities in a multi-vendor, decentralized academic environ. which includes: 3090's, 4381's, & multiple vax processors; 3725 & 3705 comm. controllers; VM, CMS, CP, TCP/IP, & EP Software; Sytek, Ethernet, Pronet, Omninet, & Token Ring Local Area Networks; Variety of PC & Micro-to-mainframe comm.; 3270, RSCS, & ASYNC protocols. Will be a resource to Univ. community incl. National Science Foundation Super Computer implementations. Interper. & comm. skills are important.

Req.: BS degree. 3-5 yrs. exp. in some of above areas. Submit resume & salary req. to Richard B. Kennerly, Chief Communications Engineer, Cornell Computer Services, Network Communications.

ADMINISTRATIVE SUPERVISOR I (PG097) Plantations

Asst. in determining short range schedules of crew. Represent & communicate concerns & installation of anticipated projects & seasonal project priorities.

Req.: BS in Horticulture or equiv. exp. 3-5 yrs. exp. Supv. exp., landscaping, landscape construction, & use of landscape equip. req. Strong comm. skills & exc. org. abilities req. Pesticide applicator & valid driver's license necessary. Send cover letter & resume to Bill Webster.

COUNSELOR-THERAPIST (P096) University Health Services

Provide professional expertise in working with a univ. population as a short-term therapist. Crisis intervention, campus outreach, emergency coverage, group work, couple therapy, & applied

clinical research will comprise majority of duties. (Special skills in treatment of alcohol & substance abuse problems are also req.). Full-time; 10 month position.

Req.: MSW or PhD in clinical or counseling psychology from an American Psychological Association (APA) approved program, & completion of an approved APA internship req. Univ. exp. pref. Send cover letter & resume to Cynthia Smithbower by 4-1.

CINEMA MANAGER (PA085) Unions & Activities-Cinema

As theatre & business manager for Cornell Cinema, supervise theatre staff (including about 30 student ushers, projectionists, box officers) & an Accounts Assistant, & assist Cinema Dir. with publicity, programming & other duties.

Req.: BA. Exp. with theatre mgmt., strong comm. skills & familiarity with accounting procedures & IBM PC's necessary. Send cover letter & resume to Cynthia Smithbower by 3-31.

RESEARCH SUPPORT SPECIALIST II (PT082) Astronomy

Provide technical support to research activities of infrared labs with emphasis on Space Infrared Telescope (SIRTF) detector test facility.

Req.: BS in Electrical Engr., Computer Sci. or related field. Fluent in a structured-procedural language such as Pascal, C, PL-I & have assembler exp. Send cover letter & resume to Judi Pulkinen by 3-20.

ADMINISTRATIVE MANAGER (PA0610) Theory Center-Repost

Serve as liaison for Cornell National Supercomputer Facility (CNSF) to Theory Center's Asst. Director, Finance in budgetary & administrative matters.

Req.: BS, MBA desir. 2-4 yrs. business mgmt. exp. in research program area. Knowl. of CU financial & admin. systems necessary. Exp. in sponsored research (i.e., grants & contracts) pref. Knowl. of computer systems, particularly IBM essential. Supervisory & comm. skills. Send cover letter & resume to Cynthia Smithbower by 3-27.

Clerical

CURRENT EMPLOYEES should submit an employee transfer application, resume and cover letter. Also, if you are interested in a career development interview, please contact Esther Smith at 5-6874 to schedule an appointment.

OUTSIDE APPLICANTS should submit an employment application and resume. Applications and resumes typically remain active for three months; typing test scores remain on file for one year. The clerical section uses an automatic referral system where outside applicants are referred to positions for which they are considered qualified and competitive. Unless otherwise advertised, requests to be referred to a specific position will not be accepted. Applicants referred for departmental review will be contacted by the department if an interview is necessary.

OPEN INTERVIEWING FOR OUTSIDE APPLICANTS Effective March 18, interviewing of outside applicants interested in clerical positions will take place Wednesday afternoons from 1:00 - 6:00 p.m. in our East Hill Plaza Employment Office by appointment only. To schedule an appointment, contact Esther Smith at 255-6874 or Lauren Worsell at 255-7044.

SECRETARY, GR18 (C1011) Civil Environmental Engr.

Provide sec. support for Endowed Chair faculty member; provide WP support for additional faculty members. Assist service-oriented main offc. duties as assigned.

Req.: H.S. dip. or equiv. Busn. or sec. school desir. Min. 1-2 yrs. work exp. Heavy typing. Knowl. of or willingness to learn tech. WP. Good org. & interper. skills. Minimum Biweekly Salary: \$431.43

ACCOUNTS ASST., GR18 (C105) Dining Services

Maintain fin. & personnel records for unit; act as receptionist; answer phones; make appts.; reconcile & approve cash deposits; type. Other duties as assigned.

Req.: H.S. dip. or equiv. Busn. or sec. school desir. Light typing. Good computation, interper. & comm. (written & oral) skills essential. Knowl. of WP & PC's pref. Minimum Biweekly Salary: \$431.43

SECRETARY, GR18 (C104) Consumer Economics & Housing

Responsible for typing tech. res. manuscripts, proposals, class materials & corresp. using IBM PC; make travel arrangements; type reimbursement vouchers. Other sec. duties as assigned.

Req.: H.S. dip. or equiv. Busn. or sec. school desir. 2-3 yrs. offc. exp. Med. typing. Exc. typing & WP skills. Knowl. of tech. terminology, i.e., within Economic discipline. Working knowl. of WordPerfect req. Minimum Biweekly Salary: \$431.43

ADMINISTRATIVE AIDE, GR19 (C102) Engineering Dean's Offc.

Provide admin. & clerical support for Offc. of Corp. Rel. & for Industrial Innovation Extension Services (IIES). Type; compose some corresp.; create & maintain databases; maintain travel & appt. schedule. Other duties as assigned.

Req.: A.A.S. in sec. sci. or equiv. exp. Exc. offc. skills. Extensive exp. with WP equip. (Mac pref.). Good comm. (verbal) skills. Able to interact well with all levels of personnel in & outside Univ. Minimum Biweekly Salary: \$457.09

PERSONNEL ASST., GR19 (C1012) Univ. Libraries-Admin. Operations

Provide sec. support for Personnel Assoc. & Facilities Coord. Type corresp.; open & sort mail; answer phone; manage confidential personnel files; greet visitors; monitor 90-day Probationary Review Forms & performance evaluations; serve as back-up for Payroll Coord.; update Univ. Staff Directory. Other duties as assigned.

Req.: A.A.S. or equiv. Sec. training-exp. req.

Heavy typing. Demonstrated org., interper. & comm. (written & oral) skills. Microcomputer exp. specifically WP (WordPerfect) & database mgmt. (dBase III) pref. Able to handle confidential material with discretion.

Minimum Biweekly Salary: \$457.09

ADMINISTRATIVE AIDE, GR20 (C109) Univ. Libraries-Admin. Operations

Assist Facilities Coord. with maint. & space mgmt. within endowed Libraries. Coordinate all purchasing activities for capital equip. & supplies & process invoices for payment; monitor library travel expenditures; prepare work orders; oversee lib. phone operations & manage offc. equip. leases.

Req.: A.A.S. or equiv. Min. 3-5 yrs. offc.-purchasing skills. Strong interper., comm. & org. skills. Exp. with dBase III, Lotus & WordPerfect. Able to work well with public & large staff. Knowl. of bldg. maint. helpful. Familiar with Univ. purchasing & Customer Service procedures helpful. Minimum Biweekly Salary: \$482.33

ADMINISTRATIVE AIDE, GR20 (C107) Summer Session

Maintain all phases of comm. with program participants; take responsibility for program registration, develop mailing lists, & computerize dept. records; support program logistics. Interact with large numbers of adult professional program participants in person & by phone.

Req.: A.A.S. degree in sec. sci. or equiv. Med. typing. IBM PC exp. req.; Macintosh exp. desir. Familiar with CU desir. Exc. org., interper., phone & written comm. skills. Minimum Biweekly Salary: \$482.33

ADMINISTRATIVE AIDE, GR20 (C108) Nuclear Sci. & Engineering

Provide admin. & sec. assistance to Dir., 3 professors & 1 supervising engr. Maintain dept. & res. acts. Process purchase orders, invoices, vouchers, phone bills, accs. receivable. Keep personnel files, process appts., payroll vouchers; act as graduate field sec., maintain student & alumni records, incl. ones relating to Nuclear Regulatory Commission req. Act as receptionist for lab.

Req.: A.A.S. or equiv. Min. 3-5 yrs. sec. exp. or more at CU. Med. typing. Bookkeeping & tech. typing (WP desir.). CU exp. is very important since this is a 1 person offc. Exc. org., interper. & comm. skills. Minimum Biweekly Salary: \$482.33

SECRETARY (C072) Boyce Thompson Institute-Repost

Type manuscripts, grant proposals, corresp., reports, etc., for a group of scientists. Assist at switchboard. Other duties as assigned.

Req.: A.A.S. or equiv. Exc. typing skills; ability to read various handwritings, & good proof-reading skills. WP exp. necessary; IBM PC helpful. Able to work pleasantly & cooperatively with many people. Contact Joanne Martin, 257-2030. Min. Starting Salary: \$11,000

ACCOUNTS ASST., GR21 (C096) Mann Library

Handle all income & disbursements for budget over \$2M. Maintain all accs. records; generate monthly stats.; reconcile operating stats., process payroll of large staff & for over 100 stud. employees. Order supplies from off-campus vendors.

Req.: A.A.S. in acctg. or equiv. Med. typing. General & acctg. exp. essential. Exc. comm. skills. Able to work under pressure & meet deadlines. Familiar with CU acctg. system highly desir. Microcomputer exp. desir. Minimum Biweekly Salary: \$512.32

General Service

CURRENT EMPLOYEES please submit a transfer application to the Cornell Employment Office, East Hill Plaza. OUTSIDE APPLICANTS: Applications are available at Cornell Employment Office, Mon.-Fri., 9 am-12 noon. No appointment is necessary, however a brief wait may be required. Applications remain active for six months. Unless otherwise advertised, requests to be referred to a specific position will not be accepted.

UNIVERSITY SERVICE OFFICER (G101) Public Safety
Prevention & detection of criminal behavior; external & internal patrol of Univ. property within his-her area for fire, safety & crime hazards; enforcement of parking regulations occurring on CU property.

Req.: H.S. dip. or equiv. Further formal ed., training or exp. in law enforcement field pref. Satisfactory completion of basic Univ. Service Officer training. US citizenship; eyesight 20-40 corrected to 20-20; no record of convictions other than minor traffic infractions. NYS driver's license; ability to obtain NYS pistol permit within 90 days of employment. Must pass physical exam. Minimum hourly rate: \$6.50

DAIRY WORKER, SO19 (G053) Animal Science-Statutory-Repost

Under general supervision, mix feed rations for 400-500 experimental cows & heifers; deliver feed; monitor amounts of rations; operate & maintain computerized & conventional feed mixing equip. 8 a.m.-4:30 p.m.; 5 days per week including some weekends.

Req.: H.S. dip. or equiv. NYS Class 5 driver's license. Able to repeatedly lift 100 lbs., withstand heat, cold & odors. 3-5 yrs. work exp. Minimum hourly rate: \$6.04

Technical

CURRENT EMPLOYEES should submit an employee transfer application, resume and cover letter. OUTSIDE APPLICANTS should submit

an employment application, resume, transcripts and a list of laboratory techniques/equipment, or computer languages/hardware with which you are familiar. Applications and resumes remain active for six months. For each position that you are qualified and wish to be considered for, submit a cover letter, including position title, department and job number, to Judi Pulkinen. **OPEN INTERVIEWING FOR OUTSIDE APPLICANTS** interested in technical positions, with training or experience in biochemistry, chemistry, microbiology, electronics, physics and licensed animal health technicians, will be conducted on the first Thursday of each month from 1:30-4:30 p.m. in our East Hill Plaza Employment Office. No appointment is necessary, however a short wait may be required.

TECHNICIAN, GR19 (T105) Poultry & Avian Sciences

Conduct lab analysis req. in duck nutrition program, set up experiments, care of ducks & statistical analysis of data & other routine lab work as req.

Req.: A.A.S. min., in bio. with intro. chem. & quantitative analysis; BA pref. 2 yrs. lab exp. Send cover letter & resume to Dr. William Dean, Long Island Duck Res. Lab., Eastport, NY by 3-27. Minimum Biweekly Salary: \$457.09

TECHNICIAN, GR20 (T106) Poultry & Avian Sciences

Assist in aspects of basic & applied nutrition research. Conduct routine chem. analysis of tissues (with emphasis on use of atomic absorption spectrophotometry for mineral analysis) & other procedures which involve use of radioisotopes. Mix practical & purified diets, handle animals (quail, chicks, adult laying hens & young rats) & take blood samples.

Req.: BS in Life Sci., coursework in bio., biochem. & org. chem. 2 yrs. lab exp. Send cover letter & resume to Judi Pulkinen by 4-3. Minimum Biweekly Salary: \$482.33

TECHNICIAN, GR20 (T102) Biochemistry, Molecular & Cell Biology

Tech. lab support for res. on DNA replication, functional components of chromosomes, & binding proteins. Prep. of DNA antibodies, LG cell cultures in fermenter; protein purification; DNA transformation in yeast & E.coli; incl. immunizing, bleeding & testing of lab animals; org. & maint. of lab & equip. ordering of supplies.

Req.: BS in Bio. Sci. 1-2 yrs. lab exp. req. Background in protein & nucleic acid biochem., genetics or microbio. pref. Send cover letter & resume to Judi Pulkinen by 3-27. Minimum Biweekly Salary: \$482.33

TECHNICIAN, GR21 (T103) Avian & Aquatic Animal Medicine

Assist in development & maint. or hybridoma cultures for producing monoclonal antibodies. Conduct ELISA & serological tests. Prepare & maintain cell cultures. Develop diagnostic procedures for poultry & fish pathogens.

Req.: BS in bio. sci.; formal trng. in microbio., tissue culture trng. Exp. pref. Knowl. of hybridoma techniques. Send cover letter & resume to Judi Pulkinen by 4-3. Minimum Biweekly Salary: \$512.32

TECHNICIAN, GR18 (T096) Chemistry

Provide staff support to Lab Services & Safety Dept. Prepare, package, & distribute reagents & supplies. Calculate & prepare chemical solutions using basic acid & base titrations. Occasionally assist in maintenance & toxic materials disposal programs.

Req.: A.A.S.; BS pref. Knowl. of chem. lab techniques & procedures. Knowl. of safety practices. Send cover letter & resume to Judi Pulkinen by 3-20. Minimum Biweekly Salary: \$431.43

ANIMAL TECHNICIAN, GR18 (T099) Physiology

Participate in long-term animal exp. with pregnant animals. Perform all aspects of general animal maint. & maintain experimental records. Blood sampling & prep. of infusions. General lab duties.

Req.: BS in bio. sci. or equiv. Pre-employment physical req. Previous exp. with sheep useful. Send cover letter & resume to Judi Pulkinen by 3-27. Minimum Biweekly Salary: \$431.43

TECHNICIAN, GR20 (T0910) Neurobiology & Behavior

Assist in neurophysiological studies of animal hearing. Duties include surgical operations on anesthetized animals, fabrication of microelectrodes, & assistance in collecting & analyzing electrophysiological data from auditory nervous system.

Req.: BS in bio. with specialization in neurobio. & behavior. Familiar with sound analysis techniques & animal bioacoustic comm. Previous lab exp. helpful. Send cover letter & resume to Judi Pulkinen by 3-27. Minimum Biweekly Salary: \$482.33

TECHNICIAN, GR21 (T097) Diagnostic Laboratory

Perform virus isolation & fluorescent antibody procedures on clinical specimens. Perform tissue culture, serological tests, & prepare media, buffers & reagents.

Req.: BS in microbio. or related field, plus 2 yrs. work exp. Exp. in virology & tissue culture req. Exp. with computers & electron microscopy desired but not req. Send cover letter & resume to Judi Pulkinen by 3-27. Minimum Biweekly Salary: \$512.32

TECHNICIAN, GR20 (T371) Biochemistry, Molecular & Cell Biology-Repost

Provide tech. assistance by purifying & characterizing cellulases & sequencing DNA.

Req.: BS in Biochem. plus related exp. Knowl. & exp. with enzymology. Exp. with DNA isolation & sequencing. Send cover letter & resume to Judi Pulkinen by 3-20. Minimum Biweekly Salary: \$431.43

TECHNICIAN, GR20 (T0113) Vet. Physiology

Routine measurement of steroid & polypeptide hormones in animal blood & body fluids & tissues, i.e., perform assays; prepare buffers & reagents.

Req.: BS in bio. sci. Knowl. of radioimmunoassay procedures, preferably for both steroid & polypeptide hormones. Send cover letter & resume to Judi Pulkinen by 3-20. Minimum Biweekly Salary: \$482.33

March 19, 1987

Number 9

University Personnel Services

Cornell University

160 Day Hall

Ithaca, New York 14853-2801

Part-Time

OFFICE ASST., GR19 (C1013) John S. Knight Writing Program

Provide clerical support to a professional staff of 4. Handle corresp.; answer walk-in & phone inquiries; explain policies; maintain files; prepare appt. & payroll forms; manage accs. payable. Prepare & proofread copy for publications. Mon.-Fri.; 5 hrs. per day.

Req.: A.A.S. or equiv. College course work in writing. Familiar with Macintosh equip. Exc. WP skills. Offc. exp., especially in college or univ. Able to work well with students, faculty & staff.

Minimum full-time equivalent: \$457.09

TECHNICIAN, GR20 (T104) Vet Micro. Immunol. & Parasit.

Assist in analysis of proteins & genes from bacteria involved in mastitis. Process cultures, grow cells & extract antigens & DNA; conduct gel electrophoresis, & immunoblotting & restriction enzyme analysis. Prepare medium & reagents.

Req.: A.A.S. with courses in Chem., biochem. & microbio. Exp. in sterile bacteriological tech. gel electrophoresis, DNA & protein extraction pref. Send cover letter & resume to Judi Pulkinen by 4-3. Minimum full-time equivalent: \$482.33

COMPUTER OPERATOR, GR22 (T098) Unions & Activities-WSH

Provide computer support including training in software & equip. support, assess future needs, formulate proposals for equip. purchases, develop dept. wide programs for standardization, & review all unit programs for scope & accuracy. 30 hrs. per wk.

Req.: A.A.S. degree, data processing. 2 yrs. exp. with IBM PC's, Macintosh, Dbase III, Lotus 1-2-3 & Wordperfect req. Able to set up computer equip. Send cover letter & resume to Judi Pulkinen by 3-27. Minimum full-time equiv.: \$539.94

Temporary

TEMPORARY OPPORTUNITIES: Individuals qualified for temporary work and interested in clerical/secretarial: if you have experience or skills, and are interested in learning more about these opportunities, please call Lauren Worsell at 255-5226.

INTERVIEWER (C1015) Communications

Spend 3 weeks in Adirondacks & Canada conducting standardized research interviews with regional residents. Enjoyable, interesting work. Pleasant environ.

Req.: BA or near completion. Pleasing personality, good convers. ability, clean & neat appearance. Genuine interest in people. Apply to Dr. Dan McDonald or Dr. Carroll Glynn, 312 Roberts Hall (255-2603, 8460) by 4-15.

RESEARCH AIDE (T107) Communications

Assist in conducting soc. sci. survey in Adirondacks & Canada; assist in prep. of questionnaire, with devising code book scheme. Supv. student & non-student interviewers during data collection.

Req.: Exp. with soc. sci. survey data prep. interviewing, along with supv. skills req. WP exp. with IBM PC stat., questionnaire design, data analy. desir. Work schedule negot.; June-Aug. 1987. Data collec., June-July 1987. Apply to Dr. Dan McDonald or Dr. Carroll Glynn, 312 Roberts Hall (255-2603, 8460) by 4-15.

COLLECTIONS REP., GR17 (C103) Bursar

Collect delinquent student loans or Bursar accounts through written & phone comm. Locate delinquent borrowers through "skip tracing" techniques. Tues., Wed., Thurs., 4:30-8:30 p.m.

Req.: H.S. dip. or equiv. Good written & phone comm. skills. Collection exp. preferable. Send cover letter & resume to Laurie Worsell.

SCIENCE WRITER (C1010) Center for Environmental Research

Write short articles for Environmental Update quarterly. Freelance.

Req.: Science writing exp. & samples. Send resume & samples to Kathi Mestayer, CER, 463 Hollister Hall, Cornell University by 3-27.

SECRETARY (C093) Johnson Graduate School of Management

Type & revise various materials (letters, memos, variables, etc.), xerox & function as a secretary for Executive Development Program. Other duties as assigned.

Req.: H.S. dip. or equiv. Min. 1 yr. offc. exp. Med. typing. Knowl. of Mass II helpful. Full-time, some evenings & weekends. Apr. 1-July 31.

PHOTOCOPY ASST. (C099) Olin Lib. Admin. Oper.

Provide coverage for operations of Photocopy Services; supply minor maint. for CUL photocopiers & related equip.; answer calls for service; make appropriate log entries & ensure proper responses to requests for services; supervise students. Evenings & weekend hrs. part-time.

Req.: H.S. dip. Work exp. pref. Willing to work with machines. Able to work courteously with patrons, staff & faculty.

OFFICE ASST. (C071) Vet. Medical Teaching Hospital

Telephone communications liaison for staff, clients referring veterinarians, general public of Small Animal Clinic. Schedule appts. using hospital computer system, take messages, page doctors, relay general info. to clients, refer vets & others as requested. Mon.-Fri., 10-6; Sat. 8-12.

The people behind the computers that run Cornell

It is dusk in Ithaca. As the sun sets, temperatures drop, and the Cornell campus automatically prepares for the coming night.

Through the course of the day, the heating and cooling of 83 campus buildings have been the business of a DEC MicroVAX computer in the Weinhold Chilled Water Plant on Beebe Lake. Watching over networks of 4,000 sensors and actuators, the computer "felt" the rise and fall of temperatures as doors were open and shut, thermostats adjusted, and the sun rose and fell. The campus energy management system constantly adjusted and readjusted steam valves, pumps and fans to maintain temperatures and other environmental conditions.

Now, the system begins to lower temperatures in those buildings that will empty for the night, to save some of the university's \$18 million annual coal, oil, gas, and electricity bills. Throughout the night, the computer will continue to monitor the campus, watching for some 1800 alarms, from overheating computer rooms to malfunctioning fans and pumps.

Also working the late shift is the real behemoth of all the computers that run Cornell — the IBM 3090-200 that is the university's main administrative computer.

During the day, the administrative computer, operating in a berth alongside the Cornell supercomputer, a bigger brother IBM 3090-400, has sped through some 40,000 to 60,000 transactions. Whether

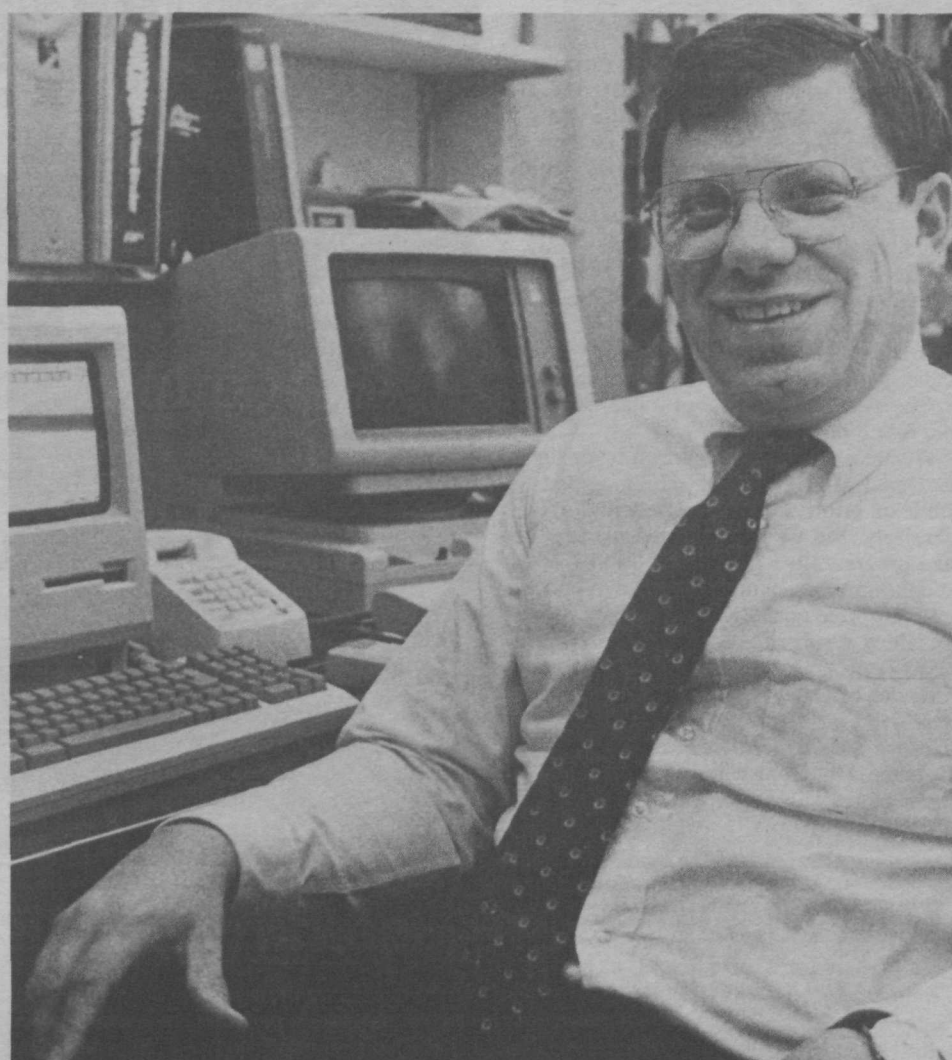
Cornell bought tires for its trucks, processed loans for its students, or decided to build a new laboratory, somewhere in its one million lines of computer code, the university's IBM 3090-200 dealt with the transaction. At night, the IBM continues its work by processing accounting reports and printing out the university's paychecks.

In both energy management and administrative computing, Cornell is a leader among the nation's colleges and universities. By installing new computer systems and fine-tuning programs on existing ones, the university has saved both time and money for itself, its employees and its students.

For example, H. Michael Newman, manager of the computer section of Facilities Engineering, has led in developing programs that allow the university's energy management computer to talk to the multitude of different control systems in campus buildings. For this work, he was recently named 1986 Institutional Energy Manager of the Year by "Energy User News."

Newman also heads a committee of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers to define such standard communications protocols for the industry. Such protocols mean that institutions like Cornell won't be wedded to one company for its control equipment needs, but can shop around.

The challenge to Newman and his colleagues has been to convert the variety of building control systems, some of which first went on-line more than a century ago, to modern computer controls. This spring,



Claude Levett

Russ Vaught, director of the university's administrative computing.

the new monitoring system will be fully on line. Then, operators will be able to call up on the computer screen diagrams of energy systems in campus buildings, complete with the current status of the myriad of pumps, fans, and utility lines. They'll be able to more quickly spot malfunctions and make changes.

"Cornell has been quite farsighted in its commitment to new technology," says Newman. "As a result we're entering an era in which we're far better equipped to manage our buildings efficiently. This means we'll be ready for the next energy crunch when it comes."

For Russ Vaught, director of administrative computing, the last year has been one of installing more than 100,000 lines of new computer code, including automating the Office of Sponsored Research, the Graduate School admissions and financial aid, and the Facilities and Business Operations data system for keeping track of readings from Cornell's light and power meters. Because of such new programming and of fine-tuning existing ones, Vaught has been able

to double the speed of many computer transactions.

"We've shaved about two seconds off each transaction, and while that may not seem like much, it means we've saved about 14 hours of staff time per day over the whole university," says Vaught. "That's almost the equivalent of two full-time people. And that doesn't even include the time of a student or staff person waiting in line for the data to be put in or retrieved from the computer."

According to Vaught, the foundation has now been established to build an on-line decision support capability into the computer system. Such capability for rapid analysis means that administrators will be able to quickly test the results of various policy decisions by running their assumptions through sophisticated computer models. For example, financial aid officers could discover immediately the consequences of a new federal law, leading to more informed decisionmaking.

— Dennis Meredith



Claude Levett

H. Michael Newman, manager of the computer section of Facilities Engineering.

CALENDAR

Calendar continued from page 5

Cornell Plantations

Non-credit evening courses and weekend workshops offered this semester include: Water Gardening, Natural History, Chinese Landscape Painting Techniques, Extending the Garden Season, Basics of Floral Design, Bulbs for Summer Bloom, Orchid Growing, Handmade Silk Flowers, Botanical Illustration, Small Fruits for the Home Garden, Ikebana, Gardening to Encourage Butterflies, Flowers in Watercolor, Spring Wildflowers, History of Cayuga Lake and Getting to Know Your Ferns.

E.A.R.S.

Empathy, Assistance and Referral Service (EARS) provides short-term counseling for both callers and walk-ins. E.A.R.S. is located in 211 Willard Straight Hall, one floor below the Ivy Room. Telephone 255-EARS. Hours are 3 p.m. to 11 p.m. Sunday through Thursday and 7 p.m. to 11 p.m. Friday and Saturday. All services are free and completely confidential.

Microcomputer User Groups

Amiga users group meets the third Tuesday of each month, 7 to 9 p.m., G14 Uris. Eli Meir, 273-5025 (evenings) for details.

Atari ST users meet the second Thursday of each month, 7:30 to 9 p.m., Mike Hojnowski, 255-3748 for details.

Display Write users, 1:30 p.m., Feb. 9 in 100 Caldwell Hall. Peggy Fluman at 255-5530 for details.

Macintosh Developers meet 3:30 p.m. the second Tuesday of each month, 100 Caldwell. Tim Larkin 257-2030 ext. 426 for details.

PC Users meet the last Friday of each month 1:30 to 3 p.m. in 100 Caldwell. Chris Haller 255-5716 for details.

For more information on user groups call Computer Services at 255-8304.

The Willard Straight Potshop

Classes offered at all levels, \$65. (\$40 students) includes six weeks of classes, 10 lbs. of clay and use of the studio for the entire semester. The studio is open from 10 a.m. to 10 p.m. every day. Call 255-5170 to register or for more information.

Papermaking Workshops

A papermaking workshop will be held for children eight to ten years old at the Johnson Museum on April 4 from 10 a.m. to noon. Cost is \$10 and enrollment is limited. Registration and payment are required by March 20. More information may be obtained by calling the museum at 255-6464.

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. and Sunday 3 to 8 p.m., 174 Rockefeller Hall; Sunday through Thursday 10 p.m. to midnight in 340 Goldwin Smith; Sunday through Tuesday 8 p.m. to midnight McFadden Hall Computer Room; Sunday 1 to 5 p.m. and Monday, Wednesday and Thursday 8 p.m. to midnight in Clara Dickson Computer Room.

Alternatives Library

Located in 122 Anabel Taylor Hall, this library contains more than 5,000 books, 180 periodicals and 350 tapes and slide shows on topics of individual, social and ecological transformations. Areas include eco-justice, holistic health, Native Americans, sustainable agriculture, appropriate technology, gay issues, political and economic analysis, and spirituality and mysticism.

Crisis Assessment Skills

"Emotional Crisis Assessment and Response," a workshop sponsored by University Health Services, will be given on April 8 and 10 from 3 to 4:30 p.m. The two-day workshop will help participants learn new skills to provide assistance to someone in crisis. All members of the Cornell community are welcome to attend. To register or for further information call Psychological Services at 255-5208 before April 3.

Intramural Sports

Intramural horseshoes for men, women and co-ed teams, minimum of two to enter, straight elimination tournament play starts April 13.

Intramural wrestling's deadline for entries is April 13. Weighing-in constitutes entry and must be done by April 13, from 2:30-5:30 p.m. No more than one person at each weight per team. Weight classes are as follows: 130, 145, 155, 165, 175, 180, and heavyweight. Entry fee of \$1 is due with roster.

Anthropology

"Approaches to the Human Environment in Japanese Folk Tales," Hiro Torigoe, visiting scholar, Kansai Gakuin University, 4:40 p.m., March 30, 305 McGraw Hall.

SPORTS

The lacrosse team will meet Harvard on Schoellkopf Field this Saturday at 1 p.m. It will be the 60th meeting between the two teams. Cornell holds a 43-16 lead in the series, although Harvard captured last year's meeting, 10-7.

Cornell enters the contest with a 2-0 mark following a 13-11 victory over Army last weekend. The Crimson is also unbeaten after downing C.W. Post 12-5 in its season opener last Saturday.

Cornell head coach Richie Moran was pleased with his team's performance against the Cadets but is wary about a dangerous Harvard club.

"We are playing very well as a team right now," said Moran. "We're getting a good total team effort, both offensively and a defensively. But we have to continue to make progress."

Sophomore attackman Brad Raymond registered three goals, while classmate Steve Lux added a pair of goals and three assists to lead the Crimson over C.W. Post. Senior netminder Michael Bergmann recorded 12 saves.

Cornell got big performances from junior attackmen Tim Goldstein and Jon Wurzbarger, along with senior midfielder Bob



Bob Cummings outmaneuvers an Army opponent on Schoellkopf Field last Saturday. The Red won that lacrosse match, 13-11.

Claude Levett

Cummings, in defeating Army. Goldstein had a goal and five assists, while Wurzbarger and Cummings each had three tallies.

Goldstein is the team's leading scorer after two contests with three goals and 12 assists for 15 points. "He's a very fine playmaker," commented Moran. "He moves the ball well, he creates the unsettled situation, and he runs the play patterns well."

Wurzbarger, who set a Cornell record for most goals scored by a junior against Cortland, is next on the list at 11-0-11. He scored eight times against the Red Dragons in the 17-5 triumph for the most goals scored by a Cornellian since 1968. Sophomore attackman Steve Meyer and Cummings follow Goldstein and Wurzbarger on the scoring list. Meyer has 4-2-6 and Cummings has 4-1-5.

Sophomore netminder Paul Schimoler has turned away 24 of 40 shots on goal for a .600 save percentage. He stopped 15 Army shots in the Saturday victory.

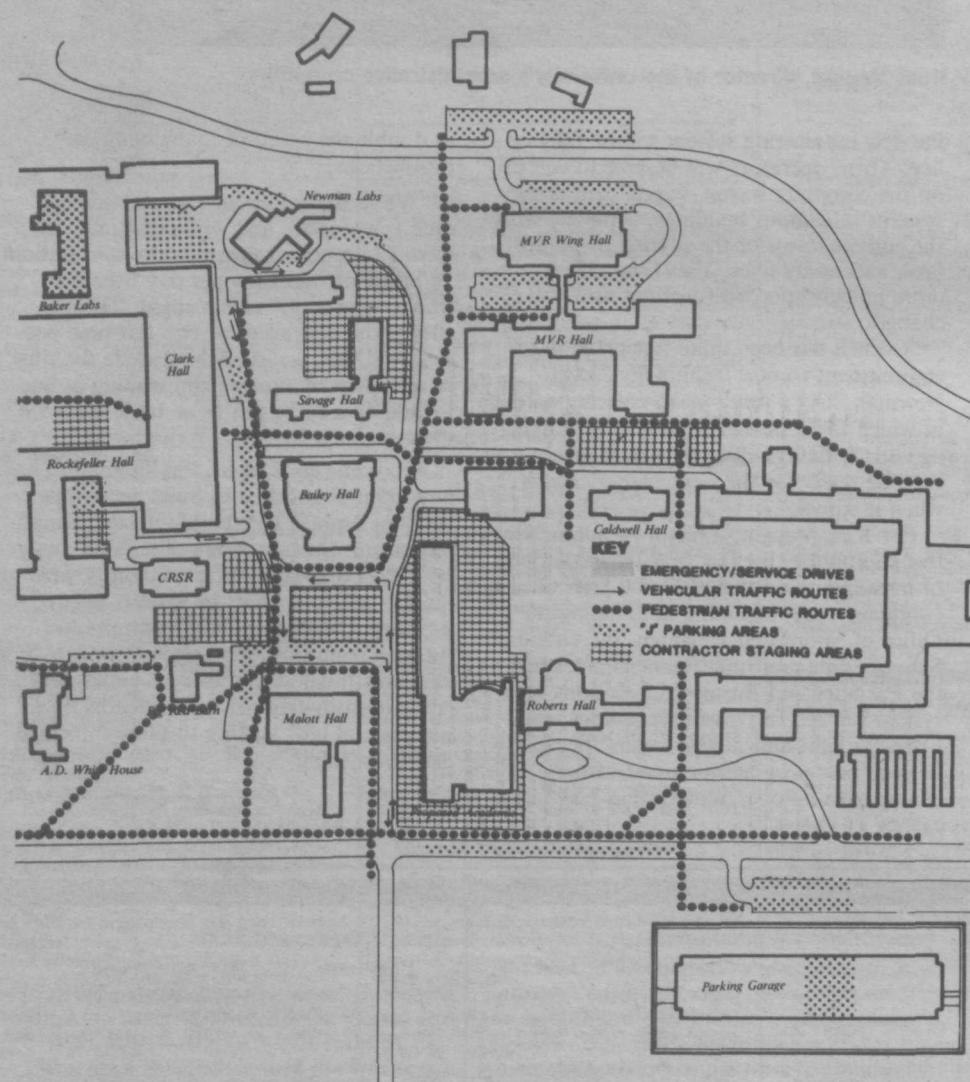
Saturday, 3/21

Men's Lacrosse - Harvard, 1 p.m., Schoellkopf Field.

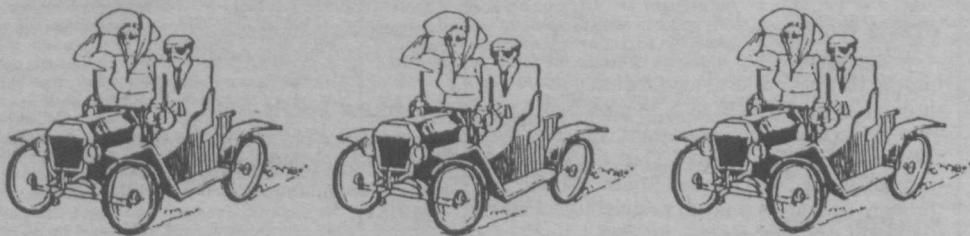
Saturday, 3/28

Men's Lacrosse - Maryland-Baltimore College, Schoellkopf Field.

NEWS OF... Construction



Parking and pedestrian traffic information for the Ag Quad area.



Alternate parking plans for faculty and staff who work in buildings west and north of the Ag Quad have been developed for the rest of 1987.

The volume of construction in the area — ranging from Academic I to renovations at Clark, Rockefeller, Martha Van Rensselaer, Savage, and S.T. Olin halls and the addition to Space Sciences — will require some one-way traffic and new staging areas for contractors.

Pedestrian walkways will be provided through and around the staging areas in order to maintain access to buildings, according to William E. Wendt, director of transportation.

Efforts will be made to maintain a one-way traffic flow around the staging areas between Malott and Bailey halls and north to the Baker-Clark parking area, he said. Pedestrians and drivers in the area are urged to exercise special care around construction sites, Wendt said.

"Deliveries and smooth access at all times will be difficult to accommodate," he said, "and some spaces will be lost to construction through the end of this year and into 1988."

He explained that J permit holders in the blue parking zone will be able to park in certain areas without traveling on North Garden Avenue, in the heart of the Academic I project area. Three locations that drivers should consider are: Forest Home Drive in front of Toboggan Lodge; Tower Road in front of Seeley-Mudd Hall; and the parking garage near Schoellkopf Field.

Wendt said there are more than enough spaces in the parking garage to accommodate the needs of J permit holders during the construction period. He added that many drivers may find the Forest Home Drive lots convenient, especially after the road is repaved later this year. Further information is available by calling William E. Wendt at 255-4628.

Statler Inn project

Foundation walls for the new 150-room Statler Inn are beginning to take shape. After some 500 cubic yards of concrete are poured, the superstructure of the nine-story building will begin to rise.

The original plans called for a seven-story addition around the former inn. Late last spring, it was determined that demolition of the 53-room inn and a complete replacement project would be more cost-effective. Two floors were added to the revised plan.

Also last year, the university hired the construction management firm of Lehrer/McGovern/Bovis of New York Inc. to supervise trade contracts and oversee the construction schedule and quality.

In February, the university transferred the external design of the new inn to The Architects Collaborative of Cambridge, Mass. The Boston firm of Goody, Clancy and Associates Inc. has essentially completed planning for the internal segments of the project, according to Robert M. Matyas, vice president for facilities and business operations.

Matyas said close coordination between the two Boston-area firms will help keep the project on schedule.

Bids on the superstructure are due this month and as many as six bids may be submitted for the inn project, according to the construction management firm.

The hotel school's \$25 million fund-raising campaign has passed the \$20 million mark, as of late February.

Bridge closings

One of the two paths to the Cascadilla Gorge footbridge will be closed from March 18-20 while contractors do electrical work at the intersection of Oak and College avenues.

The stone arch bridge where College Avenue becomes Central Avenue will be closed from March 23-27 while the contractor for the Performing Arts Center works along the southern rim of the gorge. Vehicles may use Stewart Avenue to Campus Road from the west or the Route 366 entrance to Campus Road from the east.

Harassment *Continued from page 1*

departments schedule meetings with faculty and administrators who are knowledgeable about the issue and who have examples to discuss. He said that, in many instances, male faculty are not aware of what they are doing and "how powerfully offensive it is to other people."

Barker said he was meeting this week with two FCR committees to discuss "how we adequately define what it is that constitutes a faculty member's responsibility within the institution and what determines fitness to teach."

Michael C. Latham, professor of international nutrition, said solutions to the problem of sexual harassment must be based on a clear understanding of what are acts of male sexism, which he said are deplorable in themselves, and what are sexual "come ons."

The meeting also included progress reports on the Barcelo Free Speech Commission and proposed revisions in the Campus Code of Conduct. There were no agenda items requiring a vote.

— Martin B. Stiles

High pressure *Continued from page 1*

had a structural determination made above 1 megabar," Ruoff pointed out.

Ruoff also reported new forms of germanium that occurred at .75 megabars, 1.02 megabars, and 1.25 megabars. The first two represent transitions to "primitive hexagonal" and "double hexagonal closest packed," said Ruoff, but the scientists have still not determined what structure germanium transforms to at 1.25 megabars. The transition at 1.02 megabars represents the first time any material has been found to change structure above 1 megabar. So far,

said Ruoff, the scientists have studied germanium up to 1.6 megabars.

The Cornell researchers also reported the highest pressures yet achieved, up to 1.25 megabars, using synthetic diamonds. Scientists doing high-pressure studies now must sift through thousands of natural diamonds to find two perfect enough for use in diamond anvils. And even these stones may have tiny flaws, or dislocations, that may cause them to crack or shatter under pressure.

— Dennis Meredith