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Aid-Blind' Admissions Will Continue Next Year

Beyond 1986-87 Uncertain; Commission to Study Problem

Cornell will continue to admit qualified Students through 1986-87 without considering their ability to pay educational costs Continuation of the university's "aid-blind" admission policy was approved last Friday by the Board of Trustees

Undergraduates at Cornell who need financial aid during 1986-87 will receive assistance through grants, loans, scholarships, and other programs. The proposal was pre-sented by W. Keith Kennedy, acting dean of admissions and financial aid, and Susan H. Murphy, director of financial aid.

Particular attention will be given to the needs of low-income and minority students in determining self-help levels in the finan-

cial aid package, they said. Beyond 1986-87, however "major prob-lems regarding financial aid remain," Kennedy told the trustees. A 24-member commission on undergraduate financial aid has been established to study the problem. The commission will report to the provost by November 15, 1985

For the past 10 years, Cornell has made its admissions decisions without considering applicants' financial needs and has developed aid packages to meet the financial needs of undergraduates. Earlier this year, though, Cornell projected a \$4 million shortfall in fihancial aid funds for 1986-87, leading the university to consider alternative financial aid policies

The administrators told the trustees that the \$4 million difference between total Student need and available money can be met through aggressive fund raising, increased state support, and adjustments in self-help and family contributions, permitting a con-tinuation of the "aid-blind" admissions pol-

The new or expanded sources of funding for 1986-87 may include:

An increased response to existing fundraising activities, which could yield an additional \$1 million a year.

New fund-raising programs for financial aid, which could provide another \$1 million annually. Plans are being made to step up fund-raising efforts focused on current and

endowment funds for scholarships, wage subsidies, and loans.

-Adjustments in the state's Tuition Assistance Program (aid to students) and the Bundy Program (aid to independent colleges). Increases in these programs, which would require legislative approval, could provide an additional \$1 million to \$2 million a year in aid for Cornell students.

-Cornell's paticipation in the state's new Supplemental Higher Education Loan Financing program, which provides money

from the sale of tax-exempt bonds to help colleges meet students' financial aid needs. This program could provide Cornell with up to \$2 million in 1986-87

-An increase of \$400 to \$500 in the sum-Continued on Page 2



An aerial view of the Collegetown area shows the construction sites for the new Cornell Performing Arts Center (A) and the combined Mack Travis/city combined apartment building and parking structure development (B), with both projects expected to be in construction by early summer. The arrow is on Snee Hall, just across the bridge, the new home of Geological Sciences.

ommission Will Report in November

A 24-member commission of faculty, students, staff, alumni and one trustee has been named to study new ways to provide undergraduate financial aid here.

W. Keith Kennedy, acting dean of admissions and financial aid, said the commission, ^{organized} at the request of Provost Robert

Barker, is scheduled to submit a final report to the Provost by Nov. 15, 1985.

The group will begin its study with a meeting April 9, after the students return from spring break, he said.

Its initial charge is to:

review the history and current policies re-

garding undergraduate financial aid at Cornell and other universities;

review the policy for 1986-87 and alternatives for funding the estimated \$4 million shortfall: and

assess the projected demands for financial aid funds in 1987-88 and beyond and de-

velop alternatives on the best way these demands can be financed.

Kennedy will serve as acting chairman of the commission until May 15, when Barker is scheduled to return to campus from vacation.

Formally titled the Commission on Undergraduate Financial Aid its membership includes seven students, one trustee, two alumni, ten faculty and staff, and three ex officio

members. Student members are: Lisa E. Gross (Human Ecology '88); Cynthia L. Hsu (Agriculture and Life Sciences '87); Londell McMillann (Industrial and Labor Relations '87); David A. Moss (Arts and Sciences '86); Daniel Rudd (Arts and Sciences '87); and two student trustees, currently Scott Witlien (industrial and Labor Relations '85) and Kenneth W. Williams (Arts and Sciences '85)

Staff members are: Colleen Babcock, assistant director of student employment; John Belina, director of admissions in the College of Engineering; Robert Gardner, senior associate director of university admissions; Thomas C. Keane, financial aid counselor;

Continued on Page 2

Federal Proposals Could Cost Students \$15 Million

The Reagan administration's proposals to cut federal financial aid to college students could reduce the aid to Cornell undergraduates by more than \$11 million per year, uni-Versity administrators told Cornell Trustees last Friday.

Under the proposed cuts, students from amilies with an annual income above \$32, would be barred from the Guaranteed Pludent Loan Program, and students whose amilies earn more than \$25,000 would not e eligible for Pell Grants, National Direct tudents Loans, or College Work-Study jobs lanced by federal dollars. In addition, a dudent could receive no more than \$4,000 a year in total federal aid.

If adopted, the proposals would have the following impact for Cornell University students currently receiving federal aid:

-- 2,026 students, 40 percent of those receiving Guaranteed Student Loans, would lose \$4.2 million.

2,552 students, 43 percent of the undergraduates receiving federal financial aid, would lose \$4.8 million in Pell Grants, National Direct Student Loans, and other pro-

--1,644 students, 61 percent of those who would still be eligible for federal aid programs under the new family income limits, would lose \$2.3 million because they could

not receive more than \$4,000 in federal aid

In addition, the proposed changes would reduce the federal aid to Cornell graduate and professional students by \$3.5 million. The total loss in federal aid at the Ithaca campus would be nearly \$15 million, administrators told the trustees.

Because of lobbying efforts, we expect that there will probably be some minor changes in federal aid, but not the full extent of these proposals," said Susan H. Murphy, director of financial aid. "If these cuts are approved, however, they would be disastrous for many Cornell students, especially those from low-income families.'

Ag 2000 project Helps State Prepare to Face the Future

The face of agriculture as we know it today will not be the same by the year 2000. Changes are occuring at such a rate that if New York State fails to plan today for its agricultural future, it could jeopardize its prominence in American agriculture.

So says Olan Forker, professor of agricultural economics at Cornell University and one of the three project leaders of Agriculture 2000, a study commissioned by Governor Mario Cuomo. With two other leaders, Forker has just completed the project's final report which is providing advice to Governor Cuomo on how to help New York develop long-range strategies to secure the State's agricultural future.

The report consists of 16 papers on commodities and issues concerning New York's agriculture. Thirteen of the 16 report authors are affiliated with the State College of Agriculture and Life Sciences at Cornell. About 50 of the approximately 350 attendees at the Agriculture 2000 conference in November were from Cornell and Cornell Cooperative Extension.

The forecast of the expert panel: New

York will have a greater number of larger and commercially operated farms using high-tech, as well as more small but fewer medium-sized farms by the year 2000. Fewer farmers with less land and less livestock will be able to produce the same amount of food.

"Technological advancements, changing consumer patterns and preferences, and less Federal government intervention are dramatically changing the agricultural, forestry, and fishery industries," Forker says. "To re-main in the forefront of American agriculture. New York State and her industries will have to adapt to these changes with strong marketing initiatives, strong support from the public sector, and a committment to education and research."

Forker's panel made various recommendations to Governor Cuomo. Among these were tax cuts for farmers, promotion and marketing assistance, more funding for education and research, and a complete review of all rules and regulations that pertain to the food industry in New York.

"High on the state's list of priorities should be the establishment of an environment favorable to agricultural businesses," Forker says, pointing out that many rules and regulations in New York state put firms at a competitive disadvantage.

The agricultural experts also stressed the need for the establishment of a unit in the Department of Agriculture and Markets that would focus on policy analysis and economic development as well as an advisory commission on policy and develoment.

The report emphasized that New York must concentrate on its advantages, which include proximity to large and affluent consumer markets, a highly skilled management and work force, a very strong dairy industry, and a great capacity for research and educa-

At the same time, the State should recognize its disadvantages, such as the high cost of production and labor and environmental constraints and work toward policies that will boost New York's agricultural industries so they can remain competitive in a rapidly changing and challenging climate.

Cornell Joins New State Loan Program SHELF

Cornell will participate in a new student loan program established by New York State. The Supplemental Higher Education Loan Financing Program (SHELF) was authorized late last year by the State Legis-

Meeting in Ithaca last weekend, trustees authorized the administration to invest up to \$1.5 million as the university's share in the default reserve for the SHELF program.

Officials here say that SHELF will help close the financial aid gap at public and private colleges in New York and give loan recipients a longer payback period. Under the program, the Dormitory Authority of the State of New York will sell tax-exempt industrial development bonds. The authority will then distribute approximately \$65 million to the state's universities and colleges for loans.

Cornell has requested \$15 million for loans to its undergraduates, graduates, and professional-level students who have exhausted all other options. The program, which begins this fall, will be in place for three years.

The preliminary amount allocated to Cornell by the Dormitory Authority is \$6.5 million. However, the allocation may be increased if statewide demand does not reach the available \$65 million. If Cornell is given the full \$15 million, the university's plan is to authorize \$3 million in loans for 1985-86, and \$6 million in each of the following two

To qualify for a SHELF loan, students and their parents must pass a credit test after filling out a loan application. Cornell's financial aid staff will determine student eligibility, but the credit determination will be performed by an independent organization. This organization will also make and collect the loans funded through the bond issue.

Once SHELF money is borrowed, at an in terest rate which has not yet been determined but is expected to be below 12 percent, students will have 15 years to pay back the loan Currently, there is a 10-year payback period for government-funded National Direct Student Loans and Guaranteed Student

Mary Jo Maydew, Cornell's assistant trea surer, says that unlike the current NDSL and GSL programs there is no deferral of repayment on a SHELF loan while the student is in school. Recipients must begin paying back both principal and interest on the loan immediately

Also, each participating college or university must contribute an amount equal to 10 percent of its SHELF loan pool allocation to the default reserve.

Highway Technology Transfer Center Established at Cornell

A Technology Transfer Center that will help New York State's highway superintendents and other officials keep up with technical information about highway construction and maintenance has been established here.

Supported by a two-year grant from the New York state Department of Transportation, the center serves as New York State's only informational clearinghouse on highway technology.

"This is a major boost in our efforts to

keep New York's roadways in good shape," according to Lynne H. Irwin, who heads this newly established center.

A highway research engineer, Irwin is an associate professor of agricultural engineering and director of the Local Roads Program in the New York State College of Agriculture and Life Sciences at Cornell.

Established in 1951, Cornell's Local Roads Program provides technical assistance to highway and public works officials in counties, towns, cities, and villages throughout New York State.

The Technology Transfer Center strengthens the scope of the Local Roads Program in continuing efforts to disseminate technical, legal, and other relevant information to those involved with construction and maintenance of roads in the state.

The center is now stepping up efforts to aid New York's highway officials through a series of educational activities this year.

-a series of one-day training seminars in local areas throughout New York, focusing on wide-ranging technical topics vital to local highway agencies.

-a basic training course on the fundamentals of road construction for elected and appointed highway officials at the town and village levels.

-establishment of a toll-free telephone number at Cornell for highway officials who request technical information and literature on highway technology.

-a collection of training materials and other literature which local highway officials can request.

Emphasizing the center's value as a provider of information, Irwin said the goal is to reduce the costs of highway construction and maintenance while improving the quality of the State's roadways.

For example, he says, the cost of a structural overlay with several inches of blacktop is \$65,000 per mile for an arterial road; the cost of completely rebuilding the same road is \$650,000 per mile. The question is, is this particular stretch of road in need of simple blacktopping or total reconstruction or somewhere in between?

The center will provide training for local officials to help them find the answer," Ir-

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Continued from Page 1

mer savings and self-help contributions required of students who seek financial aid. The change in self-help levels could provide up to \$2 million annually. The average increase in self-help levels for the past five years has been \$450 per year.

-- A tuition increase \$300 above any other annual increase for 1986-87 to help fund financial aid. This change could produce \$1.2

"It is not likely that all parts of our sixstep plan will fall into place, but the goal of obtaining an additional \$4 million for financial aid in 1986-87 seems reasonable," Kennedy said after the meeting.

However, if the cuts in federal financial aid proposed by the Reagan administration for fiscal year 1986 are adopted, Cornell would find it most difficult to meet students' financial needs, Murphy said. Proposed changes in federal aid could take more than \$11 million away from Cornell undergra-

Even without any reduction in federal

funding, university projections indicate that demand for financial aid from Cornell's gen eral purpose funds will be nearly \$26 million in 1988-89, compared to \$4.3 million in 1979-80.

Among the alternatives to be studied by the recently appointed commission of students, staff, alumni, faculty, and trustees are increased fund raising for scholarships and grants, additional loan programs, and a reappraisal of the self-help components of financial aid packages

Kennedy and Murphy urged that programs such as the Cornell Tradition, which rewards students for extraordinary work and other efforts by reducing their loans, be ex panded. The Cornell Tradition provides financials. nancial help to students selected for their willingness to work, scholarship, and other characteristics.

"The financial aid policies of the past 10 years need to be examined, and possibly modified. At the same time, new sources of financial aid dollars must be found," Kenne dy added

Cornell Chronicle

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Commission to Study Aid-

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Schelley E. Michell-Nunn, assistant director of State Programs in the Minority Education Affairs Office; and Carol L. O'Brien, director of development.

Faculty members are: Barry Adams, vice provost; Olan Forker, agricultural economics and faculty trustee; Peter Harriott, chemical engineering; and Benjamin Nichols, electrical engineering.

The ex officio members are: Paige V. Ire land, director of institutional planning; san H. Murphy, director of financial aid; and Deborah B. Pointer, associate dean of admissions and financial aid.

The two alumni members are Stephen W Fillo, class of '59, and Morton A. Lowenthal, class of '53.

The trustee on the commission is Edward A. Wolfson.



Cornell President Frank Rhodes, seated at left, and Peter Fischer-Appelt, president of the University of Hamburg, Federal Republic of Germany, prepare to sign a cooperative agreement establishing a Cornell Abroad program at Hamburg and bringing exchange graduate students to Cornell. Witnessing the signing last week were, from left, Davydd J. Greenwood, director of the Center for International Studies; Alison P. Casarett, dean of the Graduate School; Vice Provost Barry B. Adams; Ann F. Roscoe, executive staff assistant for Cornell Abroad; Arch T. Dotson, director of Cornell Abroad; and Jerry D. Wilcox, director of the International Student Office.

\$5 Million in Dormitory Renovations Scheduled

Nearly \$5 million in renovations to six dormitories will get under way this summer The \$4.96 million project was approved by the Board of Trustees meeting here last weekend.

Part of a continuing student housing renovation program now in its eighth year, the work will be done at North Campus dormitories 5,6,7, and 9, and at Mennen and McFaddin Halls on West Campus.

Renovations of the North Campus dormitories will include replacement of the heating system at a cost of \$1.1 million. The original hor-water heating system has been plagued with breakdowns and high volume leakage almost continually from the tme it was in-

stalled. It is being replaced with a steam system, which is what is used on the rest of the campus, according to Harold D. Craft Jr., acting vice president for facilities and business operations.

Another \$1,915,000 has been set aside for

Another \$1,915,000 has been set aside for extensive refurbishing and refurnishing of rooms and lounges and renovations, including removal of ceiling material containing asbestos, in the North Campus dorms.

According to Craft, consultants have stated that although there are no immediate health hazards, the ceiling material should be removed as a precaution against aging and usage. This project completes the university's residence hall asbestos removal pro-

RPI Official Chosen to Direct Financial Functions at Cornell

James E. Morley Jr., currently vice president for finance and administration at Rensselaer Polytechnic Institute, has been named vice president and treasurer at Cornell, effective August 1.

Morley's appointment was approved by Cornell University's Board of Trustees upon the recommendation of William G. Herbster, senior vice president.

Morley will be responsible for the financial functions of Cornell, including those of the treasurer, the office of university controller, the investment office, trust office, and university auditor.

Senior vice-president Herbster said, "Jay Morley is a broad-based financial manager who has an excellent background in educational administration. He has also been instrumental in developing a number of exciting initiatives while at RPI, particularly its Technology Park and the New Ventures In-

cubation Program through which the college encouraged the development of small, high technology-oriented businesses in the Troy area."

Morley has been at RPI since 1978. Before that, he was vice president for business and finance and treasurer at Rider College (1976-78), comptroller at Syracuse University (1972-76), and on the audit staff (1969-70) and with the consulting group (1971-72) at Ernst & Ernst in New York City, now Ernst & Whinney.

Currently a reserve colonel in the U.S. Marine Corps, he was on active duty in the Marines from 1962-1967.

He holds a bachelor's degree in engineering from RPI (1962) and a master's degree in accounting from Syracuse (1969).

Morley is president of the Eastern Association of College and University Business Officers and is a director of Raster Technologies and J.L. Thompson and Sons.

gram.

Work in Mennen and McFaddin Halls will cost \$1,945,000 and include safety improvement, replacement of heating system, new plumbing, new lighting, and extensive renovations of rooms.

Tuition Here For Endowed To Be \$10,500

Tuition at Cornell University will increase 9.4 percent in September. Tuition, currently at \$9,600 for undergraduates in the private colleges at Cornell, will be \$10,500 for the 1985-86 academic year.

The Board of Trustees also has approved increases in other student costs -- averaging 7.2 percent for housing and 5.5 percent for dining.

The combination of tuition, room, and board at Cornell next year will be \$14,100. Currently, the total is \$13,010.

Since 1981-82, tuition at Cornell and other Ivy League institutions has increased about 50 percent.

Tuition levels for the statutory colleges at the university are set by Cornell in consultation with the State University of New York.

Tuitions for undergraduates in the statutory colleges are expected to be \$4,360 for New York State residents (a 7.4 percent increase) and \$7,420 for out-of-state students (a 9.4 percent increase). This year, tuition is \$4,060 residents and \$6,784 for nonresidents.

Statutory graduate student tuition for 1985-86 will be \$5,020 (up 5 percent from \$4,782 this year). For graduate students in the New York State College of Veterinary Medicine, tuition will be \$7,400 (up 5.6 percent from \$7,002).

Tuition for DVM degree candidates in the Vet College will be \$7,400 for New York State residents (up 7.2 percent from this year's \$6,900) and \$8,820 for out-of-state students (up 7.8 percent from \$8,184).

The 1985-86 tuition rates for the two private professional schools are \$10,830 for the law school (up 9.2 percent from \$9,920) and \$11,100 for the Samuel Curtis Johnson Granduate School of Management (up 8.3 percent from \$10,250).

For the endowed graduate school, tuition will be \$10,830 (up 9.2 percent from \$9,920).

Tuition at the Medical School in New York City will increase 6.5 percent for medical students (\$13,660 to \$14,550) and graduate students (\$9,600 to \$10,225).

Microelectronics, Earth Science Research Here Gains New Support

Two Cornell University facilities involved in microelectronics and earth science research have received additional industry and government support amounting to more than \$4 million.

The National Science Foundation grant to the Consortium for Continental Reflection Profiling (COCORP) is \$2.45 million. CO-CORP, which also receives funding from industry, is the largest, single program in landbased earth sciences supported by NSF.

The Semiconductor Research Corporation (SRC) award to Cornell's Program on Microscience and Technology is \$1.67 million. Cornell's center is one of three "centers of excellence" funded by the SRC, a non-profit, cooperative organization of some of this country's leading semiconductor, computer, and telecommunications industries. (The other centers are at Carnegie-Mellon University and the University of California at Berkeley.)

Announcement of continued funding for both Cornell research facilities was made to the university's Board of Trustees meeting on campus last weekend.

Joseph M. Ballantyne, vice president for research and advanced studies, also said that research volume at the university in the current fiscal year is expected to exceed the \$170 million in sponsored research reported last

NSF's latest grant will fund the COCORP program through September of this year, according to Ballantyne. NSF is expected to continue support at \$3,702,169 for an additional 13 months, he told the trustees.

COCORP was the first program to use sophisticated seismic techniques in a comprehensive survey of the earth's crust as deep as 40 kilometers. Data gathered from surveys across the U.S. are used in producing highresolution profile "pictures" of structures deeper in the crust than drilling can reach. The success of the technique has prompted similar efforts in a dozen other countries.

Cornell's program on Microscience and Technology was established in November 1982 by the Semiconductor Research Corporation. The program supports research in technologies that are essential to the development of VLSI (very large scale integrated) circuits, and trains new researchers in fields of engineering and physical sciences that are related to semiconductors and computers.

The SRC Program is only part of Cornell's total effort in microelectronics. With more than \$10 million annual expenditures, the Cornell effort ranks among the leading two or three academic microelectronics programs in the nation.

PEOPLE

Eric A. Blackall, a leading authority on Goethe and German Romantic literature, has been named the Jacob Gould Schurman Professor of German Literature, emeritus.

A member of the faculty since 1958, Blackall's emeritus status becomes effective upon his retirement at the end of June.

The British born scholar is the author of several widely acclaimed books, including his most recent, "The Novels of the German Romantics." It was published in the spring of 1983 by Cornell University Press.

Many years in the making, the 315-page work is the first book-length critical study in English on the subject.

His other major works include "The Emergence of German as a Literary Language 1700-1775," now in its second edition; "Goethe and the Novel;" and "Adalbert Stifler, A Critical Study."

Blackall came to Cornell from the University of Cambridge in England where he had taught for 19 years. At Cornell, he served as chairman of the department of German literature from 1958 to 1965 and as director of

Timothy Mount, professor in thedepartment of agricultural economics in the New York State College of Agriculture and Life Sciences at Cornell University, has been appointed acting director of the Cornell Institute for Social and Economic Research (CISER) through June 30, 1985. CISER was established in 1981 to support and encourage research in the social and ecomonic sciences within the University. A member of the Cornell faculty since 1969, Mount is an expert in using statistical techniques in the analysis of economic problems.

J. Peter Krusius, associate professor of electrical engineering in the College of Engineering, has been awarded tenure, effective February 1. Krusius, who came to Cornell in 1980 as a research associate and lecturer, is nationally recognized for his research on very large scale integrated circuits (VLSI) used in computers and communication. In addition, he is a specialist in the physics and technology of submicron circuits and advanced semiconductor devices. Krusius was instrumental in coordinating the successful proposal to the Semiconductor Research Corporation for the establishment and support of the Semiconductor Research Corporation Center of Excellence for Microscience and Technology at Cornell.

the Society for the Humanities from 1977 to 1984.

He held the Avalon Professorship in the Humanitites from 1964 until he was named to the Schurman endowed professorship in 1967.

In 1973, the Austrian government awarded Blackall the Cross of Honor for Arts and Sciences, First Class. He was cited for his contributions to scholarship through the years and for his heroism. While a graduate student in Nazi-controlled Vienna in 1938, he rescued the papers and manuscripts of the Viennese author Arthur Schnitzler, a Jew.

Born in London in 1914, Blackall was graduated from the Latymer Upper School in 1933; he received a B.A. (1936) from Cambridge, a Ph.D. (1938) from the University of Vienna, and the M.A. (1939) and Litt. D. (1960) from Cambridge.

Jean Robinson, chair of the department of consumer economics and housing, has been reappointed for a five-year term. In the State College of Human Ecology at Cornell since 1965, Robinson is a specialist in macro-economics and family financial management. She was promoted to professor in 1981 and has serves as the chair of her department since that year.

Kraig Adler, professor of biology, has been selected by the National Academy of Sciences as one of 16 senior scholars to participate in the Distinguished Scholar Exchange Program with the People's Republic of China. He will spend more than one month in China during 1985, lecturing at various universities and institutes throughout China and conducting field research in Sichuan Province. Adler, who is in the Division of Biological Sciences, is recognized internationally for his research on animal orientation and navigation.

Bhopal's "Legal Fallout" Topic for Panelists Here

The legal "fallout" from the Union Carbide chemical plant disaster in Bhopal, India, will be examined by a panel of experts at 7:30 p.m. Tuesday, April 9, in Hollis E. Cornell Auditorium of Goldwin Smith Hall. The colloquium is open to the public free of charge.

Speakers will be Nicholas Ashford, director of the Center for Policy Alternatives at Massachusetts Institute of Technology, and Sheila Birnbaum, an attorney specializing in toxic injury claims. She is with the New York City law firm of Skadden, Arps, Slate, Meagher, and Flom.

Discussants at the colloquium will be James Senger, vice president for environmental policy at Monsanto Co.; Rashid Shaikh, director of the Program in Environmental Health and Public Policy at the Harvard School of Public Health; and James

A. Henderson Jr., the Frank B. Ingersoll Professor of Law at Cornell.

"We are conducting this colloquium in order to inform the Cornell community about the far-ranging legal implications of the tragedy in Bhopal. We hope the event will lead to wider discussion on campus about the prevention of industrial disasters and about policies concerning U.S. multinational corporations operating abroad," according to Sheila Jasanoff, the colloquium planner.

Jasanoff is an associate professor in Cornell's Program on Science, Technology and Society and the director of the Law and Society Program, a colloquium sponsor. Cosponsors are the Cornell Law School, the Institute for Comparative and Environmental Toxicology, and Cornell's South Asia Program.

Students Plan Livestock Show With Contests, Other Events

How fast can you milk a cow? When's the last time you were in a potato-sack race? Did you ever see a beloved bovine trained for a show?

You can see and do all of these things and much more if you come to the annual Cornell Livestock Show Saturday, April 20, on

Off-Campus Counselors Now Being Recruited

The Dean of Students Office is seeking students to serve as Off-Campus Housing Counselors (O.C.C.'s) in August. During the past three years O.C.C.'s have helped new Cornell students to find off-campus housing and have aided their adjustment to living in the community. O.C.C.'s should be available at the Dean of Students Office during the two weeks which precede the beginning of each semester.

Applications are available at the Willard Straight Hall desk, the Information and Referral Center in Day Hall, and the Dean of Students Office in 103 Barnes.

The application deadline is Friday, April 26. For further information call or stop by the Off-Campus Housing Office, 103 Barnes Hall. 256-5373.

campus. There's even a special door prize involving a famous racehorse.

Open to the public, the day's events include an afternoon chicken barbecue, a tugo-war, a cow milking contest, and three different and amusing races — potato-sack, egg and spoon, and three-legged. All events will be in the Cornell Livestock Pavilion. These events run from 8 a.m. to 6 p.m.

Don't leave after the chicken barbecue, though. From 8:30 p.m. to midnight, there will be a square dance in the pavilion; that's time for a lot of fun and dancing, according to organizers of the one-day show. Tickets for the square dance will be available at the door for \$2 each and \$3 per couple.

The livestock showing will take place all day, featuring more than 100 farm animals, including dairy cows, beef cattle, sheep, swine, goats, and horses. Students with the highest score in each animal class will earn grand champion awards. These grand champions will then compete with each other, each showing all six animal classes, for the title of "premier showman."

As part of the livestock show, "Gregory the steer will be auctioned off in the afternoon. Gregory is a one-year-old steer that has been raised by students of the Round-up Club since Dec. 1.

For racehorse buffs, the door prize this year is a chance to breed your mare with "Rebel Scott," the son of thoroughbred "Secretariat." If you don't have a mare, you can choose instead a dinner for two at a prominent local restaurant.

For more information about the show, contact Paul Reed or co-chair Dave Fernandez at 256-4415.

Adding 'Milky Way Galaxy' to Our Addresses

Never mind the nine-digit zip code; someday, we will have to add "Earth," "the Solar System," and "Milky Way Galaxy" to our addresses, according to a scientist here.

"Many years from now — if our civilization survives — we will establish interstellar communications. Other civilizations will send notes to our computer screens," predicted Yervant Terzian, chairman of the astronomy department at Cornell.

"The number of stars is astronomical," he added, with a chuckle. "How many stars have planets orbiting them that are homes to life? Who knows how many intelligent civilizations are looking at us right now?" he asked during his recent presentation, "Our Home in the Universe." Terzian's talk was one in a series of brown bag luncheon programs sponsored by the employee-elected university trustees and the Employee Assembly.

Although Terzian left his provocative questions unanswered, he undoubtedly astounded and amused some of his listeners with his spirited observations about our universe. Among them were these:

— The star nearest to our star, the sun, is so far away that it would take someone traveling at today's fastest rocket speeds about 100,000 years to get there.

— There is at least one place in the universe with more cloudy days than Ithaca — Venus, where constant cloud cover prevents man from seeing that planet's surface. Astrophysicists use radio-radar telescopes, such as Cornell's Arecibo Observatory in Puerto Rico, to map Venus' surface.

— The sun, a "huge inferno," will explode in about four billion years, at its nine billionth birthday, blowing up the entire solar system. "By that time, of course, we will be so sophisticated that we will survive that experience," he quipped.

— There are hurricanes in Jupiter's atmosphere that last hundreds of years. One of Jupiter's satellites is totally volcanic.

 New stars and planets are continuously being formed from interstellar clouds.

—Black holes — "the most fascinating objects that physics has ever encountered" —has formed when stars several times larger than the sun collapse in intense gravity. The

gravity is so strong that not even light can escape from the collapsing star, which vanishes from our universe for ever.

— Constellations are based in imagination more than in reality. "How you can make a Leo out of these stars, I don't know," Terzian said while looking at a photograph that showed the shape of the lion in a connect-the-dot fashion among the stars. One could just as easily use other stars to form the "martini constellation," he suggested.

"Our universe is filled with galaxies similar to the Milky Way, and each galaxy has countless solar sytems," Terzian concluded. "Don't think of yourselves as unique."

The talk was illustrated with dozens of upto-date colored slides of celestial objects, and a series of slides showing the Arecibo Observatory with its 1,000-foot radio telescope

The brown bag luncheon programs are held the second and fourth Wednesdays of each month from noon until 1 p.m. in room 105 of the Space Sciences Building. On April 10, industrial and labor relations associate professor Jennie T. Farley will discuss "Women's Studies at Cornell."

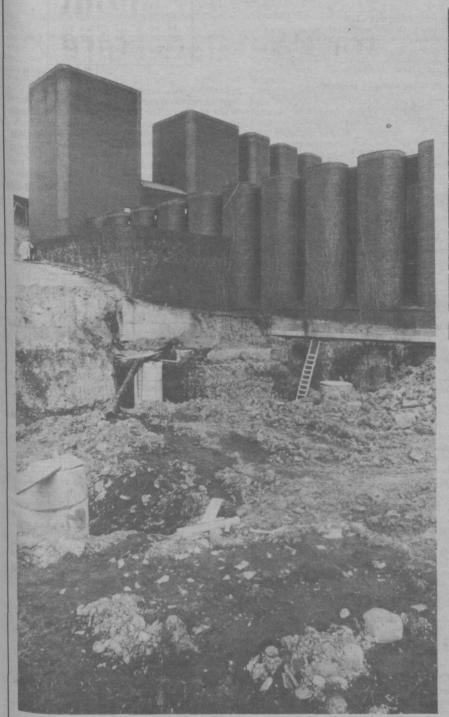
John Houseman Here For Talk April 12

John Houseman, the inscrutable, resolute, and jowly British star and director, will visit here Friday, April 12, to speak about the evolution of theatre arts.

"An Evening with John Houseman" will take place at 8:15 p.m. in Bailey Hall Auditorium. It is sponsored by the University's Unions Program Board.

Famous for his "...they earned it!" line in Smith Barney commercials, the renowned Shakespearian starred in the movie and subsequent television series, "The Paper Chase." He is also well known as a commercial spokesman for British Airways and McDonald's

Tickets for "An Evening with John Houseman" may be purchased for \$1 at the Willard Straight Hall ticket office and for \$1.50 at the door.







Construction 1985

Among the campus construction projects getting under way recently have been an addition to the Wilson Laboratory, with foundation work already begun (at left), the Tobin Field House on Jessup Road near the playing fields, with North Campus dormitories and Robert Purcell Union in the background (top right) and an addition to Comstock Hall for new telephone and computer space.

Future of Communications to Be Predicted at Symposium

The "contest" between satellite and fiber Optic communications, the survival of the fittest computer networks, and the switch to digital radio and television transmission will among the topics April 10 in Newton, Mass., when industry experts predict the future of communications.

They will take part in a symposium spon-Gored by the Cornell University School of Electrical Engineering. The Newton session is the third in a cross-country series in observance of the school's centennial. The first baccalaureate degrees in electrical engineering were awarded in 1885 by Cornell and by the Massachusetts Institute of Technolo-

General chairman of the April 10 symposih, which begins at 9:30 a.m. at the Newton Marriott Hotel, is James L. Broadhead, president and chief operating officer of GTE Communications Services. Toby Berger, professor of electrical engineering at Corhell, is faculty chairman. The symposium is Open to the public; there is a registration fee.
Robert W. Lucky, executive director of research at the Communications Sciences Division of AT&T Bell Laboratories, will begin the symposium at 9:40 a.m. by discussing optical fiber networks that will soon span the continent and the oceans. Lucky is expected to say that improved optical switches, amplifiers, and multiplexers need to be invented before the "great superhighways of communication" reach the residential user.

John V. Evans, vice president for research and development and director of COMSAT Laboratories, will speak at 10:30 a.m. on satellite communications, the chief competitor to fiber optics. Lower cost service will be provided when satellite communications begin using distributed earth stations to minimize terrestrial circuit costs. The increased application of digital techniques will allow circuit multiplication, Evans will say, noting that satellites will soon serve large private networks.

Speaking at noon, Irwin M. Jacobs, the chairman and chief executive officer of M/A-COM Linkabit, Inc., will discuss the additional services that satellite communications can provide to home television viewers. Jacobs will report on the direct broadcast of television signals from satellite to home, including new technologies to scramble signals, improve quality, and open new business area

Not all forms of computer networks will survive, according to Paul E. Green, Jr., member of the corporate technical committee at the IBM Watson Research Center. Speaking at 12:50 p.m., Green will speculate on which of today's forms of computer networks will flourish, which will adapt, and which will disappear.

Richard E. Blahut, IBM Fellow in the IBM Federal Systems Division, will discuss codes and modulation for modern communication systems in his 3:20 p.m. talk. He will describe more sophisticated waveforms for radio and television broadcasting. So great are the advantages of all-digital systems, Blahut is expected to observe, that they are certain to replace time-honored communication waveforms in radio and television.

G. David Forney, Jr., vice president and

director of the Technology and Planning Information Systems Group at Motorola, Inc., will speak at 4:10 p.m. on the future of data communications. He is expected to say that electronic data transmission capabilities will be significantly enhanced in the coming decades. The data communication advances that have already had beneficial impacts on banking, on reservation systems, and on inter-office networking will make significant inroads into our homes, cars, schools, and social institutions and will play a major role in propelling us into the "information age."

Cornell's Electrical Engineering centennial symposia continue April 17 in St. Louis, with a session on atmospheric and space sciences, and another on energy for the future April 25 in Washington, DC. The series concludes June 12 in Ithaca with a discussion of the societal impact and future directions of electrical engineering. The series has included symposia on microelectronics and on

computers.

Calendar

All items for publication in the Calendar sections, except for Seminar notices, must be submitted (typewritten, double spaced) by mail or in person to Fran Apgar, Central Reservations, 531 Willard Straight Hall at least 10 days prior to publication. Seminar notices should go to the Chronicle office, 110 Day Hall. Items should include the name and telephone number of a person who can be called if there are questions, and also the subheading of the calendar in which it should appear (lectures, colloquia, etc.) ALL DEADLINES WILL BE STRICTLY ENFORCED. *-Admission charged.

Announcements

Gay Jews Support Group
A support group for gay Jews is being formed to share and explore related concerns and conflicts, possible ways to confront them, exchange religious and cultural context material. If in-terested in taking part, please call GayPac, 256-6482. Confidentiality ensured.

Writing Workshop Walk-In Service
Writing workshop Walk-In Service; free
tutorial instruction in writing. Monday-Thursday
from 3:30-6:00 & 7:30-10:00 p.m. and Sunday from
3:00-8:00 p.m. in room 174 Rockefeller Hall.
Sunday-Thursday from 9:00-11:00 p.m. in room
340 Goldwin Smith Hall.

Making Relationships Work
Making relationships work: A new 8 week
workshop with Let Davidson, Ph.D., on creating
satisfying and loving relationships, for individuals and couples, will meet Monday's, 7:00-10:30
p.m., beginning March 25. For more information
and registration call 272-4131. Cosponsored by
CRESP.

Personal Effectiveness Seminar

Personal Effectiveness Seminar
Personal effectiveness seminar: A new 8 week
series with Let Davidson, Ph.D., on developing
self-awareness and self-confidence' integrity, commitment, creativity, vitality, peace of mind to make your life work, will meet Thursday's, 7:00-10:00 p.m., beginning April 4th. For more information and registration call 272-4131. Cosponsored by CRESP.

Personal Growth Workshops
Personal growth workshops: new series begins the week of April 15. Topics include Assertiveness, Building Self-Esteem, Building Satisfying Relationships, Stress Management, General Personal Growth, Women, Food and Self-Esteem. Holistic Health group tentative. Free and confidential. Open to all members of the Cornell community. Signups begin March 27. For more information or to sign up, call 256-3608 or stop by 103 Barnes Hall.

Biology & Society Pre-Registration Open House The Biology & Society Pre-Registration Open House is open to all Biology and Society faculty and students; also students interested in the major. It will be held Tuesday, April 9, 1985 from 3:00-5:00 p.m. in 609 Clark Hall. Refreshments will be served. Information will be available on Biology and Society courses, requirements and concentrations. For further information please call 256-3810.

Cornell Savoyards
The Cornell Savoyards are now seeking musical and dramatic directors, and designers for their fall '85 production of Gilbert and Sullivan's "The Mikado." Please contact Dan Ferguson at 277-0536 or 256-3919, or send resume to The Savoyards, Willard Straight Hall, Cornell University, Ithaca, NY 14853. Please respond by April 12.

Cornell Savoyards
The Cornell Savoyards, who brought you "H.M.S. Pinafore" last Fall, proudly present Gilbert and Sullivan's "Princess Ida" in the Alice Statler Auditorium. Four performances, one weekend only! Two evening performances: Friday

weekend only! Two evening performances: Friday and Saturday, April 12 and 13 at 8:15 p.m.; and two matinees: Saturday and Sunday, April 13 and 14 at 2:00 p.m. Tickets available as of April 1 at the Statler Box Office, or call 256-7263 for reser-

Linking Personal Problems to Issues of Gender,

Linking Personal Problems to Issues of Gender,
Race and Class

A panel presentation on Progressive Therapy by
Associates of the New York Institute for Social
Therapy and Research. The panelists are: Dr. Lois
Holzman, Research director, NY Inst. for Social
Therapy; Dr.. Lenore Fulani, Directory of Education, NY Inst. for Social Therapy, Coordinator of
Harlem Branch, NYIST. The presentation will be
held on April 8, at 7:30 p.m. in the Hoyt Fuller
Room, Africana Center, Cornell University.
Sponsored by the Women's Studies Program.

Ears, Empathy, Assistance and Referral Service tears, Empathy, Assistance and Referral Service is expanding hours. We are now available for free, confidential, counseling on Monday-Thursday from 3:00-11:00 p.m., Friday from 5:00-11:00 p.m., and Saturday from 7:00-11:00 p.m. Call us with any problem big or small at 256-EARS, or walk-in to 211 Willard Straight Hall.

Alternatives Library
Alternatives Library, Anabel Taylor Hall, Cornell Campus: Open to the public. Large selection of books, periodicals and tapes on holistic health and alternative medicine.

Off-Campus Housing Counselors
Students needed to serve as Off-Campus Housing Counselors (OCC's) in August. O.C.C.'s help new Cornell students find off-campus housing and aid in their adjustment to living in the community. Applications are available at the Straight desk, the Information and Referral Center in Day Hall, and 103 Barnes Hall. Deadline is Friday, April 26. For further information contact the Off-Campus Housing Office, 256-5373.

Engineering Career Forum

Housing Office, 256-5373.

Engineering Career Forum

Attention Freshman and Sophomore Engineers.
The next Engineering Career Forum in Geological Sciences/Agricultural Engineering is coming up on Wednesday, April 10 at 4:30 p.m. in Olin Hall, room 155. The Career Forums is a chance to hear firsthand about job opportunities for Geological Scientists/Agricultural Engineers from Standard Oil of Ohio representatives. A graduate student will also present the options of continuing education. For more information, contact the Engineering Admissions office at 256-5008. Sponsored by the Engineering Ambassadors Association.

Ornithology's Annual Book Sale

The Annual Book Sale of the Cornell Laboratory of Ornithology, Sapsucker Woods Road, will be from 8:00 a.m. to 4:00 p.m. on April 12 and 10:00 a.m. to 5:00 p.m. on April 13. Hundred of books, magazines and journals about birds. Proceeds support the Laboratory's Library.

Brown Bag Luncheon Discussion

There will be a brown bag luncheon discussion hosted by the Africana Studies and Research Center in the Hoyt W. Fuller Room at 310 Triphammer Road. The first discussion is on Friday. April

nosted by the Africana Studies and Research Cerin ter in the Hoyt W. Fuller Room at 310 Tripham-mer Road. The first discussion is on Friday, April 12, entitled "The New World Information and Communication Order: Implications for African and Afro-American Transactions," with Njoky Awa, Associate Professor in the Department of Communications Arts.

Colloquia

Monday
April 8, 12:15-1:15 p.m. 302 Uris Hall. "Butchers, Bribes and Bandits in Bolivia", with Erica Polakoff, Cornell University. Sponsored by the Department of Sociology.

Dance

Cornell Folkdancers
The Cornell Folkdancers meet in the North
Room of Willard Straight Hall every Sunday.
From 7:00 till 8:30 p.m. a review of workshop
dances, and 8:30 till 10:30 request dancing. Free,
no partners needed, beginners welcome. For more
information please call 257-3156.

Jitterbug Club
The Jitterbug Club dances the 1st, 3rd and 5th
Wednesday of every month from 9-11 p.m. in the
Edwards Room in Anabel Taylor Hall. We teach beginners from 9-10 p.m. Call Jim at 273-5268 for more information.

Scottish Country Dancing
Scottish Country Dancing. Everyone welcome.
Teaching for beginners is 8-10 p.m. Sundays. except the 1st week of every month. We meet Mondays, 8-10 p.m. at 213 S. Geneva Street. For more information call 272-6229.

Country Dancers
The Country Dancers meet each Tuesday
7:30-9:30 p.m. in Martha Van Rensselaer Hall
(lobby near "Martha's") for English and contra
dancing. No partners needed. Beginners
velcome-each dance is taught. For more information call Connie at 272-1931.

Israeli Folk Dancing
Israeli Folk Dancing
Israeli Folk-Dancing every Thursday from 8-11
p.m. in the One World Room, Anabel Taylor Hall.
Teaching from 8-9 p.m.; requests, 9-11 p.m. Call
Sharon at 272-4176 for more information.

Exhibits

Herbert F. Johnson Museum

"Order and Enigma: American Art Between the Two Wars", on view from February 20th through April 7th, is an exhibition of sixty-two paintings, prints, sculptures and drawings created between 1917 and 1941. Represented are Charles Burchfield, Stuart Davis, Arthur Dove, Edward Hopper, Georgia O'Keeffe, Grant Wood

and many others.
"Dyer's Art Weaver's Hand: Textiles from the Indonesian Archipelago", an exhibition comprised of approximately fifty textiles from private collections representing many of the islands of Indonesia, is on view from February 20th through May 1st. Cornell University's Southeast Asia Program is sponsoring the show in conjunction with the museum.

The Lagoor Cycle
Helen and Newton Harrison's "Lagoon Cycle"
(1972-1984), is an epic piece of over fifty largescale panels divided into seven sections, or lagoons. The work features a discourse between two characters who explore the ecological implications of cultivating Sri Lankan crabs as a new food source. Images include views of lagoons in Sri Lanka, close-ups of crabs, hand-colored aerial and satellite photographs, and maps. The exhibition will travel nationally after the Ithaca premiere. This exhibit will be presented from March 23 through June 2, at the Herbert F. Johnson Museum of Art.

Three Cornell Artists at Upstairs

The work of three Cornell artists will be featured at Ithaca's Upstairs Gallery beginning

Wednesday, April 10.

The oil, watercolors, and drawings of professor emeritus John Hartell will be on view through Friday, May 3. Hartell, 83, who taught architectural and art at Cornell and served as Chairman of the department of fine arts for 20 years, has achieved fame as a prominent American artist. His one-

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man shows include the inaugural exhibit at the John Hartell Gallery in Sibley Hall; the A.D. White Museum; The Art Gallery, Malott Hall; the Dallas Museum of Fine Arts; Hofstra University, Lehigh University; the Memorial Art Gallery, Rochester; Syracuse Museum of Fine Arts; Wells College; and New York City's Kraushaar Galleries--his representative since 1943.

The featured sculptor at the show will be Jack Squier, professor of sculpture in the College of Architecture, Art and Planning. Also on exhibition will be a selection of works by Ithaca artist Paul Chambers, who received his MFA from Cornell in 1978.

The Upstairs Gallery is located in the Dewitt Office Complex on Cayuga Street. Hours are: Tuesday through Friday, 11 a.m. to 3 p.m., and Saturdays from 11 a.m. to 1 p.m.

Films

Unless otherwise noted films are sponsored by Cornell Cinema.

Thursday

April 4, 8:00 p.m. •Uris Auditorium. "The Scarlet Letter", (1972), directed by Wim Wenders, with Senta Berger and Lou Castel. Open.

Friday

April 5, 7:00 p.m. •Uris Auditorium. "The Dresser", (1983), directed by Peter Yates, with Albert Finney and Tom Courtenay. Limited.

April 5, 9:30 p.m. •Uris Auditorium. "Murmilf of the Heart", (1971), directed by Louis Malle, with Lea Massari and Benoit Ferreux. Open.

Saturday

Saturday

April 6, 7:00 p.m. •Uris Auditorium. "The Dresser". (1983), directed by Peter Yates, with Albert Finney and Tom Courtenay. Limited.

April 6, 9:30 p.m. •Uris Auditorium. "Our Man in Havana", (1960), directed by sir Carol Reed, with Alec Guiness and maureen O'Hara.

Open.

Sunday

April 7, 8:00 p.m. •Uris Auditorium. "Cleopatra", (1963), directed by Richard Burton, with Elizabeth Taylor and Richard Burton. Limited.

Monday

April 8, 7:00 p.m. •Uris Auditorium. "Brighton Rock", (1947), directed by John Boulting, with Richard Attenborough and Hermione Baddeley. Open. Cosponsored by the English Department.

April 8, 9:00 p.m. •Uris Auditorium. "Two English Girls", (1972), directed by Francois Trruffant, with Jean-Pierre Leaud. Film Club Members Only.

Tuesday
April 9, 4:30 p.m. L-04 Uris Library. "Peasant Ecology in the Philippines", color, 26 minutes. Shows the complex interactions between culture with and ecology in village Philippines. Shown with "Malnutrition in the Third World", color, 28 minutes. The ecology of malnutrition in the Philippines. Cosponsored by the Southeast Asia Pro-

April 9, 8:00 p.m. *Uris Auditorium. ''Mar-a/Sade'', (1967), directed by Peter Brook, with Patrick Magee and Glenda Jackson. Limited. Co-sponsored by NYSCA.

Wednesday

April 10, 4:30 p.m. Uris Auditorium. ''Bad

April 10, 4:30 p.m. Uris Auditorium. "Bad Boys", (1960), directed by Susumo Hani, with Yu-kio Yamada and Hirokaza Yoshitake. Open. Co-

kio Yamada and Hirokaza Yoshitake. Open. Cosponsored by China-Japan Program.

April 10, 4:30 p.m. Uris Library Media Room.

"The Other Side of Terror", followed by discussion with Jeffrey Ross, National Division of Campus Affairs, Anti-Defamation League, and former Professor of Political Science at Hamilton College and Syracuse University.

April 10, 8:00 p.m. •Uris Auditorium. "Testament", (1983), directed by Lynne Littman, with Jane Alexander and William Devane. Cosponsored by November 11th Committee.

Friday

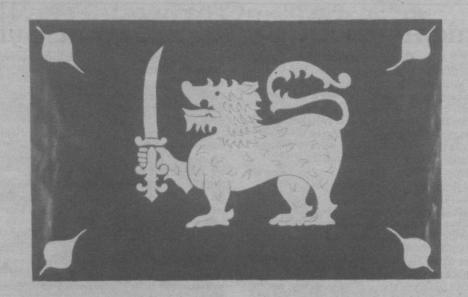
Friday
April 12, 8:00 p.m. • Anabel Taylor Hall.
"Steamboat Bill, Jr.", (1928), directed by Charles
Reisner, with Buster Keaton. Open. Show with
"Our Hospitality", (1923), directed by Buster
Keaton and John Blystone, tih Buster Keaton and Norma Talmadge

April 12, 10:15 p.m. • Uris Auditorium. "Greystoke", (1983), directed by Hugh Hudson, with Christopher Cambert and Ralph Richardson.

Saturday
April 13, 10:30 a.m.-12:00 p.m. Johnson Museum. "Norman the Doorman", a film about a mouse who lives in the cellar of the Majestic Art Museum. Sponsored by the Johnson Museum.

April 13, 7:00 p.m. •Uris Auditorium.

"Greystoke", (1983), directed by Hugh Hudson.



The First Lagoon: The Lagoon at Upouveli is one of the parts of the exhibit The Lagoon Cycle at the Herbert F. Johnson Museum of Art. Artists are Helen Mayer Harrison and Newton Harrison. The exhibit continues through June 2.

With Christopher Cambert and Ralph Richardson.

April 13, 9:45 p.m. •Uris Auditorium. "The Tempest", (1980), directed by Derek Jarman, with Heathcote Williams and Karl Johnson. Open. Co-

April 13, 12:00 a.m. •Uris Auditorium. "Inva-sion of the Body Snatchers", (1956), directed by Don Siegel, with Kevin McCarthy and Dana

Sunday

April 14, 8:00 p.m. • Uris Auditorium. "Bitter Victory", (1958), directed by Nicholas Ray, with Richard Burton and Curt Jurgens. Open.

Lectures

April 8, 7:30-9:00 p.m. One World Room.
How T.V. Alters the Thought Environment",
With Rose Goldsen, Professor of Sociology. Sponsored by the Center for World Community and IRIM.

Tuesday

April 9, 4:30 p.m. Hollis E. Cornell Auditorium, "The Judaeo-Islamic Tradition", with Bernard Lewis, Cleveland E. Dodge Professor of Near Eastern Studies, Princeton University. Sponsored by the Department of Near Eastern Studies.

April 9, 8:00 p.m. Founders Room, Anabel Taylor Hall. "Medical Ethics", with Rabbi Elie Silberstein. Sponsored by Hillel.

Wednesday

April 10, 7:30-9:00 p.m. One World Room, Anabel Taylor Hall. "How T.V. Alters the Hought Environment", with Rose Goldsen, Professor of Sociology. Sponsored by the Center for World Community and IRIM.

Friday

Friday April 12, 4:30 p.m. 230 Rockefeller Hall. "A Gathering of Poets: The Japanese Linked Verse Tadition", by Donald Keene, Professor, Japanese Literature, Columbia University. Sponsored by the Children and Columbia University. by the China-Japan Program and the Society for the Humanities.

April 12, 4:00-6:00 p.m. Hollis E. Cornell Auditorium.

lonium. "Late Bronze Age News from Cyprus", with Vassos Karageorghis, Director of the Depart-University Lectures Committee.

Meetings

Cornellesbians holds weekly meetings. Call lonio

Opic.
The Cornell Outing Club holds weekly meetlngs. The meeting time is 7:30 at Japes (behind Noyes Lodge with the canoes on the roof).

Thursday
Loft III, Willard Straight Hall at 7 p.m. Disinformation.

Music

Two Concerts to Feature Haydn

Two concerts featuring the music of Joseph Haydn will be presented by the Cornell Chamber Opera Ensemble at 8:15 p.m. Saturday, April 13, and at 4 p.m. Sunday, April 14, both in Barnes Hall.

Programs for the free, public concerts will feature Mimmi Fulmer in the title role of La Canterina" (the songstress)--an early opera buffa about the adventures of a lady
of easy virture and her two lovers. Other cast hembers are sopranos Patrice Pastore and Marina Gilman and tenor David Shefsiek. Jim Cassaro is the stage director.

Other works will include the C-Major Vioin Concerto with soloist Sonya Monosoff, and Symphonies No. 7 ("le Midi") and No. 8 ("le Soir").

April 8, 8:15 p.m. Sage Chapel. Organ Recital: nettle Hanslowe, Edith Read. Work of Bach, Versic, Rossini. Sponsored by the Department of Mu-

April 9, 8:15 p.m. •Statler Hall. Heinz Holliger, D. Scarlatti, Couperin (Series concert). Sponsored mittee on Music.

Thursday
Colloquium: John Harbison, guest composer:
Music of Jerome Kern'', (Contemporary Music

Festival). Sponsored by the Department of Music.

Saturday
April 13, 4:00 p.m. Barnes Hall. Student Recital: Jennifer Widom, trumpet, with assisting instrumentalists. Works of Torelli, Cohen, Hindemith, Farnaby. Sponsored by the Department of

April 13, 8:00 p.m. • Anabel Taylor Auditorium. Balinkie Productions and the Commons Coffeehouse will present Billy Novick and Guy Van Duser in concert. When you first hear the music of Billy Novick and Guy Van Duser, you may think you're hearing one of the classic jazz groups of the 1930's. All of the ear carbing qualities of the 1930's. All of the ear-catching qualities of the swing era—the cleverly crafted arrangements, joyful interplay, and, of course, the swinging feel—are strikingly evident in the duo's music. Tickets for this concert are \$5.00 in advance and \$5.50 at the door, and are available at the Ithaca Guitar Works, Borealis Books and the Commons Coffee house at Cornell. For more information, call (607)

April 13, 8:15 p.m. Barnes Hall. Haydn Opera: "La Canterina' and other Haydn works. Vocalists: Mimmi Fulmer, Marina Gilman, Patrice Pastore, David Shefsiek; Sonya Monosoff, violin; Cornell Chamber Opera Ensemble directed by Fred Cohen. Sponsored by the Department of Music and the Cornell Council of the Creative and

Sunday
April 14, 4:00 p.m. Barnes Hall. Haydn Opera:
"La Canterina" and other Haydn works. Vocalists: Mimmi Fulmer, Marina Gilman, Patrice Pastore, David Shefsiek; Sonya Monosoff, violin; Cornell Chamber Opera Ensemble directed by Fred Cohen. Sponsored by the Department of Music and the Cornell Council of the Creative and Performing Arts.

Religious Events

Makhela

Makhela (Hebrew choir) will resume meeting on Sunday, April 14 at 9:00 p.m. in the Edwards Room, Anabel Taylor Hall.

Passover
Because Passover begins during Spring Break
this year, Hillel will not be holding Seders or other
Passover meals. Haggadot will be available to borrow from the Hillel office.

Jewish/non-Jewish relationship
Open discussion for people involved in Jewish/non-Jewish relationships, Wednesday, April 10,
at 7:30 p.m. in the Hillel office, G-34 Anabel Taylor Hall.

Religious Services

Saturday
April 6, 9:15 a.m. Edwards Room, Anabel Taylor Hall. Shabbat Services, Orthodox Minyan.
Sunday
April 7, 11:00 a.m. Sage Chapel. (Easter) Robert L. Johnson, Director, CURW.
April 14, 11:00 a.m. Sage Chapel. Nancy
Gaenslen, Lecturer, Department of Modern Languages & Linguistics, Cornell University.

Catholic

Mon.-Fri., 12: 15 p.m. Anabel Taylor Chapel.
Catholic Mass.
Every Sectors

Every Saturday, 5 p.m. Anabel Taylor Auditorium. Catholic Mass.

Every Sunday, 9:30 & 11 a.m., 5 p.m. Anabel
Taylor Auditorium. Catholic Mass. Sacrament of
Reconciliation by appt. G-22 Anabel Taylor Hall.
Christian Science
Every Thursday, 7 p.m. Anabel Taylor Founders Room

ers Room.

Episcopal Every Sunday, 9:30 a.m. Anabel Taylor

Friends (Quakers)
Every Sunday Anabel Taylor Edwards Room.
Meeting for Worship at 11 a.m.; Adult Discussion
and First Day School at 9:45 a.m. Babysitting

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

Lutheran Every Sunday, 10:45 a.m. Worship Service. Sunday Church School at 9:30 a.m.

Every Friday, 1 p.m. Anabel Taylor Edwards Room. Juma Prayer. Anabel Taylor 218, Zuhr, Asr and other prayers. Every Sunday, 12:30 p.m. Anabel Taylor Hall. Sunday meeting, discussion groups, children's classes, etc.

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

Seventh Day Adventists
Every Friday, 7: 30 p.m. Anabel Taylor Room

Seminars

Animal Science: "Genetic Size-Scaling; Does It Work?" Michael L. Thonney, associate professor, animal science, 11:15 a.m. Monday, April 8, 348 Morrison Hall.

Astronomy: "Planetary Rings," Dick French, MIT, 4:30 p.m. Tuesday, April 9, 105 Space Sci-

Biology & Society: "An Ecosystem Paradigm in Agriculture," Dr. Benjamin R. Stinner, Department of Entomology, Ohio State University, 12:15 p.m. Monday, April 8, 609 Clark Hall.

Biology & Society: "Agricultural Research in Central America; Scale of Production, Research Design and Beneficiaries," Dr. Alison G. Power, Department of Zoology, University of Washington — Seattle, 12:15 p.m. Wednesday, April 10, 701 Clark Hall.

Biophysics: "Optical Mapping of Neuronal Activity; From Single Growth Cones to Intact Brain," Amiram Grinvald, The Rockefeller University; 4:30 p.m. Wednesday, April 10, 700 Clark Hall.

Hall.

Boyce Thompson Institute: "Locus of Nitrogenase in Frankia, in Culture and in Symbiosis," Dr. J. Torrey, Harvard Forest, Petersham, 3:15 p.m. Wednesday, April 10, BTl Auditorium.

Chemical Engineering: "Transport Properties of Models of Macromolecules in Solution," Prof. Howard Brenner, Chemical Engineering, MIT, 4:15 p.m. Tuesday, April 9, Olin 145(A).

Design and Environmental Analysis: "Redesign of the Shuttle Space Suit Glove," Cheryl Gomes, ILC Dover, 4:30 p.m. Monday, April 8, 317 Van Rensselaer Hall.

Ecology: "Ecology of Conservation Tillage Sys-

Ecology: "Ecology of Conservation Tillage Sys-

Ecology: "Ecology of Conservation Tillage Systems," Bengamin R. Stinner, Entomology, Ohio State University, 4:30 p.m. Monday, April 8, Morison Seminar Room, Corson Hall.

Ecology: "The Spread of an Insect-Vectored Disease in Tropical Maize," Alison G. Power, Zoology, University of Washington — Seattle, 4:30 p.m. Wednesday, April 10, Morison Seminar Room, Corson Hall.

Room, Corson Hall.

Ecology and Systematics: "Zooplankton Feeding: Food Capture at Low Reynolds Number,"
Mimi A. R. Koehl, Zoology, University of California, Berkeley, 4:45 p.m. Thursday, April 4,
Morison Seminar Room, Corson Hall.

Ecology and Systematics: "The Science of Sur-

prise: Taradigms of Ecological Function and Structure," C. S. (Buzz) Holling, Institute of Ani-Structure, 'C. S. (Buzz) Holling, Institute of Animal Resource Ecology, University of British Columbia, Vancouver, 4:30 p.m. Tuesday, April 9, Morison Seminar Room, Corson Hall.

Floriculture and Ornamental Horticulture:

"American Horticulture; A Historical Perspective," Brenda Bullion, 12:15 p.m. Thursday, April 11, 37 Plant Science.

Food Science: "Academic View of Food Science in Greece," Evan Paneras, Aristotelian University of Thessaloniki, Greece, 4:30 p.m. Tuesday, April 9, 204 Stocking Hall.

of Thessaloniki, Greece, 4:30 p.m. Tuesday, April 9, 204 Stocking Hall.

Geological Sciences: "Styles of Crustal Accretion in the Pacific Northwest," 4:30 p.m. Thursday, April 11, with Darrel Cowan, University of Washington, 1120 Snee Hall.

Geology: "New COCORP Results in the Southeastern U.S.," D. Nelson, 4:30 p.m. Thursday, April 4, 1120 Snee Hall.

History and Philosophy of Science and Technology: "Amateurs, Professionals and the Origins of Solar Physics, 1815-1905," Prof. Karl Hufbauer, History, University of California, Irvine, 435 p.m. Wednesday, April 10, 165 McGraw Hall.

Manufacturing Engineering (COMEPP): "Philosophies of Manufacturing Systems," Keith Gardiner, IBM Manufacturing Technology Institute, 4:30 p.m. Thursday, April 11, 282 Grumman Hall.

Material Science and Engineering: "Materials and Process Applied to Large Scale Computer Packaging Technology," Warren Grobman, IBM (Fishkill), 4:30 p.m. Thursday, April 11, 140 Bard

Hall.

Mechanical and Aerospace Engineering: "Simplicity in Mechanical Design," Prof. D. W. Pessen, on leave from The Technion, 4:30 p.m. Tuesday, April 9, 282 Grumman Hall.

Microbiology: "Overlapping RNA Polymerase Binding Sites and CAP-cAMP Control of the Lactose Operon," Dr. William Reznikoff, Biochemistry, University of Wisconsin, 4:30 p.m. Thursday, April 11, 124 Stocking Hall.

Ornithology: "Of Calidris Canutus and Kings: Know Your Average Love Story," Pete Dunne,

Ornithology: "Of Calidris Canutus and Kings: Know Your Average Love Story," Pete Dunne, Cape May Bird Observatory, 7:45 p.m. Monday, April 8, Laboratory of Ornithology.

Operations Research: "Recent Advances in the Decomposition to Linear Programming," Prof. James K. Ho, University of Tennessee, 4:30 p.m. Tuesday, April 9, 107 Upson Hall.

Pharmacology: "The Composition of Adrenal Chromaffin Granules Using Electron Microscopic Elemental Analysis," Richard Ornberg, National Institutes of Health, 4:30 p.m. Monday, April 8, D-105 Pierre A. Fish Laboratory.

Physiology: "Uptake and Metabolism of Thy-

roid Hormones by the Kidney," Tim DeVoogd, Psychology, Cornell, 4:30 p.m. Tuesday, April 16, G-3 Veterinary Research Tower.

Plant Pathology: "Sclerotinia Sclerotiorum on Cabbage and Colletotrichum Coccodes on Tomatoes; First Impressions, 1984 Field Observations, and Needed Research," Dr. Helene Dillard, NY-SAES, Geneva, 4:30 p.m. Tuesday, April 9, 404 SAES, Geneva, 4:30 p.m. Tuesday, April 9, 404 Plant Science.

Plant Science.

Plasma Studies: "Muon Catalyzed Rusion,"
Dr. R. M. Kulsrud, Princeton Plasma Physics
Laboratory, 4:30 p.m. Wednesday, April 10, 282
Grumman Hall.

Remote Sensing: "Review of Remote Sensing
Activities of the U.S. Forest Service," R. Allison,
USDA Forest Service, Washington, D.C., 4:30
p.m. Wednesday, April 10, 110 Hollister Hall.

Vegetable Crops: "Vegetable Legumes in Indonesia," Charles Daloz, Graduate Student, Vegeta
ble Crops, 4:30 p.m. Thursday, April 11, 404
Plant Science Building.

Plant Science Building.

Sports

Saturday April 6, 10:30 a.m. Schoellkopf. Women's La-

April 6, 2:00 p.m. Schoellkopf. Men's Lacrosse-

April 8, 3:30 p.m. Schoellkopf. Men's J.V. La-

crosse-Hobart.
April 9, 1:00 p.m. Hoy Field. Men's Baseball-

Army (2).
April 9, 4:00 p.m. Moakley Course. Men's
Track-Oxford-Cambridge.
April 9, 4:00 p.m. Moakley Course. Women's
Track-Oxford-Cambridge.
Thursday
How Field, Men's Baseball-

April 11, 3:30 p.m. Hoy Field. Men's Baseball-RIT.

Friday
April, 12, 4:00 p.m. Cascadilla Courts. Women's Tennis-Yale. Saturday
April 13, a.m. Inlet Flood Control. Men's

Heavyweight Crew-Yale.

April 13, a.m. Inlet Flood Control. Men's
Lightweight Crew-Platt Cup with Princeton and

April 13, 11:00 a.m. Schoellkopf. Women's La-

April 13, 12:00 p.m. Cascadilla Courts. Women's Tennis-Brown Tennis-Brown.

Sunday

April 14, a.m. Inlet Flood Control. Men's Heavyweight Crew-Rutgers.
April 14, a.m. Inlet Flood Control. Men's Lightweight Crew-Yale.

Theater

Risley Theater Presents "Bent"

"Bent," a play by Martin Sherman, will be presented at 8:30 p.m. Thursday through Saturday, April 11 to 13, and the same time Thursday through Saturday, April 18-20, as well as 2:30 p.m. April 14 and 21, at the Risley Theater. Tickets at \$3 each are available at the Risley Theater Box Office and at Willard Straight

Thursday-Saturday
April 11,12 & 13, 8:15 p.m. Willard Straight
Theatre. "Three Sisters", directed by M.F.A. candidate Anthony Cronin. Mr. Cronin is knwon to local theatre goers from his direction of "Our Town", "Confessional", and "The Gas Heart", as well as the Summer Shakespeare Festival on the Cornell Campus during the summer. Three Sisters is an eloquent, sensitive and bittersweet story of is an eloquent, sensitive and bittersweet story of three women, trapped in a provincial Russian town, lamenting the passing of bitter times, and longing for the excitement of Moscow. Reservations for Three Sisters may be obtained by calling the Theatre Cornell box office at 607-256-5165.

Sunday

April 14, 2:30 p.m. Willard Straight Theatre.

"Three Sisters" directed by M.F. A. candidate.

"Three Sisters", directed by M.F.A. candidate Anthony Cronin. Mr. Cronin is known to local Anthony Cronin. Mr. Cronin is known to local theatre goers from his direction of "Our Town", "Confessional", and "The Gas Heart", as well as the Summer Shakespear Festival on the Cornell Campusduring the summer. Three Sisters is an eloquent, sensitive and bittersweet story of three women, trapped in a provincial Russian town, lamenting the passing of bitter times, and longing for the excitement of Moscow. Reservations for Three Sisters may be obtained by calling the Theatre Cornell box office at 607-256-5165.

University Personnel Services Day Hall Ithaca, New York 14853 607/256-5226

Please Note:

Job Opportunities is a publication of Staffing Services and is distributed each Thursday through the Cornell Chronicle.

Job Opportunities lists current vacancies within the University's consistent with the University's commitment to promotion from within, affirmative action, and equal opportunity employment.

Applications for employment are available at Cornell University's employment office at East Hill Plaza at the intersection of Ellis Hollow Road and Judd Falls Road in Ithaca, from 9:00 a.m. to 12:00 noon, Monday through Friday. Applications can be submitted through the mail to University Personnel Services, Staffing Services, 160 Day Hall, Ithaca,

N.Y. 14853. For more information on jobs listed, contact Staffing Services (607) 256-5226.

256-5226.
Employee Transfer Applications:
Employees who wish to transfer to other
jobs within the University should
complete a separate Employee Transfer
Application form for each position and
submit them to Staffing Services.
Individuals with official University layoff
status will be given preference in
referrals.

This listing is also available on CUINFO

Cornell University's computerized infomation service. For further CUINFO details, contact the Information and Referral Center at 256-6200 or Computer

Services.

New vacancies are listed for two weeks

New vacancies are listed for two weeks in Job Opportunities.

*Asterisks identify jobs that were not listed last week.

Full-time jobs are 39 hours per week unless otherwise indicated. Jobs listed as SO, U1 and U2 are represented by bargaining units.

*Asterisks identify jobs that were not listed last week

Job Opportunities

Administrative/Professional

The minimum salaries listed are for re cruitment purposes only

*Position: Stockkeeping Manager Department: Lab of Nuclear Studies Description: Manage the stockkeeping, shipping, receiving and equipment inventory activities of a high energy physics laboratory with an annual budget of \$24 million. Will supervise four stockkeepers in other areas of campus.

Requirements: Bachelor's degree or equiva-

Requirements: Bachelor's degree or equiva-lent combination of training and experience in stockkeeping—warehousing. Knowledge of data base management and EDP systems, pre-ferably in FORTRAN; strong organizational and supervisory skills; ability to perform with limited supervision. Apply in person at our East Hill Plaza Office from 9:00 a.m. - 12:00

noon. Job Number: PS1310

*Position: Computer Systems Administrator Department: School of Hotel Administration Description: Reporting to the Director of Business and Administration, will develop,

Business and Administration, will develop, modify and maintain computer operations for the School and Statler Inn. Responsibilities include project development and implementation in addition to supervision of one programmer. Requirements: Bachelor's degree in computer science or related field. At least three years relevant experience including project management and systems analysis. Must have working knowledge of COBOL. Familiarity with the WANG VS system desirable. Knowledge of the Cornell accounting system helpful. Familiarity Cornell accounting system helpful. Familiarity with file management, report utilities, data base—telecommunications and word processing concepts preferred. Prior experience in a hotel environment preferred. Send cover letter and resume to Cynthia Smithbower.

Job Number: PT132

*Position: Data Analyst Department: Institutional Planning and

Description: Coordinate and prepare re sponses to standard requests for institutional data; collect and summarize data in support of university studies and publications. Assist of-fice staff and director on special projects as

Requirements: Bachelor's degree or equiva-lent experience. Some related work experience preferred. Initiative, thoroughness and ability to handle multiple projects essential. Attention to detail, capacity to work under pressure, and skills in summarizing data and preparing reports necessary. Strong communication and in-terpersonal skills necessary. Familiarity with personal computer spreadsheet software desira-ble. Please send cover letter and resume to Cyn-thia Smithbower. Job Number: PT139

*Position: Applications Programmer—Ana-

Department: University Registrar
Description: Direct, organize, schedule and
supervise a computer programming group of 3-

supervise a computer programming group of 3-5 staff. Analyze system requirements and prepare programming specifications for programming projects conducted by this staff.

Requirements: Bachelor's degree with computer-related courses. 3-7 years of experience in application design and development, preferably in an interactive environment. Familiarity with

IBM or WANG VS equipment preferred Please send cover letter and resume to Cynthia Smithbower.

Minimum Starting Salary: \$20,000

Job Number: PT134

*Position: Maintenance Inspector—Supervisor (Bowling Center Manager)
Department: Physical Education & Athletics
Description: The Manager is responsible for

Description: The Manager is responsible for operating a cost efficient recreation center and will be personally involved in physical education classes, Intramurals, open bowling, pro shop and a lounge serving alcoholic beverages. Promotion of league play is vital to the operation. Supervise two subordinates and provide maintenance care of facility and equipment. Requirements: High school diploma or equivalent. Bachelor's degree in recreation helpful. Must have proven experience in management of a successful bowling center and in

neipful. Must have proven experience in management of a successful bowling center and in teaching bowling. Mechanical, sales and supervisory skills required. Familiarity with AMF equipment preferred. Apply in person to East Hill Plaza Office, Judd Falls Road, between 9:00 a.m. and 12:00 noon daily.

Job Number: PS138

*Position: Research Support Specialist II Department: Design & Environmental Anal-

ysis
Description: Assist in experimental design, experimentation, analysis of data, publishing of research in textile science. Conduct research using electron microscopy and x-ray microanalysis to study surfaces and microstructure of

Requirements: Bachelor's degree in textile, material science or chemistry. Master's degree in a physical science preferred. Some experience in microtomy, microscopy, chemistry, statistics, textile or material science helpful. Please send cover letter and resume to Cynthia Smith-

bower. Minimum Starting Salary: \$13,625 Job Number: PT133

*Position: Research Support Specialist Department: Entomology - Geneva, NY Description: Design, plan and perform bio-synthesis experiments of insect sex pherosynthesis experiments of insect sex pheromones. Work with stable and unstable isotopes, analyze by capillary GLC and mass spectrometer, and synthesize various precursor chemicals. As senior author, prepare scientific papers for publication.

Requirements: Bachelor's degree or equivalent in chemistry. Master's degree or equivalent preferred. Research experience with microana-

preferred. Research experience with microanalytical techniques, capillary GLC, mass spectrometer, organic synthesis and isotope labelling studies. Ability to design and plan organic synthesis experiments and perform microsurgery. Please send cover letter and resume to Cynthia Smithbower.

Minimum Starting Salary: \$13,625

Job Number: PT131

Position: Technical Advisor

Department: Theory Center
Description: Reporting directly to the Manager of Experimental Systems and Networks, ager of Experimental Systems and Networks, provide direction and supervise the upgrade and expansion of a high speed network, and supervise development of software for experimental supercomputers.

Requirements: Bachelor's degree or equivalent with completion of related computer science coursework. Considerable experience in large scale computer systems software pro-

large scale computer systems software, programming experience and techniques. Exten-

sive knowledge of UNIX and VMICMS. Please send cover letter and resume to Cynthia Smith-

Job Number: PT1210

Position: Technical Specialist II

Department: Theory Center
Description: Work directly with supercomputer users to assist in solving problems in the theoretical sciences using unique resources of massively parallel systems. Provide direction to research process including definition of problem and objectives, outline and testing of pro-

cedures and techniques.

Requirements: Bachelor's degree or equiva-Requirements: Bachelor's degree or equiva-lent with graduate study in computer science, one of the physical or biological sciences, or en-gineering. 5 - 7 years experience including 1 - 2 years analysis, design, implementation and—or maintenance or a major interactive computer system. Experience with parallel systems desira-ble. Fluency in at least two programming lan-guages; commitment to UNIX. Please send cover letter and resume to Cynthia Smithbow-er.

Job Number: PT129

Position: Technical Specialist I
Department: Theory Center
Description: Work directly with supercomputer users to assist in solving problems in the theoretical sciences using unique resources of massively parallel systems. Work with scientist in algorithm development; develop methodolo-

gy for utilizing parallel systems.

Requirements: Bachelor's degree or equivalent. 3 - 5 years experience. Sound knowledge of operating systems and programming. Experience with parallel systems desirable. Fluency in at least two programming languages; commitment to UNIX. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT128

Position: Senior Systems Programmer

Position: Senior Systems Programmer
Department: Theory Center
Description: Provide, under general supervision, highly specialized systems support to an advanced graphics program. Develop highly specialized and complex large scale operating systems, software and hardware. Design and oversee engineering modifications on extension to such operating systems to meet organization. to such operating systems to meet organizational goals for computer usage. Responsible for overall system efficiency. Oversee development of scientific work stations.

Requirements: Bachelor's degree or equiva-

lent with related computer courses. 3 - 5 years experience. Knowledge of UNIX, microcomputers and graphics hardware devices. Ability to program in FORTRAN, C, PASCAL, and Assembler. Please send cover letter and resume to Cynthia Smithbower. Job Number: PT124

Position: Systems Programmer III
Department: Theory Center
Description: Participate, under general supervision, in major upgrade and expansion of high speed network connecting superminicomputers and scientific workstations to a production supercomputer facility as well as experimental systems. Participate in development of software for prototype systems.

Requirements: Bachelor's degree or equivalent. 3 - 5 years minimum experience. Considerable basic knowledge of operating systems,

able basic knowledge of operating systems, programming, procedures and techniques. Operating systems, e.g. 4.2 BSD UNIX; TCP—IP

Protocols. Please send cover letter and resume to Cynthia Smithbower. Job Number: PT123

Position: Applications Programmer III

Department: Theory Center
Description: Design and implement, under
general supervision, complex applications
software for high speed network and experimental systems.

mental systems.
Requirements: Bachelor's degree or equivalent desired. 3-5 years experience. Considerable basic knowledge of major programming languages, particularly C—UNIX. Considerable experience with applications programming. Please send cover letter and resume to Cynthia Smithbower. Smithbower.

Job Number: PT125

Position: Business Manager

Position: Business Manager
Department: Unions and Activities
Description: Responsible for preparation of
annual budget, quarterly and related reports,
accounts receivable and payable, payroll and
personnel. Strong organizational ability and accuracy essential.
Requirements: Bachelor's degree inbusiness
administration—accounting necessary. Mas-

Requirements: Bachelor's degree inbusiness administration—accounting necessary, Master's degree preferred. Excellant communication and interpersonal skills and substantial experience in student activities required. Please send cover letter and resume to Ralph D. Jones by April 18, 1985.

Job Number: PA1211

Position: Systems Programmer I (Repost)
Department: Electrical Engineering
Description: Supervise daily operation of
general purpose computer systems including
UNIX and VMS. Responsible for maintaining
operating systems including installation and

operating systems including installation and modification of new releases and making backups of these systems. Assist in isolation and diagnosis of software problems. Provide training and consultation for users.

Requirements: Bachelor's degree or equivalent in computer science. Some related programming experience with familiarity with UNIX operating system and software diagnosis. Good communication, interpersonal and organization skills. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT083

Position: Systems Programmer II

Position: Systems Programmer II
Department: Theory Center
Description: Assist, under general supervision, in upgrade and expansion of high speed network and in development of software for prototype systems.

Requirements: Bachelor's degree desired. 2-3 years minimum experience. Basic experience with operating systems, programming, procedures, and techniques. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT122

Position: Applications Programmer II
Department: Theory Center
Description: Assist, under general supervision, in design, development modification, maintenance and documentation of straight forward applications of the propert of the straight forward applications of the forward applications software in support of a major high speed network and experimental

systems.

Requirements: Bachelor's degree desired. 2 Requirements: Bachelor's degree desired. 2-3 years experience. Basic experience with applications programming. Knowledge of C—UNIX and at least one other major programming language. Familiarity with VAX, IBM 2081, mini—microcomputers, and network communications. Please send cover letter and resume nications. Please send cover letter and resume to Cynthia Smithbower, Job Number: PT126

Position: Programmer—Analyst 1
Department: Computer Services (APS)
Description: Work as a member of a project
team to install and maintain batch and interactive programs of an overall administrative system. Write production procedures and JCL. Interface with production procedures and JCL. Interface with production control clarks

terface with production control clerks.

Requirements: Bachelor's degree or equivalent with computer related courses. A knowledge of applications for interactive administrational control in the computer related courses. edge of applications for interactive administra-tive systems and data base concepts desirable. Some experience with machine architecture, programming languages (such as PL—1, NAT-URAL, COBOL, MARK IV) and system utility programs necessary. Please send cover letter and resume to Cynthia Smithbower. Job Number: PT1213

Position: Student Development Specialist III Department: Division Student Services

Counseling Office
Description: Responsibilities include counseling undergraduates and orientation of new students; special counseling programs for minority students; tutorial programs for EOP students; liaison with University Office of Minority Affairs and Learning Skills Center and other counseling functions

counseling functions.

Requirements: Master's degree in counseling

Or related fields required. Three years experience in individual and group counseling, pre-lerably in a higher education setting; compelence in development and implementation of Programs; demonstrated ability to effectively counsel minority students. Please send cover letters. letter and resume to Ralph D. Jones.
Job Number: PA1212

Position: Research Support Specialist I (Re-

Department: Food Science and Technology, Geneva

Description: Perform microbiological and Description: Perform microbiological and chemical—biochemical research; plan experiments in conjunction with professor; maintain detailed, concise, clear laboratory notebook; search literature, maintain cleanliness and orderliness in laboratory; assist with pilot plant experiments.

experiments.

Requirements: Bachelor's degree in chemistry—biochemistry with strong microbiology minor, or Bachelor's degree in microbiology with a specific process. with strong chemistry—biochemistry minor;
Master's degree preferred. Academic and—c ndustrial research experience is highly desiraexperience in microbial genetics desired.

ase send cover letter and resume to Cynthia

Minimum Starting Salary: \$13,625 Job Number: PT094

Position: Director, Production Supercom-puter Facility

Department: Theory Center
Description: Provide administrative and
managerial support to a new research facility.
Major responsibilities include developing and
implementing an operating plan and budget, helementing an operating plan and budget, versee staffing of facility as well as act as lia-

Requirements: Ph.D. in scientific field desirable in addition to some experience in computer ion. At least three years experience in senior management position, preferably in computer Management position, preferably in computer services environment. Please send cover letter and resume to Cynthia Smithbower.

Job Number: PT113

Position: Technical Consultant Department: Residence Life Description: Coordinate management sysems in Residence Life, a \$16 million enterprise responsible for on campus housing for 7,000 dudents. Design plans for current and future rain (hardware and software) development. Residence Life staff in use of mainframe and micro computers.

micro computers. Provide maintenance for

departmental equipment.
Requirements: Bachelor's degree with related on puter courses. Proven knowledge and expendence in the courses of the course of the c nce in management systems, both micro
nputer and mainframe based required. Exlence with ADABAS—NATURAL and micomputer software is extremely helpful. lity to work independently and collaborate Sover letter and resume to Cynthia Smithbow-

Job Number: PT117

Position: Communications Production
Coordinator
Department: University Development
Description: Coordinate the printing and
Collings of fund-raising communications, broduires, newsletters, alumni solicitation letters
and invitations. Maintain records of production and distribution costs.

n'and distribution costs.

Requirements: Associate's degree or equivadi. Experience in graphic arts and fund raisghelpful. Excellent communications and inpersonal skills with superior abilities in
of teading. Please send cover letter and reoof reading. Please send cover letter and re-to Ralph D. Jones.

Number: PA118

Osition: Research Support Specialist II

Cpartment: Animal Science

escription: Provide support in research efto improve the economic efficiency of

production through more effective manment. Programming and documentation of ation and data analysis; write up results.

I pate in team effort aimed at modeling fulation of various components in dairy ction systems.

Accition syst

Osition: Research Support Specialist
Department: Food Science
stop Provide technical support in restop of the properties of proteins. Will
factors affecting surface area and flavor abstion, in addition to protein association, visy, gelation and surface activity. Help

maintain laboratory instrumentation and coordinate purchasing and instrument use. Assist in supervision of lab operations.

Requirements: Bachelor's degree in physical

chemistry, materials science or chemical engineering. Master's degree preferred. Knowledge of physical chemistry of proteins. Experience in physical testing of biological—food materials as well as coordinating and maintaining a research laboratory. Please send cover letter and resume to Cynthia Smithbower.
Minimum Starting Salary: \$16,000

Job Number: PT102

Position: Systems Analyst II Department: University Personnel Services Description: Under the supervision of the Manager, Human Resource Information Systems, design, implement, maintain and enhance mainframe and microcomputer systems for the Personnel area; provide leadership and func-

tional supervision as project team leader as as-

signed.

Requirements: Bachelor's degree including computer courses. At least two years experience in administrative programming and operations. Familiarity with at least one high level language necessary. Knowledge of ADABAS—Natural preferred. Please send cover letter and resume to Cynthia Smithbower Job Number: PT103

Clerical

All applicants interested in positions requiring typing must take an official University test. Tests are given on Monday and Wednesday at 8:00 A.M. in Room 337, Statler Hall. Please contact Staffing Services for an appointment

*Position: Accounts Coordinator, GR24 *Position: Accounts Coordinator, GR24
Department: Restricted Fund Accounting
Description: Monitor financial activity of restricted accounts. Prepare and submit billings to
sponsors; monitor receivables; correspond with sponsors and Cornell community; defend accounting system to auditors.

Requirements: Associate's degree or equivalent. Bachelor's degree or equivalent in accounting, business or related field preferred. Strong accounting background required. Eamiliarity with University accounting system preferred.

Minimum Starting Salary: \$14,779

Job Number: C134

*Position: LC Cataloger, GR20 Department: NYSSILR - M.P. Catherwood Li-

Description: Catalog and recatalog monographs and serials with copy utilizing RLIN on-line cataloging systems; input monographic and serial records to RLIN data base; train and supervise student assistants including the revision of their work. Other duties as assigned. May require occa-

work. Other duties as assigned, may require occasional evening and weekend work.
Requirements: High school diploma or equivalent with three or more years of relevant technical services experience or college education with one or more years of relevant technical services experience. Subject background in social sciences help-ful. Light typing. Knowledge of MARC tagging; rul. Light typing. Knowledge of MARC tagging; experience with computer searching and inputting techniques and cataloging procedures; familiarity with OCLC and—or RLIN on-line cataloging systems. Absolute accuracy and ability to handle details with discretion and judgment.

Minimum Starting Salary: \$11,739

Job Number: C137

*Position: Senior Special Collections Assistant, GR20 (Repost)

Department: History of Science - Olin Library
Description: Catalog rare books using existing
catalog copy; catalog special rare books such as
manuscripts and graphics; provide specialized information service; supervise reading room and cir-culation; make decisions about binding and pres-ervation; search bibliographic records; maintain departmental catalogs; other special projects as appropriate.

appropriate.
Requirements: Bachelor's degree or equivalent in the humanities and—or the sciences. Excellent reading knowledge of French; reading knowledge of Latin desirable. Ability to work independently and to interact effectively with graduate students, faculty and visiting scholars required. Initiative and a willingness to perform complex tasks in which sensitivity to detail and accuracy is necessary. Appreciation of the nature and significance of rare books. Ability to provide information service for collection users in their research tion service for collection users in their research

Minimum Starting Salary: \$11,739 Job Number: C024

*Position: Secretary, GR18
Department: Clinical Science - Medicine Section
Description: Provide upport for the Administrative Supervisor and Data Analyst in the Medicine Section of the Department of Clinical Sciences. Type; assist in organizing Grand Rounds, conferences and accounts of the section (comput-

er-based records); travel arrangements. Other duties as assigned.

Requirements: High school diploma or equiva-lent. Some course work in business and—or ac-counting desirable. Medium typing. Some office-accounting experience. Excellent organizational, interpersonal and communication skills.

Minimum Starting Salary: \$10,500 Job Number: C132

*Position: Secretary, GR18
Department: International Student Office

Description: Serve as office receptionist and provide secretarial support for several staff members. Refer foreign students to appropriate staff members for assistance; type; use word processor (IBM PC); file. Other duties as assigned.

Requirements: High school diploma or equiva-lent, Business or secretarial school desirable. Me-dium typing. Experience in dealing with public. Ability to work under pressure and with many interruptions. Excellent interpersonal and communication skills. Familiarity with word processor or computer (IBM PC).

Minimum Starting Salary: \$10,500

Job Number: C135

*Position: Administrative Secretary, GR18
Department: Alumni Affairs
Description: Provide secretarial support for two
assistant directors. Answer phones; prepare newsletters for annual mailings; make travel arrange-

letters for annual mailings; make travel arrangements. Other duties as assigned.

Requirements: High school diploma or equivalent. Business or secretarial school desirable. Medium typing. Experience working with the public. Ability to use copier, word processor helpful. Excellent organizational, interpersonal and communication skills. Good telephone skills.

Minimum Starting Salary: \$10,500

Minimum Starting Salary: \$10,500 Job Number: C131

*Position: Secretary, GR18 (Repost)
Department: Ecology & Systematics
Description: Provide secretarial support for several department faculty. Duties include typing correspondence, course work, manuscripts, statistical charts, etc.; answering telephones; serving as department mail coordinator; performing other supporting functions.

Requirements: High school diploma or equiva-

Heavy typing. At least one to three years secretarial experience. Word processing (Xerox 860) highly desirable. Strong organizational, communication and interpersonal skills. Ability to work indepen-

dently and under pressure.

Minimum Starting Salary: \$10,500

Job Number: C116

Position: Administrative Aide (Legal), GR22 Department: University Counsel—Trustees Description: Provide administrative support to Description: Provide administrative support to assistant secretary of the Corporation. Work with executive staff officers and members of the Board of Trustees. Process agendas for Board, Executive Committee and Committee on Board Membership, minutes, notices; handle extensive contacts on—off campus. Other duties as assigned. Requirements: Associate's degree or equivalent. Heavy typing. At least 3 - 5 years executive and—or law office experience preferred. Demonstrated ability and emphasis on use of word processors—

ability and emphasis on use of word processors—
microcomputers. Good language usage and punctuation important. Ability to work under pressure.
Detailed accurate output. Organizational ability.
Confidentiality essential. Please send cover letter
and resume by April 8, 1985 to Esther L. Smith.
Minimum Starting Salary: \$13,141
Job Number: C126

Position: Secretary, GR18

Department: Unions & Activities
Description: Answer telephones; coordinate room reservations and equipment rentals; receive visitors; distribute mail and coordinate building information notices. Extensive communication

information notices. Extensive communication with staff and patrons of Noyes Center; oversee student employees.

Requirements: High school diploma or equivalent, business or secretarial school desirable. Medium typing. Good communication skills (grammar, spelling, telephone). Adept in use of 10 key calculator, machine transcription, mimeograph and ditto machines, word processor (Micom 2002). and ditto machines, word processor (Micom 2002) and IBM PCXT. Shorthand experience helpful.

Experience in public service desirable. Minimum Starting Salary: \$10,500 Job Number: C127

Position: Secretary, GR18 Department: Entomology - Geneva (Off Cam-

Description: Type manuscripts, reports and research papers on word processor (including text editing, formatting and producing drafts into final copies). Type general correspondence; answer telephone; assist with requisition and invoice typing; maintain reprint files and mailing lists. Other duties as assigned.

ties as assigned.

Requirements: High school diploma or equivalent, business or secretarial school desired. Heavy typing. At leas 2 - 3 years secretarial experience.

Aptitude with figures helpful. Some experience

with computers and CRT's.

Minimum Starting Salary: \$10,500

Job Number: C125

Position: Office Assistant, GR17

Department: Residence Life
Description: Provide initial contact for students, staff and visitors. Answer all incoming calls and take messages; keep records (key system, receipt system for cash register, lock change system, telephone usage billing system). Other duties as as-

Requirements: High school diploma or equiva-lent. Light typing. Familiarity with Xerox, ditto and mimeo machines. Computer input and word processor helpful. Excellent organizational and record keeping skills essential. Excellent interpersonal skills to work with students, staff and visitors.

Minimum Starting Salary: \$9,967 Job Number: C121

Position: Office Assistant, GR16
Department: Human Development and Family
Studies - Albany, NY (Off Campus)
Description: Provide general support to the Migrant Student Record Transfer System (MSRTS).
Duties include entering data (IBM-PC); typing maintaining files; preparing reports and workshop materials; traveling to local MSRTS offices. Requirements: High school diploma or equiva-

lent, some secretarial coursework desired. Medi-um typing. Some secretarial experience. Data en-

try skills.

Minimum Starting Salary: \$9,494

Job Number: C122

General Service

*Position: Stockkeeper, GR19 Department: LASSP

Description: Stock shelves, check stock level, initiate stock orders, wait on stockroom customers, handle cash transactions, enter data on CRT. Requirements: High school diploma or equiva-

lent, major in clerical studies, typing speed can be at low end but accuracy very important. Must lift 70 lbs. Mechanical, electrical and—or electronic knowledge helpful. Any related business (retail) experience also very helpful. Must be very flexible

and highly conscientious.

Minimum Starting Salary: \$11,125

Job Number: S135

*Position: Dairy Worker, SO18 Department: Animal Science - Statutory Description: Must routinely milk and care for Description: Must routinely milk and care for dairy cattle, calves, heifers and facility in maternity area. Also assist in care of calves and facility in calf nurseries; feeding, care and observation in both main unit and remte facilities. Assist in breeding, moving, handling adult and young dairy cattle. Other duties as assigned.

Requirements: High school diploma or equivalent 3-5 years related experience with dairy cattle.

lent. 3-5 years related experience with dairy cattle. Valid NYS driver's license. Experience with machine bucket milkers. Must be able to lift 100 lbs.

Pre-employment physical required. Minimum Starting Salary: \$5.41—hour Job Number: S136

*Position: Material Handler, SO18 Department: University Press - Endowed
Description: Receive and warehouse all books

published by the Press. Occasional operation of department truck.

Requirements: High school diploma or equivalent. Must have valid NYS driver's license. Must be able to lift 70 lbs. and climb an 8' ladder.

Minimum Starting Salary: \$4.98—hour Job Number: S131

*Position: Custodian, SO16 Department: Residence Life - Endowed Department: Residence Life - Endowed Description: Perform general custodial care. Clean vacant apartments; other assigned tasks involved wiht apartment complexes. Monday - Thursday, 7:30 a.m. - 4:00 p.m.; Fridays 7:30 a.m. - 3:00 p.m. Requirements: High school diploma or equivalent. Ability to lift 50 lbs. Ability to deal with a variety of tasks. Candidates with two years experince in maintaining apartments will be given preference.

preference.
Minimum Starting Salary: \$4.47—hour
Job Number: S134

*Position: Custodian, SO16 (Two Positions) Department: Buildings & Grounds Care - Endowed

Description: Perform general maintenance and custodial care of buildings and grounds in immediate vicinity of assigned area. Monday - Thursday, 6:00 a.m. - 2:30 p.m.; Fridays 6:00 a.m. -1:30

Requirements: Ability to operate a variety of heavy power operated equipment, climb an 8' ladder and lift 50 lbs.

Minimum Starting Salary: \$4.47—hour Job Number: S132, S133

Continued on Page 10

Job Opportunities

Continued from Page 9

Technical

Applications for Technical positions should include the following information:
- Scientific/technical courses completed

Lab techniques and/or equipment (knowledge

- Special skills (e.g. knowledge of computer language)

*Position: Technician, GR20

Department: Plant Pathology
Description: Collect and analyze data from New Description: Collect and analyze data from New York orchards: orchard characteristics, management practices, seasonal development, weather conditions and disease incidence. Participate in field experiments on fire blight including pruning, labeling and treating apple trees.

Requirements: Bachelor's degree or equivalent preferred in plant pathology or pomology. New York State driver's license. 2-3 years field and laboratory experience helpful. Considerable travel within New York State.

Minimum Starting Salary: \$11,739

Job Number: T131

*Position: Technician, GR20
Department: Pomology
Description: Design, implement and maintain field experiments; collect data from experiments; perform statistical analysis of data with computer;

perform statistical analysis of data with compute travel to field sites throughout New York State; oversee temporary labor; maintain greenhouse plants; develop photographic film.

Requirements: Bachelor's degree in plant science or related field. Course work in statistics, math and—or computer science preferred. Driver's license and pesticide applicator's license required. Attention to detail and ability to perform quired. Attention to detail and ability to perform tedious tasks, safe handling of laboratory chemicals, pesticides and fertilizers; ability to interact with a diversity of people and experience with small farm equipment desired.

Minimum Starting Salary: \$11,739

Job Number: T134

*Position: Technician, GR19 Department: Section of Neurobiology and Be-

havior
Description: Responsible for animal and plant collection and maintenance. Responsibilitie involve field work; library research; lab maintenance; preparing reports to Federal and State agencies; oversee work study lab assistants.

Requirements: Bachelor's degree in biological

sciences with course work in entomology, botany and—or plant science extremely helpful. Good written and oral communications skills, general lab skills, ability to work independently and take initiative; ability to conduct literature searches, to set up and carry out experimentation, record results. Own car highly desirable.

Minimum Starting Salary: \$11,125

Job Number: T133

*Position: Animal Health Technician, GR18 Department: Clinical Sciences—Teaching Hos

Description: Responsible for technical aspects of patient care within the Small Animal Clinic. Will administer medicine, groom and bathe pa-tients, stock medications, care of instruments, set up and clean up procedures, assist staff and stu-dents with routine exams, specimen collection as other miscellaneous tasks in the field of animal

health technology.
Requirements: Licensed Animal Health Technician in New York State. Previous experience working in a small animal practice. Minimum Starting Salary: \$10,500 Job Number: T132

Position: Electrical Technician, GR22 (Repost)
Department: Electrical Engineering
Description: Provide routine and emergency
maintenance of school's computer equipment. Diagnose faults using such tools as diagnostic software programs; design—construct simple digital electronic equipment.

Requirements: Associate's degree or equivalent in electronics technology or a related field. Two

years relevant work experience. Minimum Starting Salary: \$13,141 Job Number: T085

Position: Computer Programmer, GR22 (Re-

Department: Horticultural Sciences - Geneva (Off Campus) Off Campus)
Description: Provide computer support in the Germplasm Resources Information Network System (GRIN) for the Plant Introduction Station and the National Clonal Repository. Organize and maintain these information systems. Instruct and assist staff members in use of programs. Entry of data from evaluation notes, inventory maintenance

Requirements: Associate's degree or equivalent, Requirements: Associate's degree or equivalent Bachelor's degree preferred in computer science. Some programming experience in either BASIC, FORTKAN and—or COBOL. Familiarity in working with data bases and the following equipment: Perkin-Elmer CRT, DEC printer, telenet system, IBM PCST, field data loggers.

Minimum Starting Salary: \$13,141

Job Number: T061

Position: Technician, GR20

Position: Technician, GR20
Department: Veterinary Pathology
Description: Prepare slides for microscopic examination to include embedding and cutting of tissue and routine and special staining of slides. Other duties associated with the departmental
Histology Laboratory as assigned.
Requirements: Associate's degree or equivalent in Histology, Medical Technology or Animal Science with course work in Histology. HT (ASCP) certification preferred. Some experience in a Histology laboratory. Knowledge of special staining techniques. Proficient in use of microtome.
Minimum Starting Salary: \$11,739
Job Number: T125

Position: Technician, GR19 (Repost)
Department: Agricultural Engineering
Description: Provide technical support for a
study evaluating alternatives to improve pathogen

reduction during aerobic digestion of sewage sludge in cold climates.

Requirements: Associate's degree or equivalent in engineering technology, or a related field with experience in wastewater treatment. Two years as a research—engineering technician. Analytical chemistry skills. Mechanical aptitude including familiarity with electrical circuits. Motor vehicle op-

erator's license.

Minimum Starting Salary: \$11,125

Job Number: T082

Position: Technician, GR19 Department: Biochemistry, Molecular & Cell

Description: Conduct research on the regulation and synthesis of yeast galactokinase. Duties include DNA isolation, hybridization and digestion as well as performance of Agarase Gel Electrophoresis and enzyme assays. Monday - Friday, 39

Requirements: Bachelor's degree with knowledge of genetic engineering, electrophoresis and DNA hybridization. Some laboratory experience helpful. Familiarity with spectrophotomers, cen-

trifuges and scintillation counters preferred. Minimum Starting Salary: \$11,125 Job Number: T123

Part-time

Position: Associate Coordinator
Department: Center for Religion, Ethics and
Social Policy (CRESP)
Description: Provide assistance to the cooordinator in the general administration and program development of CRESP. Coordinate current projects and programs; attend meetings; supervise the administrative budget; help with activities of CRESP; act as liaison with Cornell United Religious Work and local human service agencies. Requirements: Bachelor's degree or equivalent combination of education and experience. Interest

combination of education and experience. Interest in overall orientation and work of CRESP. Effec-tive written and oral communication skills. Expetive written and oral communication skills. Experience in financial planning. Openness to different spiritual and religious traditions. Familiarity with Tompkins County and Cornell University. 20 hours—week; one year appointment contingent upon funding. Please send cover letter and resume to Philip Snyder, CRESP, 123 Anabel Taylor Hall, Cornell University, Ithaca, NY 14853. Telephone (607) 256.6486 phone (607) 256-6486.

Minimum Starting Salary: \$8,000 Job Number: PC1214

Position: Technical Assistant, GR17

Department: Entomology
Description: Assist in curation of aquatic inver-Description: Assist in curation of aquatic invertebrate collections; process donations of speciments; update—improve taxonomic keys; update and manage literature on aquatic invertebrate taxonomy. Monday - Friday, 20 hours—week, September thru June (9 months).

Requirements: Associate's degree with coursework in entomology or aquatic sciences. Mastery of taxonomy of freshwater invertebrates; knowledge of construction of taxonomic keys and curation of collection necessary; familiarity with taxonomic literature preferred.

nomic literature preferred.
Minimum Starting Salary: \$9,967—annual

Job Number: T122

Temporary

TEMPORARY OPPORTUNITIES: Cornell TEMPORARY OPPORTUNITIES: Cornell University has an ongoing need for qualified individuals willing to work on a temporary basis. We frequently need individuals to work as word processor operators, secretaries, typists, receptionists, office assistants, account clerks and data entry clerks. Requirements for these positions range from medium to heavy typing, some office—secretarial experience and knowledge of word processing equipment. If you have an interest in working on a temporary basis in the clerical area, please contact Tambi Benzon at 256-5226 ext. 266; in the general service area, please contact Sharon Warunek at 273-1179. Temporary opportunities in the technical field are posted here, and applications are made with a general application, cover letter and resume. letter and resume.

*Position: Temporary Research Equipment Technician
Department: Nuclear Science and Engineering

Description: Build research laboratory apparatus using standard machine shop equipment; use and maintain research laboratory equipment. Temporary until completion of project (approxi-

mately two months).

Requirements: Associate's degree in mechanical and—or electrical technology. Knowledge of use of machine shop tools and research lab test equip-

Job Number: T135

Academic

Please contact department directly.

*Position: Research Associate, CA7 Department: Theory Center Job Number: A131

*Position: Research Associate, CA5 Department: Theory Center Job Number: A132

*Position: Assistant Librarian Department: Africana Studies and Research Center Library Job Number: A133

Position: Research Associate, Advanced Silicon and III-V Semiconductor Devices
Department: School of Electrical Engineering
Job Number: A121
Contact: Send cover letters and resumes by June
15, 1985 to Professor J. Peter Krusius, School of Electrical Engineering, 428C Phillips Hall, Cornell University, Ithaca, NY 14853. (607) 256-4657.

Position: Lecturer - Writing Workshop
Department: Learning Skills Center
Job Number: A122
Contact: Janet Smith-Kintner, Learning Skills
Center, 375 Olin Hall, Cornell University, Ithaca,
NY 14853. (607) 256-6311.

Position: Lecturer - Mathematics Department: Learning Skills Center

Job Number: A123 Contact: Janet Smith-Kintner, Learning Skills Center, 375 Olin Hall, Cornell University, Ithaca, NY 14853, (607) 256-6311.

Barton Blotter

Twenty-one thefts involving the loss of \$1,-781 in cash were reported on campus during the 14-day period from March 17 through March 31, according to the morning reports of the department of public safety.

Eight of the thefts included wallets, one with \$450 in American currency and \$50 worth of West German money taken from Statler Hall; \$151 stolen from the student locker room of Statler Hall, and \$150 in cash taken from Gerson Hall.

room of Statler Hall, and \$150 in cash taken from Corson Hall.

In all, there were 55 thefts totaling losses in cash and valuables of \$8,326.50 over the two week period. Among the losses were three radar detectors, valued at a total to \$500, taken from cars in campus parking lots; stereo equipment, a jacket, and watch worth \$1,636 taken from Sperry Hall; and \$750 in stereo equipment taken from University Hall No. 3.

Other thefts, mostly from dormitories, in-

Other thefts, mostly from dormitories, in-

cluded \$470 worth in stereo equipment; a \$200 "Walkman"; \$275 in clothing; a \$250 camera; a \$375 disc drive for a computer; and a \$140 radio with headphones.

Nine fire extinguishers worth a total of \$211 were taken from various buildings on campus,

were taken from various buildings on campus, mostly dormitories.

Eleven persons were referred to the Judicial Administrators on charges such as harassment forging parking permits, reckless endangerment, and stealing a coar discounter. ment, and stealing a soap dispenser.

Typists Listed

The Reference Department of Uris Undergraduate Library maintains a listing of typists willing to prepare term papers, theses, etc. If you are a typist and are interested in having your name included on that listing, please fill in the form below and bring or send it to the REFERENCE DEPARTMENT, URIS LIBRARY before April 30th. Any forms received after that date will not be included in this year's

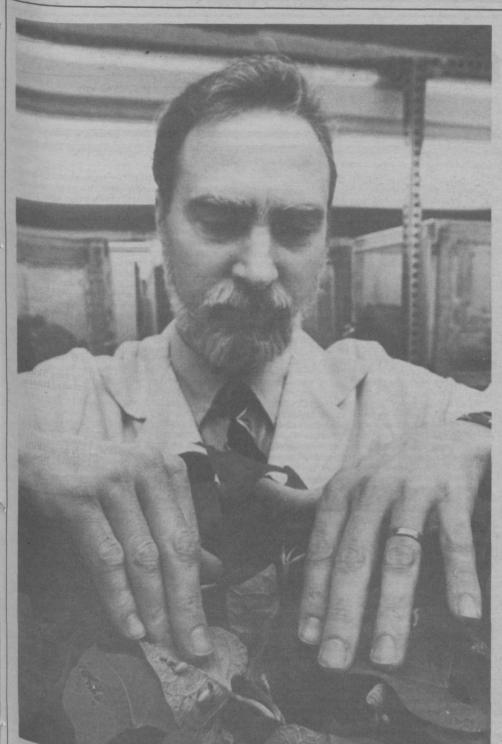
Address & Phone) (office & home)

Type of machine type face)

(Rate charged p page (sgl or dbl spaced)

(e.g. theses, technical repts., legal or foreign materials.)

(Pick up and or delivery service (free or charge?))



Patrick R. Hughes, an entomologist at the Boyce Thompson Institute for Plant Research, holds soybean plant leaves that have been damaged by the feeding of Mexican bean beetles.

Plants Under Stress More Prone to Damage From Insect Pests

Many plants, when faced with an environmental stress such as air pollution, produce a chemical called glutathione to protect themselves

. But in a cruel twist of fate, glutathione increases the number of insects, which can result in damage to the plants, according to scientists at the Boyce Thompson Institute for Plant Research.

As a result, an undetermined but possibly significant amount of the crop damage caused by plant-feeding insects is actually instigated by air pollution and other sources of plant stress, such as insufficient or salty water, or exposure to cold.

Also, by feeding on plants that have high glutathione levels, the insects can increase their immunity to pesticides, making it more difficult to eradicate the pests.

Glutathione is a compound of amino acids that is found in plants and animals. It protects plant cells from oxidation damage.

"Our findings are still limited, but it appears that this problem is fairly common, and may be causing millions of dollars in lost plant productivity from insect damage each year," said entomologist Patrick R. Hughes, leader of the research team studying plant stress and glutathione.

Solving this complex interaction may help limit crop damage and increase food production, added John Chiment, research specialist at BTI, a private non-profit research facility at Cornell University.

A relationship between pollutant-induced plant stress and insect population was noted some six decades ago, but little research was devoted to the connection until the 1970s, when studies were begun at the Boyce Thompson Institute. BTI researchers have demonstrated that air pollution and other stresses do produce chemical changes in plants that lead to increased insect feeding and reproduction.

Now, Hughes, Chiment, and BTI biochemist Ruth Alscher have become the first to identify glutathione as a connection between stress to plants and insect behavior. Additional studies are planned to determine if other chemicals that behave similarly to glutathione may be involved, Hughes said.

Plant-feeding insects regulate their eating

and reproduction based on chemical signals they receive from their host plants. That interaction keeps the insect population in a finely tuned equilibrium with the plant that it depends on for food.

But when plants produce additional glutathione in an attempt to combat air pollution or other stresses, they inadvertently disrupt that balance, Hughes explained.

For example, studies at Boyce Thompson Institute have shown that Mexican bean beetles would rather eat soybean leaves exposed to a pollutant (sulfur dioxide) than non-exposed leaves. It is the glutathione produced by the exposed soybean plants, not the sulfur dioxide itself, that affects the beetles, according to the research results.

Beetles feeding on the exposed, high-glutathione leaves cause greater leaf damage, grow faster, become larger, and lay more eggs than beetles feeding on non-stressed leaves, Hughes said. The insect population can be expected quickly to become too large for its host plant, damaging the crop.

Stress has been found to increase glutathione levels in several plants in addition to soybeans, including radishes, pinto beans, spinach, and others. More research is needed to study why glutathione alters insect feeding and reproduction.

Glutathione, which is present in animals as well as plants, helps protect insects from pesticides, Chiment said. That can hinder attempts to control abrupt insect outbreaks caused by increased glutathione in plants.

Eventually, glutathione levels in plants may be used as a guide to determine when pesticide spraying is likely to be most effective, Chiment added. In addition, a greater understanding of the interaction among pollution, plants, and insects may change planting practices, so that plants more susceptible to stress are placed away from sources of air pollution.

Today, there are areas in Illinois, Kentucky, and Indiana where the Mexican bean beetle is a more serious problem for soybean crops near power plants than in surrounding areas, Hughes said. While the power plants have not been proved to be the cause of the problem, the Boyce Thompson Institute studies suggest that they might be connected.

Shoals Courses to Explore Mountains, and the Sea

Flowers on a mountaintop, food from the floor and the interaction of marine mamals with man will be among the wonders credit courses offered by the Shoals Marine floor.

Three courses — "From the Summit to the Sea," "Sperm Whales and Oceanic Dollins: Georges Bank," and "A Sea Beside are new this year. The others are "Marine Floor to Table," and "Nature Photogra-

Connell University and the University of Students Studying field marine science, anitopics in 17 credit courses this summer. Shoals is the largest undergraduate field macanada.

Oast on Appledore Island, the largest of the

Isles of Shoals, the laboratory has a long history of offering non-credit education programs to the public as an integral complement to its academic focus.

This summer's non-credit courses run from four to seven days, at costs ranging from \$295 to \$475 per person per course. Anyone 12 or older can enroll, but those under college age must be accompanied by an adult.

"From the Summit to the Sea," offered Sept. 8-14, is co-sponsored by Cornell Adult University and the Applachian Mountain Club. The course begins at the 6,288-foothigh summit of New Hampshire's Mt. Washington, moves to a bog situated in the bed of an old glacial lake, and concludes at Appledore Island. Participants discuss and observe the plants and animals that make ther homes in the three environments.

"Sperm Whales and Oceanic Dolphins: Georges Bank," Aug. 23-26, is coordinated by Shoals, Seafarers Expeditions, and New England Whale Watch. The offshore expedition to Georges Bank, one of the world's richest commercial fishing grounds, will seek out the elusive sperm whale, the leviathan of Herman Melville's "Moby Dick," and observe rarely encountered open ocean whales, dolphins, and seabirds. The group anchors nightly in Nantucket Harbor.

"A Sea Beside the Sea: Ecology of the Gulf of Maine," July 5-8 or Sept. 2-7, examines the historical, economic, and environmental uniqueness of the Gulf through island walks, intertidal zone studies, excursions to observe commercial fishing vessels and whale feeding grounds, and other activities.

The evolution and behavior of marine mammals, and their interaction with man, is studied in "Marine Mammals," Aug. 12-17, 19-24, or 26-31. Laboratory demonstrations, readings, films, and offshore expeditions to observe mammal behavior are included.

"Island Bird Study," June 2-5 or Sept. 7-10, allows participants to go beyond observation of Common Eiders, Black Guillemots, Double-crested Cormorants, gulls, and several other of the more than 100 bird species found on the Shoals. Lectures, onand off-island field trips, and the opportunity to assist a certified birdbander are part of the program, also.

In "Sea Floor to Table," Aug. 5-10, food sources are followed from their homes in the sea to the dining table through visits aboard fishing vesels, tours through seafood processing plants, and other activities. On the final day, everyone helps prepare and eat a lavish seafood banquet.

Finally, "Nature Photography," July 5-10, offers instruction and opportunities for capturing the island's diverse flora, fauna, and incomparable scenic vistas on film.

Instructors are faculty members from Cornell or other leading universities, fishermen, coastal planners, and other specialists.

More information about the non-credit and credit courses can be obtained from Shoals Marine Laboratory, GD-14 Stimson Hall, Cornell University, Ithaca, NY, 14853-7101, or by calling 256-3717.

Bulletin of the Faculty

December 12, 1984 110 Ives Hall

The Speaker, Russell D. Martin, called the

The Speaker, Russell D. Martin, called the meeting to order at 4:30 p.m. and announced that since there was not a quorum at that time, the minutes of the September 12 and October 10 meetings could not yet be approved. He then called on Dean Joseph B. Bugliari for remarks.

1. REMARKS BY THE DEAN:

Dean Bugliari: "I don't really have a great number of remarks. I would like to congratulate myself on the fact that you now have the Faculty Handbook applause. The plan now is that it will be redone and distributed every two years. If you find anything in it that you think needs changing or correcting, let us know because we're going to or correcting, let us know because we're going to start immediately to do that. Secondly, we have extra copies of it if you would like them. For example, if there is someone at another institution whom you were interested in recruiting, we'll be

glad to supply you with copies of the handbook to send to them.

"In the Call to the meeting, I think you all received a notice of the third session in computer training that we are sponsoring through our oftraining that we are sponsoring through our office. This will occur in early January, and the main attraction this time, everybody, is that it's free. So, if you are interested, please look it over and let us know. We obviously hope that we can accommodate you; we'll do our best. If everybody wants to go to one session, we may be in a little bit of trouble. There are about thirty different sessionns, so we've got plenty of room for anybody who'd like to go.

"The third item is that if we look toward the spring, there are a number of issues that will be coming forward. I will report on one that you may have been reading about in the Sun, and that is the issue of academic integrity. We are modifying and undating the academic integrity code. A draft of the original proposal has been submitted to the Committee on Academic Programs and Policies, and the hope is that the Committee will get it to the Executive Committee so that we can put it on the March meeting agenda. I'm not sure what we'll have on the February meeting yet, but at least at the March meeting our hope is to get that draft out and make some updates and changes if you feel it's appropriate."

Speaker Martin: "Are there any questions for the Dean? The third item is that if we look toward the

"Our next speaker is one of those people we just don't let retire around here. Keith, it's a pleasure to again welome you as Mr. Dean, Acting Dean of Admissions and Financial Aid, for a presenta-

2. PRESENTATION ON ADMISSIONS AND FINANCIAL AID:

W. Keith Kennedy, Acting Dean of Admissions and Financial Aid: "Mr. Speaker, Mr. Dean, I

was most pleased to see the Faculty Handbook.
"Members of the FCR, it's a pleasure to join
Ann York, Director of Admissions and Susan Murphy, Director of Financial Aid in making a rather brief presentation on admissions and financial aid and also to give you an opportunity to preview a movie starring our latest film star. I also wish to acknowledge the presence of John Spencer who is manning the projector in the rear and who has forgotten more about admissions than I will

has forgotten more about admissions than I will ever know.

"In just a few minutes I will introduce Ann, but I would like to comment that during the past five years the number of applications has increased from fifteen thousand (15,000) to over twenty thousand (20,000). This is at a time when the high school population is declining especially in the northeast, and this sizable increase does not hap-

pen by chance.

"It represents much planning, careful analysis of what was done last year and what we should do this year followed by a critique on what did hap-

this year followed by a critique on what did happen. It also means many days of travel and numerous presentations and interviews by the admissions aid staff, by deans, and by faculty members.

"It also involves the contribution and help of our alumni. While many people can take credit for our success, in the final analysis it is safe to say that it comes down to the professionals and the support staff in Admissions who work in the tranches and that includes those in the colleges as

support staff in Admissions who work in the trenches, and that includes those in the colleges as well as those in the University.

"They worked during the Thanksgiving recess; they will be working during the upcoming holidays because huge bags of mail arrive daily. You cannot imagine the enormous task that these people have to go through in handling the applications, letters of recommendationn and other documents.

"The question might be asked, 'why continue

an aggressive program when you have twenty thousand (20,000) or more applications for approximately three thousand (3,000) entering spaces?' We don't believe this is the time to rest on our laurels. The decline in the number of high rate during the next eight or nine years. Competi-tion for the most able students will continue to in-crease and if we ease up we are not sure what the outcome will be. We prefer not to take any

'At this time I wish to introduce Ann York who am reminded again that there are many contribu-ting to our success in attracting high quality stu-dents to Cornell. She will give you an update on admissions and also introduce a recent film."

Ann V. York, Director of Admissions: "Thank you. As Mr. Kennedy indicated, we are just bringing the staff home from weeks and weeks of travel this fall. This has been our most aggressive travel season for sure, and I think in terms of a variety of other initiatives that we pursued in terms of recruitment this fall -- more targeted direct mail recruitment using lots of personalized letters to students, addressing in many cases their area of interest and concerns that we know they have from our own market research by virtue of where they live in the

'We also did a great deal more on-campus hosting, and I want to thank all of you who no doubt saw plenty of new and fresh faces in your classes, students visiting our campus, frequent-

ly with their parents, and there was substantially more alumni involvement.

"John Spencer has a vigorous program in terms of training our alumni -- the members of Alumni Secondary Schools Committees -- and Alumni Secondary Schools Committees -- and they're out there on the local front representing the University, going to college nights, interviewing students and sticking up for Cornell, really representing us and enhancing our visibility in local communities. In terms of the numbers, I want to give you a little bit of an update on where we are as of today, and the numbers that I am comparing are 12/7/84 -- a few days ago -- with 12/11/83, so actually it's day-to-day comparison. In terms of the dates we are a little bit slow on this side, since the comparison for last year was taken several days later.

"We are up in terms of overall admissions -- overall applications for freshman admissions for next fall. That's the only group that I'm going to talk about at any length. We're up by a modest amount -- about 1.4 percent and that's about where we have been holding with that kind of an increase over the past few weeks. I would predict that we will end this admission season for freshman recruitment slightly up --- on the high side

would predict that we will end this admission season for freshman recruitment slightly up -- on the high side.

"Last year he had nineteen thousand four hundred eight-six (19,486) applications for freshman admission for the fall, and this year I think we'll probably just top about twenty thousand (20,000). There is some evidence that suggests from our travels and discussions with guidance counselors that students are completing their applications a bit later than they had in the past.

in the past.
"With the declining population of college have begun t bound students, many colleges have begun to recruit students much harder than they had in the past, and one of the apparent student responses to this is that students are feeling a little bit more pursued and less compelled to get all their application documents in early. So, we may see a little bit of a larger surge in terms of last minute documents coming in for applicalast minute documents coming in for applica-tions in the time frame between Christmas and the new year. So, in terms of the University, overall freshman figures were up by a modest

"In terms of individual colleges, the divisions that have substantial increases are Hotel, which is up by about twenty-five percent (25%) and Fine Arts also has a fairly large increase—they have got small numbers: they've got an increase of fifty-two percent (52%)—seventy-nine (79) students as opposed to fifty-two at the same time last year. Those two divisions will probably end this admissionn cycle with fairly large increases n their applicant pools. In terms of colleges on the down side, ILR is down by about nineteen percent (19%), and we're working right now to try to figure out why that is the case. 'In terms of individual colleges, the diviis the case.
-"Engineering is down by about four percent

(4%) -- a small amount. Engineering was the

only division last year that ended the year slightly on the down side. All other divisions of the University during the last admission cycle had increases in their application groups. What we have seen in the last ten years or so is a huge increase in interest in engineering, sizable increases in the engineering applicant pool over the last ten years

creases in the engineering applicant pool over the last ten years.

"Perhaps what we're seeing now is a simple leveling off of interest. In terms of the other divisions -- Architecture is showing a modest decline at the current time. Arts and Sciences is up by about 3.4 percent. Agriculture and Life Sciences is up by about 3 percent (3%), and Human Ecology is up by about three percent (3%). Regions of the country are what we watch really carefully because we study the demographic pattern to try to figure out where to spend our pattern to try to figure out where to spend our recruiting resources each year. In New England we are, at the current time, showing about a six percent (6%) increase, which is good.

"The Northeast area between about 1979

and 1992 will decline in terms of the college-bound population, somewhere between about thirty percent (30%) and forty percent (40%). We're probably through about twelve percent (12%) of that decline at this point, and the rest

selors said things like, 'we have about two hundered in our graduating class this year, and we had three hundred fifty seven years ago.' So, what we may be seeing in New York State is the beginning of having to deal with the population decline and fewer numbers of students out there who are available to go to college. We are showing increases in our international applicant pool, both in terms of U.S. students abroad and in terms of international students "The international pool is the international students"

"The internationnal pool is about twenty percent (20%) larger at this point in the year than it was last year. Of course, our funds for financial aid for foreign students are somewhal limited, so we may not be able to take advantage of the course, our funds for financial aid for foreign students are somewhal limited, so we may not be able to take advantage of all those increases. The only somewhat disturbing news -- and this has been a continuing trend in the picture today — is that of transapplicants. We're just finishing right now admitting students who will enroll in January, and a number of colleges have in the past taken fairly large numbers of transfer students, in particular, at mid-year.

ular, at mid-year.

"Our transfer pool over the past four years for mid-year admission -- for January admission -- has declined by about fifty percent (50%). So, we're seeing many fewer applica-

"We have recruited very, very hard this fall - about five weeks of staff travel in the Southeast, with Florida in particular targeted...."

is still to come. We're pretty much holding our own in terms of the number of applications that we have at the current time from the Mid-Atlantic region. We're down by about nine percent (9%) in the Southeast. That's a bit disturbing to us at the current time. That's an area of ing to us at the current time. That's an area of the country that we know is growing and where we have recruited very, very hard this fall—about five weeks of staff travel in the Southeast, with Florida in particular targeted. We're hoping that picks up. We're doing some large programs in Miami and Fort Lauderdale this week, and we will be hopeful. We'll be needing to look at exactly where that shortfall is—whether it is in Florida or some other area of the Southeast.

whether it is in Florida or some other area of the Southeast.

"We have a fairly sizable increase — sixteen percent (16%) in the far West. That's an area of the country that we've hit very hard -- California, in particular, and where we've had a lot of help from our alumni. California now, next to New York, is the second largest state in terms of the number of Cornellians living in the

"The Southwest, which is a growing area, where it's nonetheless very difficult to draw students -- we're competing there with the University of Texas in Austin and some other institutions that are giving fairly sizable merit scholarships is showing a slight increase. The arships -- is showing a slight increase. The Midwest is showing about an eight percent (8%) increase, and we're pleased with that. We did pull back a little bit on our recruiting in the Midwest this fall.

"The area I think of greatest concern in terms of the regions is New York State where terms of the regions is New York State where we have fairly consistently this fall been reflecting a slight decline. At the current time we've got a decline of 6.2 percent in Upstate New York, and about five percent (5%) in the Metropolitan area. We have recruited very hard in both Upstate New York and the Metro area. We've done a lot of large candidate programs as well as school visits, and we have very active alumni in those areas who have been representing us at the local high school college nights. We've conducted a number of programs in Up-We've conducted a number of programs in Up-state New York with guidance counselors last week, and I was amazed to learn from all the counselors that I had met about their perceptions of the numbers of students in terms of

just looking at the size of graduating classes
"The number are much smaller than they were about seven years ago. Lots of the countions from transfer students for mid-year, af

tions from transfer students for mid-year, and our applicant pool for transfer students for the fall has been declining a little bit each year by eight percent (8%) or nine percent (9%). That kind of decline is again reflected in the figures for next fall although it is very early; the deadline for applications from transfer students for the fall of 1985 isn't until March 1.

But we need to begin to work on strategies for the recruitment of transfers. The decline in transfers is both in the group from junior and community colleges — two-year transfers from students from four-year institutions. With the four-year institutions—in terms of that particular group, of course we can't go in and recruit those students. They come to us. And that number has been going dowm.

'In terms of minority students -- applications for minority students for freshman addission in the fall -- the numbers look in general pretty good. Overall in terms of the number for papplications for minority students applying for farshman addission of the fall -- the numbers look in general pretty good.

tions for minority students for freshman sion in the fall -- the numbers look in general pretty good. Overall in terms of the number applications for minority students applying for freshman admission, we're showing a twelve percent (12%) increase for next year: a twenty six (26%) increase in terms of the number of Native Americans applying for freshman admission, and there the numbers are quite similarly and the percent (12%) increase in terms of Black A nine percent (9%) increase in terms of Black A nine percent (12%) increase in terms of Hispanic students applying for admission, a twelve percent (12%) increase in terms of Hispanic students who are not Puerto Ricans or Mexican Americans -- those are listed as separate groups. And a seventeen percent (17%) increase in Asian-American students. The only areas where we are pretty much holding our own and are about where we were last year in the numbers of Puerto Rican and Mexican American applicants. But the numbers look pretty good. We've had a fairly large number of pilot programs this year targeted at specific thinic populations. We've succeeded in recruite ing our minority alumni in the cities of Los Angeles and Chicago, New York, Philadelphia and Washington, D.C. to assist and provide and they have been reaching out and the helping to encourage students to complete tend applications. Minority students as a group and helping to encourage students to complete the applications. Minority students as a ground to have a fairly high incompletion rate, and we'll be looking at the success of each of these pilot programs at the end of the year, but the initial picture looks pretty encouraging.

of trends?"

Professor Royal D. Colle, Communication Arts: "I think you mentioned earlier that your market analysis helps dictate how you spend your money and efforts. Could you explain that a live you had the results to me that there your money and efforts. Could you explain that a little bit because it seems to me that there are two possibilities. One is that if we find few applicants coming from a geographic area, we might put more emphasis. On the other hand, where there are more applicants coming in you may consider that an area of opportunity where you do not have to put more money. How does that influence your strategy?"

Ms. York: "That's a good question. The first thing we look at is the demographic picture of low fertile the market appears to be in terms of sending college-bound students, and we look at a variety of different factors. One is the number of students graduating from high school in, for each of the students graduating from high school in, for each of the students graduating from high school in,

of students graduating from high school in, example, the state of Florida. So, how my high school graduates is Florida going to oduce over the next five years, what kind of ord do they have in the state for producing yhigh SAT scores? What kinds of records high SAT scores? What kinds of records he states have for exporting students? In twords, what proportion of the high bol graduates leave the state for higher eduon and what number stay? Texas is productuite a large number of college-bound studies. quite a large number of college-bound stu-legate a large number of college-bound stu-legate but most decide to stay within the state of as for higher education. So, we've studied out patterns. If they're exporting a fairly the analysis of the students, as for example the legate of Illinois is, where are they going? The definition of the students to out the students to ort patterns, is exporting its students to higan and Wisconsin and other Big Ten but it doesn't have a significant pattern corting students to New York State. So, the of the market is in terms of how fertile it be for Cornell and then we try to construct cture for ourselves as to what kind of re-rees we have within a region, how many of alumni are involved with Secondary School mittees in the state and look at those kinds

In the end, in terms of putting together a legy, after we determine areas that look by fertile, the ones that will be given priority resources are those areas where we're aly attracting a reasonable number of appli-s at the current time. So, we'll try to in-se the number of applications and perhaps as the yield in markets where we already a fairly successful record.

et me just say a few words about the sound show that you are going to see. was funded entirely from gifts that we red from alumni, and they were interested in project because as I mentioned they do a deal of recruiting for us. They were anxionate a current and relatively short (10nutes) slide/sound show that they could at a college night or at a high school visit, len plan to present some brief informa-ollowing the presentation as well as dis-e some publicity material."

silide/sound show was presented
an Kennedy thanked Ann York, then proid: "Moving on to financial aid -- it's all very
to recruit students, but if we want them to Ornell -- certainly those with limited re-Susan Murphy currently is our Director ancial Aid. She accepted the assignment a year ago just as the downward trend in proved federal aid is not bright. In 1980-81 leral government was providing \$14.2 bil-leral government was providing \$14.2 bil-grants and loans. This year's estimated at is \$14.1 billion. The decline appears to be but the cost of attending Cornell and other universities has increased substantially durpast four years and these costs will contin-

an will bring us up to date on the financial

an Murphy, Director of Financial Aid: wurphy, Director of Financial visits let thought I would try to do today is to let thow what our plans are for 1985-86 and the struggers in that ort we'll be providing for the students in that

Skeith mentioned, we have some major nges facing us in the years ahead, and we been working with Institutional Planning and visit to model the needs that we will have in the years; I think you'll be hearing a great deal in ancial aid in the upcoming month as we

try to figure out how to face the concerns of limited dollars and the increased needs of our students. For 1985-86 we will be continuing the policies that are currently in place, which are to support in full the demonstrated need that our undergraduates have. What that means is that we will take a look at what their costs will be and subtract from that what they bring in the form of resources, both as students and from their parents. Whatever the difference is between those two numbers is their financial need. We are committed to meeting that need through a financial aid package which has in it entitlement monies that they may bring with them from the federal government or the state government, what we call self-help which is in the form of work or borrowing during the academic year and then scholarship monies to the tune of about ten million dollars from general purpose monies and several million from income from endowments.

"We will continue the policies of having differential packages; the packages differ for students in the proportion of scholarships and self-help. That difference is determined by a rating that is given by the faculty selection committees in the different colleges. We also are committed to maintaining our commitment to low income students who come from families with incomes of less than ten thousand dollars (\$10,000). Their self-help will be at a level of one thousand eight hundred fifty dol-lars-(\$1,850) as compared to an average self-help of about four thousand six hundred dollars (\$4,600). The difference, therefore, is much more scholarship money for them.

scholarship money for them.

"We also have a commitment to minority students who come from families with incomes less than thirty thousand dollars (\$30,000); we keep their self-help levels at a lower level, therefore increasing the scholarship commitment. We anticipate a slight increase in the form of summer savings that we anticipate students will bring with them in the fall. We also will be increasing in a small amount the self-help level by increasing the work commitment by fifty dollars (\$50) and loans by about two hundred fifty dollars (\$250). Still, with those increases and with a generous increase with those increases and with a generous increase with those increases and with a generous increase in general purpose monies, we are looking at an unmet need on the part of our students for next year. So, our challenge is how to take care of that need. Whether that will happen with additional funding from the state as they did this year with an increase in TAP monies which saved us about nine hundred thousand dollars (\$900,000) in scholarship monies or whether we will see a decline in arship monies or whether we will see a decline in our financial aid population as we have these past few years of about one percent (1%) per year which, therefore, lowers the need is unclear.

"Those answers are yet to be defined, so we will be working very closely the next couple of months with John Lambert from the Budget Office and Institutional Planning to try to address those concerns. After '85-'86 is the big question. I think in the next two or three months we need to decide

in assistance. We would add that to what they are bringing in family contribution and typically stu-dents do not demonstrate needs beyond that.

"If, for example, we had a budget of fourteen thousand dollars for an endowed student and that student only brought with him or her summer savings, if it was a freshman, it was one thousand dollars (\$1,000), their need would be thirteen thousand dollars (\$13,000). If the financial aid package was then only ten thousand dollars (\$10,000), that student would be eligible for additional financial assistance of about three thousand dollars (\$3,000). Because of the way we build the financial aid package, that would be primarily work and loan because we package those components in aid first before we get to additional scholarships. So they would certainly be eligible for work and loan if they demonstrated financial need."

Professor Ward: "It would seem that since our students receive tuition, fees and a stipend they are not considered to need more aid. I am not sure student only brought with him or her summer sa

students receive tuition, fees and a stipend they are not considered to need more aid. I am not sure that any of the people we have in this year's class are getting aid. Is that a policy also?"

Susan Murphy: "Again, we would determine whether they still showed need. We would put together a financial aid package now knowing they had their ROTC award, and it's perfectly possible that we would be using our own scholarships to meet the need of that student. If they then received an NROTC award, we do recompute their finanan NROTC award, we do recompute their financial need, and I would say that in a vast majority of cases, they would not demonstrate scholarship need any longer."

Professor Ward: "I just want to make one

quick comment. In the summer under self-help it's not possible for students in the Navy, and I It's not possible for students in the Navy, and I think it's generally true of those in the Army also, to earn that amount of money because they go to summer camps. They're allotted one thousand three hundred dollars (\$1,300). They generally go from four to six weeks at summer camp or a cruise and in the Navy are paid at a rate of four hundred ninety-nine dollars (\$499) a month."

Susan Murphy: "We do provide an opportunity for students who do not earn their summer savings to apply for what we call summer savings adjustments, and that is advertised in the fall semes-

justments, and that is advertised in the fall semes ter and students submit what their expenses were in the summer which prevented them from saving that amount, and then we would increase their award in the form of some kind of self-help, either

work during the academic year or loan.

"This past year we had about four hundred ninety-six (496) students of the five thousand five hundred (5,500) who are receiving financial aid; not quite ten percent (10%) who applied for an adjustment to their summer savings which we then award national direct student, guaranteed student loan or college or study, and certainly your students of the student loans or college or study, and certainly your students. dents would be eligible to follow that application

Professor Ward: "I just wish to offer one more observation. We saw a very nice presentation but

about the Cornell-in-Washington Program because it is older and now well established. Cornell-in-Washington actually consists of two segments in-Washington actually consists of two segments or parts. One is the architecture segment, in which a group of students from the Architecture Department come to Washington to work on the architectural problems of urban design. It's not very easy to do that in Ithaca. The program was conducted for a time in New York. There are now about fifteen (15) students form Architecture in Washington. Some of them are doing their senior theses, and others are simply taking a term there. A curriculum is offered in design problems, critiques, and so on. This segment was introduced in 1977. "The other component is so-called 'public policy'; and that was started only five years ago. As a

cy'; and that was started only five years ago. As a matter of fact, this is the fifth year. Its genesis is older: in the 1976 bicentennial celebration, the University invited faculty to make new proposals for Cornell's next century. At the time, a group of us who have since come to call ourselves the Founding Fathers, proposed that Cornell utilize the unique resources, personnel, collections -- all the other remarkable opportunities in the nation's capital -- for a program in public policy. The proposal didn't prosper at the time. It was not until later that the Provost, Keith Kennedy, offered us a small grant of seed money. We took additional money out of the chairs of two of the Founders, and started in '79 with six students and two seminars. We utilized the studio of the architects for the two seminars. We had no housing; the faculty comunted. We had no facilities, no furnishings except those that we could borrow.

"We now have a building, which is the Cornell Center in Washington. (It's located near Dupont Circle, just two blocks west at the intersection of 22nd and O Streets.) On the first floor are an office for the Cornell Club of Washington, shared with the Middle Atlantic Regional Development office; a reception area; the architects' studio; the Executive Director's office; offices for faculty; seminar rooms; and a large lecture hall that can also be used for receptions. The top three floors are used for student and faculty residences.

"The curriculum of the public policy program consists of the following, with slight variations from term to term. Eight policy sector seminars are offered, such as American Military Policy, The History of Presidential Elections, Public Finance, The State and the Arts. Then there is the popular seminar that provides some relief from policy, policy, policy, the Architecture of the Capital Metropolis, taught by a member of the Architecture faculty. Similarly, many of the architecture ture students take the State and the Arts seminar

in public policy. "The academic centerpiece of the public policy program is a seminar called Projects in Public Pol-icy. (It is Government 500, six hours credit, crosslisted as HD/FS 404.) This seminar, in turn, is supported by a workshop in Analytic Methods. Every student does an 'externship'. We use that designation deliberately, in part because it is correct and in part to distinguish what Cornell does from what the dozens of other colleges do in Washington. An externship is really a sort of rewashington. An extensing is really a sort of re-search posting. A student spends three days a week in some policy institution, on the hill, in an agency, with a lobbyist, etc. Every student has a tutor, for we use the turorial method in Government 500. Every student writes a thesis; and I do mean thesis, not just an essay or a seminar paper. The thesis compare favorably in my judgment -- I have a long judgment about this -- to the honors thesis written at Cornell-in-Ithaca. Sometimes

they achieve the level of masters theses.
"The students come from all undergraduate colleges: Cornell-in-Washington is a University Program. We have had some thirty-five (35) different majors represented. It is possible for any student to write a thesis in public policy and work usefully as an extern because of the Workshop. Students who have never undertaken any empirical re-search, who do not know how to model an empirical problem, who do not know how to establish analytic parameters around a real world problem are taught how to do these things. In the end they produce a thesis, frequently a remarkable thesis. "We are now at full capacity. Some faculty are

in residence, as Walter LaFeber was two years ago and Will Provine this year. Rose Goldsen has made the program a regular stop, and she spends one term each year in residence in the Center. We have more faculty requests to participate in the program than we can accept. We have more applications from students than we can accommodat Nonetheless, in my judgment, the program should

"We should bring to the attention of those going to high school and alumni helping us to get the best students, the role of ROTC and particularly how it helps students financially."

what will be the solution to the challenges because Ann and her staff will start recruiting the class entering in the fall of '86. Some we've already met on the road but we'll start in an active way in March and in April, and it's important for us to know in what direction we'll be heading as we start the recruitment seaon so that we can articulate what our policies will be in the years ahead."

Speaker Martin asked if there were any questions for Susan Murphy to answer.

Professor Eugene Ward, Naval Sciences: "I wanted to ask if you have a policy of not providing any further aid to those students who are receiving

any further aid to those students who are receiving NROTC scholarships."

Susan Murphy: "No, the policy is not to provide them with no additional aid. What we do is look at what their need may be following the receipt of the ROTC award. And because ROTC covers the full tuition and books plus a one hundred dollar (\$100) stipend per month, that means that the students have, if they are in the endowed units, about ten thousand nine hundred dollars (\$10,900)

it did not have a single slide on ROTC. Considering that one of Cornell's first original departments was a military department and that among the three services here we've had scholarship students and pay the University several million dol-lars a year in tuition, it would seem that a vital, sa cred part of undergraduate life was omitted. We should bring to the attention of those going to high schools and alumni helping us to get the best students, the role of ROTC and particularly how it helps students financially."

There were no more questions, so Dean Kennedy thanked Ann York and Susan Murphy. Speaker Martin announced the next agenda item, a presentation on Cornell Abroad and the Cornell-in-

Washington Program.

3. PRESENTATION ON CORNELL ABROAD AND CORNELL-IN-WASHINGTON PRO-GRAM:

Professor Arch T. Dotson, Government, and Director, Study Abroad: "I don't know in what sequence this should be offered, but I'll talk first

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Bulletin of the Faculty

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be kept at its present level of about fifty-five (55)

"The program is rather like an academy, focused in the Cornell Center. It is remarkable as a teaching device, for students teach each other. They form close bonds because of this common experience. It is a very rigorous program. The students do most of the recruiting. It's competitive; it is in effect an honors program devoted to a specialized curriculum.
"Cornell-in-Washington was originally a new

notion, as Cornell Abroad is now. It cut across existing arrangements, regulations and requirements. It is now, I believe, woven into the fabric of a Cornell Education. When I go with Cornell's recruiters to secondary schools, to meetings of sturecruiters to secondary schools, to meetings of students who are considering Cornell and other colleges, I find great interest in this program. This is self-serving, to be sure; but the testimony that we get from the students and from the faculty who have participated in it is very gratifying.

"You asked me to appraise it. In my judgment it is enormously successful. It has also been one of the most exciting academic ventures in my 33 years at Cornell."

at Cornell."

Professor Davydd J. Greenwood, Director, International Studies: "Arch Dotson and I are going to be doing a little shifting back and forth now because this program, as you'll see, involves us in a variety of different kinds of activities. The attempt to improve study abroad options at Cornell proves at least that you can't do just one thing. When we started with the program of study abroad, we ended up very quickly getting involved in international internships and international public affairs, and as Ann York has said, also in the matters of international admissions. All of these are going to become increasingly important over the years.

"This issue began with an impulse from the Cornell Council which was passed on to us from the President and the Provost who asked the Center for International Studies to help design a study abroad program that would be suitable for Cornell, both for a university of this caliber contacts.

nell, both for a university of this caliber and diver-sity and with the extensive international contacts sity and with the extensive international contacts that it has. Now, the Center had never taken on a responsibility of this sort in the past. The Center, just for your information, is a unit, an intercollege unit which reports to the Provost. It contains sixteen (16) programs. Three Title VI programs and one Title XII program of the University are located there, as well as a series of topical and area programs. Its role in the undergraduate educational arena had been previously limited to language teaching and in the creation primarily of upper level ching and in the creation primarily of upper level

'At this point we are now involved very directly in undergraduate education, although we, of course, do not offer courses of our own. In approaching this we decided that it was very impor-tant to establish principles that would work uni-versity-wide, because the most outstanding fact of the past was that, despite a tremendous amount of effort on the part of many individuals around the campus, Cornell's overall performance in study abroad was very poor. The high point was reached this year with two hundred (200) students studying abroad out of twelve thousant (12,000) plus undergraduates which is an exceedingly small fraction. graduates, which is an exceedingly small fraction and far below most of our competitor institutions. It is also a practical matter because other undergraduate institutions are clearly attracting students away from Cornell by having better study abroad

away from Cornell by having better study abroad options available than we have had.

"The principles were first of all that it had to be a program available to all Cornell undergraduates but that simple principle is very hard to live up to. I mean available in the number of senses, available in the sense that it's open to everyone regardless of their financial ability to pay for the program, a key element in the whole idea. It also means available to students in all colleges and in all disciplines in the colleges insofar as that's possible. There are inherent limits to this but nevertheless that's the basic idea.

basic idea.

"The second principle is that there has to be a quality in the couses that is equivalent at least to the quality of courses available on the campus and that furthermore it be tied closely to campus activthat furthermore it be fied closely to campus activities and campus curricula, not a separate program; something that happens to people when they disappear from campus, but something that is an integral part of their educational process. Thirdly, it has to well reflect Cornell's global involvements. Perhaps the most surprising thing about our small involvement in study abroad is about our small involvement in study abroad is that the university, by comparison to many of its competitors, is internationally famous to a remarkable degree. We also have out of one hundred twenty thousand (120,000) or one hundred

thirty thousand (130,000) of one fundated thirty thousand (130,000) alumni, some fifteen thousand (15,000) foreign alumni.

"The implications of all this are very substantial. First of all, financial aid had to be extended to students studying abroad. That has not been the case, but will be next year. Secondly, we needed a university mechanism that would allow us to help in the process of certifying programs, in collaboration with all of the colleges on the quality of the program. There are five hundred thirty-four (534) foreign study programs around the country. Some of them are outstandingly good: some of them are of them are outstandingly good; some of them are incredibly bad; many of them make a lot of money for the people who run them, and Cornell's involvement in this kind of program has to be careful and thoughtful. We have to undertake a review of existing Cornell arrangements because there are a very large number of arrangements. Many of the colleges have innovated their own programs, creating options that are suited to their curricula. Those arrangements have to not only be looked at and supported, where the support will be helpful but also ratified and brought to the attention of other colleges as a stimulus for similar ideas to be extended elsewhere.

"Having an overseas program for all students in all fields in all colleges is a nice ideal, a very diffi-cult one to come to terms with. After all, study abroad is, in a certain sense, naturally a preserve of students in the social sciences and the humanities, both because of curricular considerations and also because that is a natural path for them, a normal course of events. They can extricate them-selves from the campus in their junior year with-out a great deal of delay in the fulfillment of the rest of their requirements and it works well. Fo-students in other fields, with tightly sequenced

curricula, these programs are difficult to paticipate in. For them, special efforts must be made.

"Another implication of our effort is a need for increasing the amount of information to be available to the colleges for advising with regard to for-eign studies. There is a group of very dedicated ad-visors around the campus who have been interested in this for a long time and have served the University well in lieu of a university-wide pro-gram. Their efforts need to be encouraged. The colleges will be taking on, as more and more stu-dents go, increasing advising responsibilities, we dents go, increasing advising responsibilities. we have to enlist the support of the faculty who know a great deal about this but whose information has not really been summed up anywhere. Cornell faculty have been all over the world and know colleges and universities in many places. We do not have an adequate inventory of who they are and

have an adequate inventory of who they are and where they have been or how they could help us advise students better.

"Finally, we need to create other than academic year programs because in realtiy, many of our students in the physical sciences, the biological sciences, and in engineering will find it simply impossible for curricular reasons to leave during their junior year, and I will talk about that in a little bit more detail in a few minutes, but I want Arch to tell you where we stand with regard to Cornell Abroad as part of Cornell's regular academic year program."

Professor Dotson: "This becomes my second act. In pursuit of the purposes and principles that Davydd has identified, so far we have taken the following steps. Because of the variety of colleges programs, and so on at Cornell, and because of the variety in the same factors abroad, a great many different arrangements are indispensable if many different arrangements are indispensable if we are to make study abroad an integral part of Cornell education and if we are, further, to ensure that no student shall be deprived of this opportunity because of the need for financial aid. We have entered into formal agreements whereby Cornell will nominate a minimum number of students to particular institutions. Such agreements have been reached with the London School of Economics, University College of the University of London, Bristol, Manchester, Edinburgh and Sussex Universities. You will notice immediately that these may be regarded as our peer institutions. They are comprehensive institutions as well. We have informal understandings with six colleges at Cambridge and sixteen at Oxford. In all of these, Cornell nominates its own students. They are reviewed, as they must be, by the institutions themselves; but they have been vetted, as the English say, validated as they say as well, and certified by Cornell.

Cornell's imprimatur is on its own students.

"This, in turn, means that since it is an all-University program, there must be a mechanism for selecting our students, ranking and nominating them. We have already done this for the first group. A review committee from all colleges was

constituted, the applications reviewed; and fourteen (14) students were nominated to Oxfored and Cambridge. We do not yet know the result, but the prospect is that there will be a very high rate of acprospect is that there will be a very high rate of acceptance. This arrangement was encouraged, if not insisted upon, by these institutions. They wanted to have students nominated, reviewed, and certified rather than having them apply directly. Direct application often means that the students are, as was said to me by the admissions tutor at Clare College, 'non-starters'. That's one set of arrangements

rangements.

"We have, as well, entered into a joint venture with the University of Michigan to establish a program at the University of Seville. We have a program, similarly negotiated, with the University of Hamburg. We have reached agreement in principle with DIS in Copenhagen. We have under ciple with DIS in Copenhagen. We have under consideration a program in Geneva. The attraction in Geneva may be apparent to you immediately because it offers an opportunity to replicate, with appropriate adaptations, Cornell-in-Washington. There are some thirty-five (35) international agencies that have headquarters in Geneva. Many private sector consortia and corporations also have headquarters there. The prospect of having externships in international agencies, coupled with seminars in the University of Geneva or the Institute of International Studies, is very exciting indeed. You may well imagine we have exploited all the Cornell connections. The Chief of External Relations of the United Nations in Geneva is a Cornell graduate; one of the senior officers in

Relations of the United Nations in Geneva is a Cornell graduate; one of the senior officers in UNCTAD is a Cornell graduate; and so on. "In addition, we hope to have an exchange program, now in the early stages of negotiation, with several universities in China. We also have under consideration a program in Japan. A workshop with Tokai University is scheduled for January; but Tokai is only one of the institutions under consideration. Also in Israel (I am going to Israel at the end of this month, where Professor Arthur Ligherman will join me), we are going to try to Lieberman will join me), we are going to try to

"We believe, quite simply that every Cornell student is entitled to study abroad...."

achieve a program somewhat similar to the one in Britain whereby students may go to one of several universities, depending upon their interests and qualifications. We want, as well, to investigate the

opportunity for Arabic studies at the American
University of Cairo.

"That's where we are at the moment. We do not have programs or projects in France or Italy. Of course, we can never have affiliations with every institution in the world where a student might have a legitimate academic reason for wanting to study. In cases where we have no program, Cornell will undertake the function so commonly performed by the placement agencies to which Davydd re-ferred. Cornell will place its own students. The student will, again, register at Cornell. All stu-dents will be eligible for financial aid. All students will get credit. We believe, quite simply, that every Cornell student is entitled to study abroad. Where it is best for each student to go is a judgment that can only be made by the faculty concerned. Corcan only be made by the faculty concerned. Cornell Abroad seeks only to assist in that judgment

"In general, we visualize ultimately an interna-tional league of universities of distinguished qual-ity: Cornell would be a member of that league. We hope that this will lead to expanded interchanges of both faculty and students.

"Let me speak to one final point. This program is feasible only if students register at Cornell and pay Cornell tuition. The prospect at the moment-we have been given a three-year moratorium to sort this out--is that Cornell may have to subsidize costs, at least in the early years. I just hope that we can get through after three years on a relatively balanced budget." Professor Greenwood: "In addition to the actu-

al study abroad programs themselves, there are related efforts occurring on the campus. There is a Language House Program. There had been one in the past and it has now been resurrected in new

form. The Language House currently resides in North Campus Lowrise 9. Three languages are represented--German, Spanish, French will some thirty-six (36) students in residence. This kind of model is something that other unique residence. model is something that other universities have had in the past, and it works reasonably well making use of native speakers and creating the opportunity for students to spend time learning together about the cultures that they are interested in. This gives students respectively to go abroad an opportunity of the cultures that they are interested in. gives students preparing to go abroad an opportunity and inducement to learn as much as possible before going abroad. It also gives students comin back an opportunity to tell somebody about the experience that they had, a problem that is more acute than you might imagine. It's very disheatening to come back from a major experience and have no one who's interested in hearing about it. "In addition there will be certain curriculum developments: e.g., courses suitable for preparing

"In addition there will be certain curriculum velopments; e.g., courses suitable for preparing students to go abroad. We do need some courses of a more global sort about contemporary wester. European society and politics, as well as additional survey courses. The talent exists on campus to do that, and the impetus I think will be provided by interest on the part of the students involved in foreign study in such courses. One such courses already going to be offered jointly by History and Government this coming semester on the acquisition of national and ethnic identities in Western Europe.

"Another part of this program is the interna-tional internships. Given the principal of equal access for all students on all grounds, it is clear that we need to have opportunities for students who we need to have opportunities for students will not be able to go during the academic year. Think, for example, of a pre-med faced with the junio year MCATs, Organic Chemistry, the meir cal interviewing system, and all the rest. It is not the most likely time for that person to disappear from the campus. Even students who do not have an objective reason for not going, fear leaving the system in case it will put them out of step. Manyo an objective reason for not going, fear leaving system in case it will put them out of step. Many of the students in the science courses and in engineering who are tied into curricula that are very tightly sequenced simply cannot go away without delaying their graduation a full year.

"For these students, we have looked into the summers for internship opportunities because they have shown a very strong interest in summer with in professional areas where they might be working later. They are trying their profession on for size

later. They are trying their profession on for sand building their resumes, in some cases. We think the opportunity exists to reach those students by offering them internships in a foreign country that would require them to learn a larguage and would encourage them to learn some

think the opportunity exists to reach those dents by offering them internships in a foreign country that would require them to learn a larguage and would encourage them to learn a larguage and would encourage them to learn some thing about how the professionals practice in another place. This, we believe, would perform some of the leavening intellectual functions that study abroad performs for other kinds of students.

"This program has already begun as an experiment with the Engineering Coop. In this program a selected group of students is sent away during the fall semester on a professional placement. They return them to the campus for their spring semester and go off again in the summer to work. They get the fall semester work that they miss in an intensive summer course prior to leaving on their internship. For this program, we have a rranged foreign internship placements, with the help of Cornell alumni in Venezuela. Student enthusiasm for this experiment was very gratifying. It also shows us that there is a potential synergy between the foreign and U.S. alumni on many les, including secondary school admissions work and foreign internships.

"To develop this imposes on Cornell an obligation to enhance its International Public Affairs Program. At the present time, Cornell does not have a fully funded International Public Affairs position, there having been in the past an experimental half-time position to serve the entire work of these internship elements may also timately be incorporated in the Cornell Traditional Cornell Connection as international elements of those programs.

"It hink what we are seeing in the pangly of the mark."

and Cornell Connection as international element of those programs.

"I think what we are seeing in the panoply of possibilities here is that the full scope of the maining of the statement that we must "international lize" Cornell is quite staggering, and that even what we are doing now, we are only touching very small part of it."

Speaker Martin: "We have reached our mandatory adjournment time. Those of you who do have tory adjournment time. Those of you who do not answer them."

The meeting was adjourned at 6:00 p.m. miltiglight.

The meeting was adjourned at 6:00 p.m.
Respectfully subm
Francine A. Herman, Sect

Cuban National Identity On Conference Agenda

A two-day conference on "The Emergence of the Cuban National Identity" is scheduled here Thursday and Friday, April 11 and 12.

Free and open to the public, the conference features lectures by scholars from leading universities such as Harvard, Yale, Texas Tech, Amherst, Texas, Pittsburgh and Cornell. While most of the lectures will be in English, several will be in Spanish.

The conference will start at 4 p.m. Thursday, April 11, and continue through the following day, starting at 9 a.m. All the talks will be in the Guerlac Room of the Andrew D. White House on the Cornell campus.

Each lecturer will examine the factors which have contributed to the formation of Cuban national identity from the perspective of their academic disciplines -- government, economics, history, and literature.

The conference is funded by the Cornell Latin American Program's Federal National Resource Grant, part of a consortium agreement with the University of Pittsburgh.

Following is the conference program:

Thursday, April 11, 4-6 p.m. - "Cuban Nationalism and U.S. Response: The First Machado Administration," Jorge Dominguez, Harvard; "Reflexiones sobre Espajo de paciencia." Robert Gonzalez Echevarria, Yale:

Friday, April 12, 9 a.m. - noon - "Guns, Subsidies, and Commercial Privilege: 1763-1815." Allan Kuethe, Texas Tech; "The Vision from Afar: la Condesa de Merlin," Adriana Mendez Rodenas, Universidad Autonoma de Puebla.

Friday, April 12, 2-5 p.m. - "Ingenio y literatura," Antonio Benitez Fojo, Amherst, "Marti and the Cuban Revolution," Enrico Mario Santi, Cornell.

In addition, professors Cole Blasier, Julio Matas, and Carmelo Mesa Lago, all of the University of Pittsburgh, will participate in the program. Mesa Lago will lead a general discussion at the end of the conference.

'Herb Garden Companion' Is New Plantations Book

Devil's posy, Frenchman's darling, widow's tears, Grecian foxglove, clear eye, johnny-jump-up.

These are not the names of ingredients for a witch's brew, nor are they code words for some secret mission. They are, in fact, antique references, respectively, to: garlic; mignonette (of value to the beekeeper); spiderwort (representative of herbs and garden lowers used in early dooryard gardens in upstate New York); Digitalis lanata, which is part of nature's pharmacy and is used in the treatment of heart disease and for heart regulation; clary sage, an economic herb cultivated for its aromatic oil; and a garden panis used as a cordial and for diseases of the

These are only some of the herbs discussed in "An Herb Garden Companion," published by Cornell Plantations (paperback, \$13.95). Written by Audrey H. O'Connor Mary Hirshfeld, the book has information for gardeners with a wide range of interests including nutrition, medicine, folklore, sardening, and social history.

Indeed, the authors herald the beginning of an "herbal renaissance" as people seek the vital association between plants and people. Herbs, they write, "were the first foods

and helped sustain human life. (They) became the healers of pain and helped make human life endurable."

Eventually, the authors continue, herbs nourished the human mind and spirit as evidenced by the discovery of the skeleton of Shanidar IV, a Neanderthal man buried 60,000 years ago in a cave in northern Iraq. Shanidar's survivors laid his body on a bed of branches of ephedra. Seven species of wildflowers were placed in the grave; all the plants, with the exception of one, have traditionally been used in herbal medicine.

Inspired by the Plantations' Robison York State Herb Garden on the Cornell campus, "An Herb Garden Companion" will inform readers about the lore, legends, and uses for more than 400 species and cultivars of herbs. Ninety drawings and photographs of herbs growing in gardens and an index that is cross-referenced by both Latin and common names are also included.

For more information, write to: Cornell Plantations, One Plantations Road. For a copy of the book, send \$13.95 per copy, plus 7 percent New York sales tax, and \$1.75 to cover postage (35 cents for each additional book) to the Plantations. Checks should be made payable to Cornell Plantations in U.S. funds only.

Round-up Club Students and Steer In a 'Race' Toward Auction April 20

Students in the Round-up Club here and their steer, Gregory, are racing the clock to April 20.

Members of the club are feeding and caring for Gregory who will be auctioned during the April 20 student livestock show on campus.

"He'll be a little young when we sell him in April," according to Polly Sisson, a student in the department of animal science of the State College of Agriculture and Life Sciences and president of the Round-up Club.

"We're feeding him so he'll be a quality beef animal when we sell him," she says.

Gregory is an Angus-Hereford-Simmental cross born last April 1. He weighed 667 pounds when the Cornell student group acquired him on December 1. Mr. and Mrs. John Bisgrove of Sunrise Farms in Auburn donated the steer to the club.

Beef animals like Gregory are generally sold when they are 18 months old; at that age, they weigh approximately 1,200 pounds. Gregory will be a little more than a year old at auction time. So, the members of the Round-Up Club are hoping to boost Gregory's weight to 1,100 pounds. On March 1, Gregory weighed in at 900 pounds. To achieve the 1100 figure his weight gain must be at least 3.3 pounds per day; his average, however, is 3,57 pounds.

On sale day, Willie Boles, an auctioneer from the Empire Livestock Marketing Coop, will donate his time and services to sell Gregory to the highest bidder. The average meat price of choice quality -- as Gregory has been judged -- is 65 cents per pound on-the-hoof. Sisson hopes that bidders, recognizing the charitable nature of the auction, will boost the bid to \$1 a pound, or better.

Applied Mathematics Plans Three Lectures

Donald Cohen, professor of applied mathematics at California Institute of Technology will present three lectures next week as part of the Special Year '84-85 on Reacting Flows, supported by the U.S. Department of Energy and the Army Research Office.

The lectures are sponsored by the Center for Applied mathematics and the School of Chemical Engineering. The general subject for all three, each scheduled for 4:30 p.m. in 165 Olin Hall, is "Chemical Reactor Theory"

Specific topics are "Mathematical Formulation" Monday, April 8, "Multiplicity and Stability of Operating States" Wednesday, April 10, and "Current Problems" Friday, April 12.





of udents wishing to add or drop courses at this time must petition for changes and pay a late processing fee.

For more information on the fellowships listfor more information on the fellowship Oflelow contact the Graduate Fellowship Oflelow contact the Graduate Fellowship Ofletow contact the Graduate Fellowship Ofletower in the fields of business and finance, labor/industrial relations, perletower in the social sciences. To be eligible the stuletower in the social sciences. To be eligible the stuletower in the social sciences. To be eligible the stuletower in the social sciences in the fields of business. To be eligible the stuletower in the social sciences in the field of the stuletower in the social sciences in the fields of business.

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living expenses and/or project costs. For application information write: Communication Service, The Canada Council, 255 Albert Street, P.O. Box 1047, Ottawa, Ontario K1P 5V8.

For employment and internship opportunities

For employment and internship opportunities check the bulletin board outside the door of the Graduate Fellowship and Financial Aid Office, 116 Sage Graduate Center. Relevant information will also be sent to the field offices.

New Phone System Work Progressing

Work continues on the new telephone system. Dormitory rooms in both West Campus and Lower North Campus are now being wired

The excavation work in the Engineering Quadrangle is complete and ready for the installation of new cable between buildings.

Major excavation work will begin on April 8 in the North Campus. Work will begin near the foot bridge by Noyes Lodge and move north to Balch, Clara Dickson and on to the International Living Center. Thurston Avenue, Sisson Place, several service roads and parking areas will be affected.



The dog is Toby, the student is Brian Harris and the book is engrossing.

Brief Reports

Foreign Visitors Here For ILR Instruction

The New York State School of Industrial and Labor Relations will be host to a group of visiting trade union leaders from a variety of countries including Bangladesh, Belize, Burkina-Faso, Cameroon, Ecuador, Grenada, Honduras, India, Indonesia, Liberia, Nicaragua, Sierra Leone and Sri Lanka beginning Monday, April 15. The participants are here for a four-week tour of the United States, including a week of instruction at Cornell.

A wine and cheese reception will be held in the Main Lounge of the Statler Inn, at 8 p.m. Monday, April 15. The reception is informal and is open to anyone interested in meeting and exchanging ideas with these leaders.

Any native citizens of the participants' countries who are currently living in the Ithaca area are particularly invited to attend.

Further information is available from Mary Lehman at 256-2125.

India Group Schedules Four Days of Events

The Cornell India Association will present "Images of India," four days of dances, music, food and films, from Thursday, April 11, through Sunday, April 14.

Events begin at 7 p.m. Thursday with an Odissi dance performed by Lita Sarangi and Niharika Mohanty, along with Kathak, Baratnatyam and Manipuri by Asha Devi, at James Law Auditorium of the Veterinary College. Tickets are \$1 for members, \$2 for non-members.

At 7 p.m. Friday, a sitar recital will be presented by Gaurang Yodh, with Daniel Prabhakar on the tabla and Jaya Yodh on the violin, followed by Hindustani vocal music by

Sujit Mohanty, also at James Law Auditorium, with tickets \$1 for members and \$2 for non-members.

At 1:30 p.m. Saturday, a Hindi film, "Amar Prem," with English subtitles, will be shown at Uris Hall Auditorium, with free admission.

At 7 p.m. Saturday, "Rhythms of India," a medley of folk, classical and contemporary dances of India will be performed by the Academy of Indian Art and Culture of New Jersey, choreographed by Reeta Baidyaroy, at James Law Auditorium, with tickets \$1 for members and \$2 for non-members.

At 1:30 p.m. Sunday, a Hindi film, "Phir Bhi," with English subtitles, will be shown at Uris Hall Auditorium, with admission free.

Events end with a potluck dinner at 6 p.m. Sunday in the One World Room of Anabel Taylor Hall. Cosponsors are Graduate Activities Funding Commission, Council for Creative and Performing Arts and International Student Programming Board.

Author Tobias Wolff To Read from Works

Tobias Wolff will read from his fiction at 8 p.m. Thursday, April 11 at the A.D. White House. Wolff is the author of "In the Country of the American Martyrs," a collection of short stories.

Wolff's reading is sponsored by the Cornell Creative Writing Program, the Cornell Council for the Creative and the Performing Arts, and the National Endowment for the Arts. After the reading, there will be a reception.

Entertainment Editor Will Visit on Campus

Joan Behrmann, entertainment editor of USA TODAY, will visit campus April 10 and

11 as part of the American Society of Newspaper Editors' "Editor-in-Residence" program.

She will speak twice, at 12:20 p.m. Wednesday, April 10, in 233 Plant Science, and 4:30 p.m. that day in Loft 2 of Willard Straight Hall.

Her visit is sponsored by the Sigma Delta Chi campus chapter.

Garden Plots Available For Summer Rentals

Garden plots located on Warren Farm, Ellis Hollow Road and near Cornell Quarters are available for rent for the summer through the Cornell Garden Plot Committee.

Small plots, 20x25 feet, are \$5 for the season and large plots, 20x50 feet, are \$10. The plots are available to members of the Cornell community and are distributed on a first-come, first-served basis.

Interested gardeners can sign up for a plot by sending a self-addressed, stamped envelope to:

Cornell Garden Plots P.O. Box 843 Ithaca, N.Y. 14851

Do not send money at this time.

The land for the gardens is donated by the State College of Agriculture and Life Sciences.

Those who sign up in advance will receive information concerning distribution time. Those who have not signed up in advance should go to the auditorium of Martha Van Rensselaer Hall on May 11, 1985 at 1 p.m., when leftover plots will be distributed.

-SAGE CHAPEL-

Director of CURW Will be speaker

The Reverend Robert L. Johnson, director of Cornell United Religious Work will speak at Sage Chapel at 11a.m. Sunday, April 7 (Easter). His sermon topic will be "Life for Those Who Know

Death."
Johns dained in United M Church a of the U

Johnson is an ordained minister in the United Methodist Church and a graduate of the University of North Carolina at Chapel Hill, Union Theological Seminary New York City, and

JOHNSON Harvard Divinity
School. For 18 years, he served as director of the Wesley Foundation at Chapel
Hill, N.C. and served in recent years as the president of the National Institute for Campus Ministries. As director of CURW, he is responsible for the administration of Sage Chapel services.

Music for the service will be provided by Stephen May, acting university organist.

Minority Business Positions Available

University Personnel Services is accepting applications from minorities within the Connell community for the Business Management Trainee Program.

This program is designed to provide experience and training in all aspects of university administration, sufficient to prepare an individual to assume a business management role at the university.

The program begins Sept. 1. Interested employees may submit a letter of interest and resume by April 30 to Judith Morgan, assistant to the director, University Personnel Services, 130 Day Hall.

The Week in Sports

Men's and Women's Lacrosse Home Saturday with Pennsylvania

Sports Information Office

Ever since its loss to Adelphi on opening day, the Big Red men's lacrosse team has been coming on. Cornell has won two games in a row, and this Saturday the Red has a very important game at Schoellkopf Field, entertaining Pennsylvania at 2 p.m.

In addition to the men's lacrosse game, the Pennsylvania and Cornell women's lacrosse teams also will play Saturday. That contest will get under way at 10:30 a.m. on Schoellkopf Field. Two other Big Red programs open their home campaigns Tuesday. The baseball team begins Eastern League competition with a doubleheader against Army at 1 p.m. on Hoy Field, while the men's and women's track teams take on a combined squad from Oxford and Cambridge universities at 4 p.m. on Schoellkopf.

Pennsylvania is the defending Ivy League men's lacrosse champion, and the Quakers are currently 1-1 in league play with their lone loss coming to Yale (12-11 in overtime). Cornell is 1-0 in the league, having defeated Harvard. Saturday's game is an important one as both the Big Red and Penn are looking to keep pace with current leader Yale (2-0).

Cornell has been making steady progress this season, and it showed continued improvement in the 12-11 victory over Maryland-Baltimore County this past weekend. This win brought its record to 2-1, and earned the Red 15th ranking in the latest USILA coaches poll. Seven different players scored against Maryland-Baltimore County, and the attack and midfield units recorded six tallies each. Five different players have

five or more goals thus far.
Junior attackman Bill Hughes leads Cor-

nell in scoring with four goals and five assists, but he is followed closely by senior midfielders Ken Entenmann and Jamie Smith, who both had four points on Saturday. Entenmann has five goals and three assists, while also enjoying an eight-game scoring streak. Smith registered a season-high three goals vs. UMBC and now has four goals and three assists.

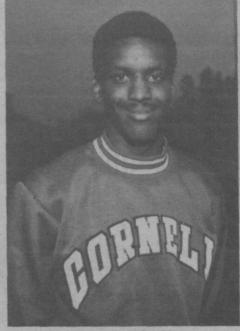
Junior attackman Nick Lantuh matched Smith's goal-scoring total Saturday, as he had a career high with three consecutive scores in the second period. Cornell received a big boost Saturday from sophomore attackman Tim Mulligan. Mulligan, who suffered a hip injury during the pre-season and did not suit up for the first two contests, contributed two goals against UMBC. They were the first two tallies of his Big Red career.

Pennsylvania is 4-1 on the season (ranked seventh in the country) and is coming off a 9-8 victory over Harvard in Cambridge Saturday.

day.

The women's lacrosse team lost its season opener this past Saturday, suffering a 17-2 defeat to Yale on the road. Freshman Mary Beth Delaney had a very fine debut for the Red, scoring one goal and assisting on the other. Junior Jenny Graap had Cornell's other tally on the afternoon, while senior Lyn Reitenbach recorded one assist. Junior Ellen Grant and senior Claudia Casavecchia split the playing time in goal.

The baseball team is currently on its spring trip to the Southwest, and is enjoying a great deal of success — despite the fact that it is taking on foes with a great deal of game experience under their belts. The Big Red has opened its season by winning six of its first



DARREN ROACH Men's Outdoor Track

seven games in Texas. Cornell opened the campaign with a 17-6 rout of Trinity College, and it then swept a doubleheader with Southwest Texas State (7-4 and 8-3). The Big Red split two games with St. Mary's (dropping the opener 5-2, but taking the nightcap 4-2), and then took two from Schreiner College (5-4 and 17-16). Senior right-hander Steve Huber won two of the contests, including a complete game performance against St. Mary's. Junior Larry Brown went the dis-

tance against Southwest Texas, allowing Infive hits. As far as the hitting is concerned, senior left fielder Mike Kalfopoulos is having an outstanding trip. Kalfopoulos had home run in each of the two games against St. Mary's. In the doubleheader with Schreiner, he had five hits in eight trips to the plate, including five RBIs in the second game. Freshman outfielder Eric Olson, sophomore shortstop Mark Smith, junior catcher Jim Durant and junior center fields Joe Cossu have all hit homers on the trip.

The Cornell men's and women's track test ms will compete at home Tuesday after spending a week in California, where it is training and competing in two meets. This past Saturday, the men defeated both Santa Barbara and Cal-Lutheran while the women beat Lutheran but lost to Santa Barbara. Sophomore jumper Darren Roach an outstanding meet, as he won both the long jump (23-9) and triple jump (50-23/1) and recorded a personal best in each event

Freshman Steve Kuntz set a school recolor the ment in the high jump. Other winners for the ment were freshman John Bayne in the 400 meters, sophomore John Reid in the 400 meters, sophomore John Reid in the 400 meters, junior Grant Whitney in the 5,000, hurdles, junior Grant Whitney in the 5,000 junior Todd Pressley in the 200, senior Charles Fleming in the 100 and senior John Passalacqua in the shot put.

Among the women, senior Amy Phelps won both the 800- and 1500-meter runs, and nior Lauren Kulik won the triple jump and took second in the long jump. Senior Made took second in the long jump. Senior Made leine Wootan and sophomore Dana Stande each placed in the shot put and discuss, tan captured the shot put and Stone took discus. Freshman Elizabeth Jackson was first in the high jump.