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Peter Morenus/University Photography

The successful cloning of a gene for disease resistance in tomato plants creates a new approach for obtaining better-yielding and hardier crops, necessary to feed a growing world population, says Steven Tanksley, professor of plant breeding and biometry in the College of Agriculture and Life Sciences.

In breakthrough, scientists clone crop gene for disease resistance

By William Holder

Cornell scientists have, for the first time, successfully cloned a gene for disease resistance in a major crop using a powerful technique for locating genes, achieving a significant goal of the U.S. Plant Genome Research Program and holding promise for substantial changes in the world's food sources.

Reported in Science (Nov. 26), this achievement has been vigorously pursued by several researchers because it opens the way to obtaining genes for many important agricultural traits, such as flavor, yield and insect resistance, said Steven Tanksley, professor of plant breeding and biometry in the College of Agriculture and Life Sciences.

The discovery creates a new approach for obtaining better-yielding and hardier crops, necessary to feed a growing world population, Tanksley said.

"It is not inconceivable that we will be isolating genes for

CU and Latino leaders meet after Day Hall sit-in

President Frank H.T. Rhodes, Provost Malden C. Nesheim and other university officials and faculty members met with leaders of Latino student groups and their supporters Tuesday morning to continue dialogue about issues raised during demonstrations and the occupation of Day Hall last week.

"We had a very good session, with many positive ideas put on the table," Vice President for University Relations Henrik N. Dullea said of the meeting. Discussion focused on the proposed development of a Latino living-learning unit, he added.

"While President Rhodes expressed his continuing grave reservations about any initiatives that could contribute to the exacerbation of fragmentation on the campus, the concepts presented by the students had a strong academic component and offered substantial opportunities for the inclusion of many campus groups in their implementation," Dullea said. "A program design committee consisting of the executive committee of the Hispanic American Studies Program (HASP) faculty, four undergraduates, one gradu-

yield within the next 10 years or less," he added. "Yield is a trait controlled by multiple genes that no one would have tackled before."

He and his colleagues turned to the extensively studied tomato plant to clone a disease resistance gene. Their discovery also sheds light on the basic biology of disease resistance, which bears similarities to a chemical signalling process in humans.

More important, the technique of map-based cloning, which the Cornell researchers have applied for the first time to a crop plant, gives scientists a general tool for obtaining genes of agronomic interest. As a result, Tanksley predicted the pace of gene discovery and exploitation in agriculture would increase significantly.

"This scientific breakthrough at Cornell is exactly the type of results that were aimed at when the Plant Genome Research Program was set up," said Jerome D. Miksche, the program's director, with the U.S. Department of Agriculture's Agricultural Research Service. ARS is the lead agency in the USDA program, established in 1991 to fund research to identify, characterize and transfer genes that control plant traits important to agriculture and forestry.

"The Cornell research not only demonstrates for the first time that important agronomic genes can be cloned and isolated by reliance on genetic maps," he said, "it also opens the possibility for cloning similar resistance genes in other

Plant breeders have known for a century that there are single genes that confer resistance to diseases, and they have bred plants for these genes. The most common type of resistance is known as the gene-for-gene relationship, in which an invading bacterium possesses a gene that triggers a specific resistance gene in the plant. This is analogous in some respects to the antibody-antigen interaction in humans and animals.

Pursuing a tomato resistance gene, the Cornell researchers worked with a bacterium (*Pseudomonas syringae* pv. tomato) that causes bacterial speck. In a gene-for-gene relationship, the bacterium possesses a gene that triggers the *Pto* resistance gene in some tomato cultivars.

Tanksley's co-authors are Gregory Martin, who carried out this work as a postdoctoral associate at Cornell and now is on the faculty of Purdue University; Elizabeth Earle, Cornell professor of plant breeding and biometry; post
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CORNELL LIFE

For students, it's that time of year again. No, not final exams. It's time to decide where to live *next* year.

STRATEGIC PLANNING

As the strategic planning process moves toward conclusion, four task forces have set public meetings to report on their progress and gather campus comment.

Sagan wins science academy's highest honor

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By Larry Bernard

Carl Sagan, the David Duncan Professor of Astronomy and Space Sciences, has won the 1994 Public Welfare Medal from the National Academy of Sciences, the academy's highest honor, the academy announced Monday, Nov. 29.

The medal, awarded annually since 1914, is presented to "honor extraordinary use of science for the public good," the academy said.

"I'm honored and delighted," said Sagan, director of Cornell's Laboratory for Planetary Studies.

"In the public view, Carl Sagan's name may be associated more with science than that of any other living U.S. scientist," said Bruce Alberts, NAS president. "This award clearly honors a very distinguished individual who has played a critical role in promoting the understanding of science worldwide."

Sagan, 59, played a leading role in NASA's Mariner, Viking, Voyager and Galileo expeditions to other planets. He has received NASA Medals for Exceptional Scientific Achievement and twice for Distinguished Public Service. His research has focused on topics such as the greenhouse effect on Venus, windblown dust as an explanation for the seasonal changes on Mars, organic aerosols on Titan, Saturn's moon, the long-term environmental consequences of nuclear war, and the origin of life on Earth. He continues to teach graduate and undergraduate students in courses in astronomy and space sciences and in critical thinking.

Cornell President Frank H.T. Rhodes said Sagan's contribution to the public understanding of science has been unprecedented.

"Carl's ability to inform the public about science in general and space science in particular is unmatched," Rhodes said. "But also, he has enlightened us about our own fragile Earth through his research of other planets in our solar system. The Laboratory for Planetary Studies is a worldclass – no, a universeclass – facility, due in large part to Carl's contributions."

Yervant Terzian, chairman of the Astronomy Department, said: "Carl Sagan is unique in his success to communicate the sciences to the public. His monumental TV series Cosmos has inspired the young and the old around the world about our home in the universe and has instilled a deep sense of responsibility to all of us about our planet the Earth. He richly deserves the academy's Public Welfare Medal."

Peter H. Raven, NAS home secretary and chair of the selection committee, agreed. "Carl Sagan has been enormously successful in communicating the wonder and importance of science," Raven said. "His ability to capture the imagination of millions and to explain difficult concepts in understandable terms is a magnificent achievement."

Sagan, at Cornell since 1968, received a bachelor's

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Peter Morenus/University Photography

Carl Sagan

Making her point



Peter Morenus/University Photography

Joanne Kaplan of Human Resource Services leads a recent training session on mentoring for staff women as part of a program sponsored by the Advisory Committee on the Status of Women and the President's Council of Cornell Women. Ten pairs of university women are involved in the mentoring project.

Disease resistance continued from page 1

doctoral associates Martin Ganal and Tiyun Wu; graduate students Sergio Brommonschenkel, Julapark Chunwongse and Anne Frary; and technician Rody Spivey.

They obtained the Pto gene through mapbased cloning, a technique developed for the Human Genome Project. As the name implies, the technique enables scientists to pinpoint genes by developing a map of their locations. During the past six years, the team has developed several techniques needed to apply map-based cloning to a crop plant, including a rapid method of finding DNA markers that function as signposts toward the gene of interest.

The most attractive feature of locating genes through DNA maps, Tanksley explained, is that one need not know anything about the molecular biology of the gene or the protein it encodes. Most previous methods of cloning genes in plants involved working backward from known proteins, but comparatively few protein products of genes have been characterized.

"If you want something that can modify agriculture, map-based cloning is a powerful technique," Tanksley said.

With the Pto gene in hand, the researchers put it into otherwise susceptible tomato plants. The plants became resistant to the bacterium, confirming that Pto is a resistance gene. Tomatoes are known to have at least 50 resistance genes for fighting viruses, bacteria and nematodes, Tanksley said.

The researchers found that Pto codes for a product, called a protein kinase, that is involved in the process whereby tomato plants recognize they are under attack and initiate a defensive response. The gene is a key component of the process, known as the signal transduction pathway, and is involved in the recognition phase, as opposed to the secretion of defensive substances.

'The signal transduction pathway is old and probably predates plants and animals," Tanksley said. "Details of how it works remain to be elucidated, but our research opens doors to answering that question."

A similar protein kinase pathway for signal transduction has been discovered in humans and other animals, he pointed out. It is not involved in defense - the province of the immune system - but does play a role in messaging between hormones and cells. Since the signal transduction pathway has been conserved across species, Tanksley expects to find similar genes in many other

He currently is searching for additional genes and predicted the time to find them, now that the technique has been developed, would be narrowed to about three years. He suggested that further progress could be expected soon in crops such as rice, sorghum, soybean, lettuce and potatoes.

The workings of plants at the molecular level also is the topic of Tanksley's courses on Plant Genome Organization and Plant Molecular Biology Laboratory.

The Plant Genome Research Program provided Tanksley in 1991 with a three-year \$480,000 grant.

Sagan continued from page 1

degree in 1955 and master's degree in 1956, both in physics, and a doctorate in astronomy and astrophysics in 1960, all from the University of Chicago.

He is well-known for his work on the PBS series Cosmos, the Emmy- and Peabody award-winning show that became the most watched series in public television history. It has been seen by more than 500 million people in 60 countries. The accompanying book, Cosmos (1980), was on The New York Times best seller list for 70 weeks.

He has published more than 600 scientific papers and popular articles and is author, co-author or editor of more than 20 books, including Broca's Brain, Comet, Contact and The Dragons of Eden, for which he won the Pulitzer Prize. Most recently, he co-wrote Shadows of Forgotten Ancestors with his wife, Ann Druyan.

Sagan has earned numerous awards for public service, from such groups as the Federation of American Scientists, Physicians for Social Responsibility, the American Physical Society and the American Astronomical Society, and has 20 honorary degrees from colleges and universities.

The NAS award, a bronze medal and illuminated scroll, will be presented April 25 at the NAS annual meeting in Washing-

BRIEFS

Attempted assault: In the wake of an attempted assault on a female student Sunday night, Nov. 29, Campus Police issued a reminder to the campus community that persons should exercise caution when walking about campus, especially at night. Campus Police advise that people, especially women, utilize the Blue Light pedestrian escort and bus systems and not walk outside alone during darkness. The attempted assault occurred shortly after 11 p.m. on Nov. 29, as the student walked alone on the footpath along Beebe Lake, going from Martha Van Rensselaer Hall to North Campus. She said that a man jumped out at her and grabbed her. She screamed, struggled and escaped unhurt. Campus Police are investigating the incident.

FCR meeting: Provost Malden C. Nesheim will discuss next year's budget at the December meeting of the Faculty Council of Representatives, which will be held on Tuesday (not Wednesday), Dec. 7, at 4:30 p.m. in the Uris Hall Auditorium.

■ Gingerbread: The National Society of Minority Hoteliers will hold its second annual gingerbread house making event on Friday, Dec. 3, at 4 p.m. in the Statler Lounge on campus. Children from the Greater Ithaca Activities Center and some 90 students in the School of Hotel Administration will participate.

■ Chronicle schedule: The final two issues for the fall semester will be published Dec. 9 and 16. Publication will resume Jan. 20 for the spring term. Calendar notices must be received 10 days perior to publica-

OBITUARIES

By Roger Segelken

Ronald D. Mack, the psychologist whose Evergreen residence set an early pattern of community-based care for former mental patients in an era of deinstitutionalization, died on Nov. 27 of cancer.

The 53-year-old associate professor of psychology recently received a major award from an Ithaca organization that operates homes for residents with special needs.

A Cornell faculty member since 1971, Mack founded Evergreen that year to provide semi-independent living experiences for patients who were released from large psychiatric centers. The halfway house was staffed by Cornell students of psychopathology who gained field experience while helping residents learn to function in their community, and it was one of the first of its kind in the state. Today, a majority of mentally disabled persons in New York are housed in residences nearer their families, and many of Mack's former students occupy positions of leadership in the mental health profession.

The undergraduate course established by Mack, Fieldwork in Psychopathology and the Helping Relationship, continues to provide opportunities for large numbers of students to participate, under careful supervision, in social agencies in Tompkins and other counties, according to Bruce Halpern, chair of the Department of Psychology. Halpern called Mack "an innovative, exciting and dedicated teacher" and a "deeply caring and committed person" who "cared about people, their needs, successes and goals, as well as their failings and problems. In the Psychology Department, he was a constant source of both stimulation and realism," Halpern said. Mack had taken a leave of absence during his illness, but hoped to return to teach a psychopathology class.

Mack's research specialties included psychopathology and psychotherapy as well as personality, dreams and dreaming, paraprofessional training and the use of paraprofessionals in mental health. He taught advanced undergraduate courses in psychotherapy, and his introductory psychopathology classes was one of the most popular in the College of Arts and Sciences. In 1988, Mack was honored with the university's Clark Distinguished Teaching Award. In 1990 and 1991, he was selected by Merrill Presidential Scholars as the most influential professor in the students' Cornell careers.

His classes also were well-attended by returning alumni, according to Ralph Janis, director of Cornell's Adult University, where Mack gave weekend seminars, courses in Origins of Personality and, most recently, The Primal Screen: Psychology, Hollywood and American Film.

Born Jan. 30, 1940, in Portland, Maine, Mack graduated cum laude with a B.A. in psychology from Brandeis University. He did graduate studies at Duquesne University and Columbia University Teachers College, as well as at Brandeis, and received a Ph.D. with distinction in clinical psychology from Columbia in 1974. He held an internship at Duke University Medical Center in 1967-68, then served as a consulting psychologist to the Peace Corps and VISTA (Volunteers in Service to America).

Mack was a state-licensed psychotherapist who maintained a private practice in Ithaca. He also was a consultant and staff trainer for Elmira Psychiatric Center and for H.O.M.E.S. Inc. (also known as Housing Opportunities Management and Essential Services), which took over operation of the Evergreen house in 1981.

"Before the deinstitutionalization that led to thousands of people with psychiatric disabilities being sent back to their communities, Professor Mack had the vision to set up the region's first community residence," said Deirdre Silverman, development director of H.O.M.E.S., which gave Mack its Lifetime Service Award on Nov. 8. In the future, that annual award will carry Mack's name, she said.

Active in professional affairs on the local and national level, Mack was elected president of the Andras Angyal Association for Health Oriented Psychotherapy and Education in 1986. He also had served as chair of the Advisory Committee of the Tompkins County Mental Health Clinic, co-president of the Tompkins County Psychological Association and was a member of the Citizens' Advisory Board of the McCormick Secure Detention Center for Boys.

A friend of more than 20 years, history Professor Richard Polenberg called Mack "a dedicated teacher who cared as much about teaching as any person I've ever known. He was utterly honest with his students in discussing the most sensitive issues," Polenberg said. "Although he never took himself too seriously, he had a serious attitude about his work. That combination of lightheartedness and seriousness is quite exceptional today."

Mack is survived by his mother, Ann, and brother, Marshall, both of Portland, Maine; his wife, Joanne Taormina; and children, Josh, 20, Hannah Rose, 7, and Ari, 1, also of Ithaca. Services were held Monday at Temple Beth-El, and a memorial service is being planned. Contributions in his memory may be made to Temple Beth-El or Hospicare of Ithaca.

Joseph Andrew (Andy) Breslin,

21, a master of engineering degree candidate, was killed in an automobile accident in Lancaster, Pa., early Thanksgiving Day. He was a 1993 graduate of the University of Pennsylvania and had been a National Merit Scholar and recipient of the Pennsylvania Award for Academic Excellence.

Memorial contributions may be made to the Andrew Breslin Memorial Fund, Lancaster Catholic High School, 650 Juliet Ave., Lancaster, Pa. 17602.

Henrik N. Dullea, Vice President for University

Linda Grace-Kobas, Director, Cornell News Service Mark Eyerly, Assistant Director and Editor Karen Walters, Editorial Assistant Joanne Hanavan, Circulation

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

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

Campus marks World AIDS Day

On Wednesday, Dec. 1, the Cornell community joined millions of people around the globe in marking World AIDS Day with a series of activities that includes a display of the AIDS Memorial Quilt in the Memorial Room of Willard Straight Hall through Friday, Dec. 3.

World AIDS Day is an annual day of observance designed to expand and strengthen the worldwide effort to stop AIDS.

Its goal is to open channels of communication, promote the exchange of information and experience, and forge a spirit of social tolerance, said Sharon J. Dittman of Cornell AIDS Action at Gannett Health Center.

World AIDS Day provides an opportunity for talking about HIV, caring for people with HIV infection and AIDS, and learning more about AIDS. The only international day of coordinated action against AIDS, it is now a yearly event in most countries, Dittman added.

Among the World AIDS Day events held on campus were a display of posters "Advertising AIDS" and a ceremony of remembrance and dedication.

Today, Dec. 2, the film And the Band Played On, based on the book by Randy Shilts, will be shown at 7:30 p.m. in the Willard Straight Hall Memorial Room.

Cornell AIDS Action is asking staff, faculty and students to do something to let people know that they are a part of the struggle against AIDS.

Only through joint efforts can we make the changes that are necessary to support and protect our friends, our loved ones, our co-workers and ourselves, Dittman said.

Among the things that faculty, staff and students can do to build AIDS awareness:

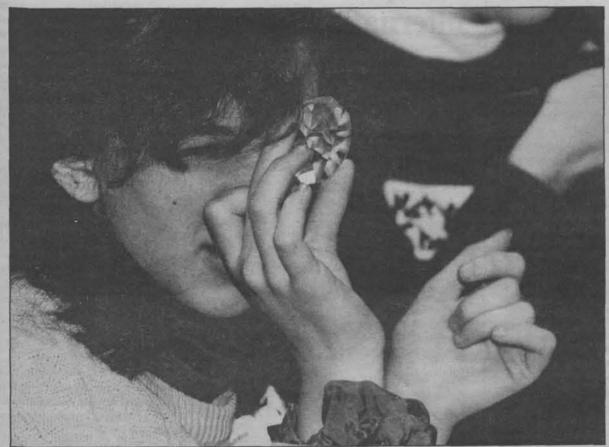
 Make sure to understand the facts about AIDS and help others to do the same.

 Schedule an HIV/AIDS workshop for a residence hall, class, office, department or group, or order brochures from Cornell AIDS Action at Gannett Health Center by calling 255-4782.

* Join the "Ask Me About AIDS" Network, an informal network of hundreds of people in all kinds of jobs at Cornell who are willing to let others know that, though you're not an expert, you are open to talking about AIDS. (Call Cornell AIDS Action for more information.)

* Join people all over the country who are wearing red ribbons for AIDS awareness. Make some for your friends (5 inches of ribbon with safety pin). Buy red ribbon AIDS awareness stamps from the post office.

Hello in there



Peter Morenus/University Photography

Elisabeth Monk, 13, of Ithaca, learns about the diffraction of light as she looks at a prism on Nov. 20. She was one of about 400 teen-age girls from 21 schools in five school districts who attended the seventh annual Expanding Your Horizons in Math, Science and Engineering program, organized by graduate students.

Workshop will teach faculty how to use multimedia technologies in the classroom

'You no longer have to be a skilled pro-

your instruction.'

grammer to integrate technologies into

By Carole Stone

The Instructional Resource Center (IRC) at Cornell Information Technologies is offering a workshop from Jan. 17 to 19 for faculty who would like to explore the potential of multimedia technologies in teaching and learning.

The three-day workshop will give participants an overview of available technologies, plus a chance to develop

dynamic lectures using outlining tools; use HyperCard with text, sound and graphics; put images, video and animation into the computer and retrieve them; and learn about visual databases.

"The workshop will give faculty enough hands-on ex-

perience that they can begin making and using these new learning tools themselves," said Charlotte Kiefer, manager of the IRC. "You no longer have to be a skilled programmer to integrate technologies into your instruction."

New computer technologies and software — such as HyperCard authoring systems and the new QuickTime technology — enable faculty to bring sound, text, video and graphics into their lessons, Kiefer said.

IRC staff have taught the Learning Technologies Program workshop numerous times, both at Cornell and at

other schools. Workshop participants need only a familiarity with a Macintosh or Windows-based environment. The workshop is free, but registration is limited.

Faculty should consider attending the course with a computer support person or graduate student, Kiefer said: "Previous participants say that they have been able to progress more smoothly in integrating multimedia in their teaching through a partnership with someone who under-

stands their instructional goals and the possibilities and limits of the technology."

Workshop participants will see and study examples of programs already in use in courses here at Cornell and around the country. They will also begin working on an in-

structional project of their own design.

The IRC, situated on the first floor of the Computing and Communication Center, is a facility where faculty can explore multimedia technology, review software related to their discipline and get guidance from IRC consultants. The center offers access to Macintosh and IBM workstations; slide and flat-bed scanners; photo CD and still and motion video cameras; and CD-ROM.

To register for the workshop, contact Tammy Drake at 255-3329 or by electronic mail at ltp@cornell.edu.



The housing market

It's about that time again.

"The rental season this year is starting earlier than ever," my four roommates and I were informed by mail recently. "Therefore we need to know your renewal intentions for '94-'95 as soon as possible."

The letter from our landlord went on: "Because we appreciate you as a tenant, we are willing to offer a freeze on your current rental rate if you renew by December 18, 1993. If you do not renew by this date, we will begin to market your unit and cannot guarantee an apartment will be available to you...."

Dec. 18?! We've yet to finish paying off our installation fees to New York Telephone, and we're expected to make a decision about next year already?

As sophomores, we're determined to do this housing thing right the second time around. Last year we waited until spring for the on-campus lottery, only to find ourselves shut out of the dorms we wanted and left to scramble at the last minute for decent, affordable off-campus apartments.

At one point we found ourselves discussing the relative merits of setting up camp in Goldwin Smith's Temple of Zeus, building a tree house in the Arts Quad, or residing in McGraw Tower. Moving like nomads from study lounge to study lounge in the U-Halls was another suggestion, although now that many of the lounges have been converted to regular rooms, this is no longer an option. One of our more enterprising friends even went so far as to write a letter to President Frank H.T. Rhodes, challenging him to a footrace in which Rhodes' Cayuga Heights home would be the stakes. (He received replies from Rhodes and Vice President Larry I. Palmer, both good-naturedly urging him to seek out more conventional channels for securing housing.)

We discussed setting up camp in Goldwin Smith's Temple of Zeus, building a tree house in the Arts Quad, or residing in McGraw Tower.

Fortunately everyone did eventually find acceptable living arrangements, but only after much hair tearing and temper flaring about where the best location was, who would room with whom, who got the rooms with the view of the lake, who should get the singles and how much more those people should have to pay.

Yet despite the lessons of freshman year and beginning the process months in advance, sophomore year house hunting is proving to be equally as messy and complicated, if not more so. Figuring into the equation are typical junior-year variables such as those who may or may not be participating in engineering co-ops, others who may or may not be admitted to the semesterlong Cornell-in-Washington program, still others who have not decided whether they will be spending the year abroad.

Most of these are questions that won't be resolved until well into the spring semester.

I keep thinking about a friend of mine at the University of California, Berkeley, where housing crunches are infamous. She ended up spending this semester working as a live-in baby sitter for a family and is contemplating selling her waist-length hair to help with expenses.

My roommates and I started the first round of what might fairly accurately be called negotiations a few weeks ago, but have yet to arrive at a decision. We halted discussion for Thanksgiving break, but despite returning to Cornell refreshed, well fed and rested, we've remained unable to resolve our little housing dilemma.

Should we sign leases now that we may have to break, or at least find replacements for, later? Or should we wait until spring semester and risk being stuck with lemon apartments with outrageous rents? Collegetown or West Campus? Four people or seven people? Apartment? House?

Shouldn't we be concentrating on finals now? I always liked that tree house idea. . .

—Barbara Yien '96

Cornell Chronicle

CU students to get loans directly from U.S. government

By Sam Segal

Starting in the fall, some 7,000 Cornell students will be borrowing \$28 million a year in loans made directly from the federal government.

In its first year, the Federal Direct Student Loan Program will handle only 5 percent of the \$15 billion now lent by banks to students. But for Cornell, the \$28 million will represent about 98 percent of all student borrowing under federal programs, according to Donald Saleh, director of financial aid and student employment.

Saleh predicts that the new system will make loans available to Cornell students at least three weeks faster than under the current system, meaning that most graduate students will have cash available sooner for paying bills and most undergraduates will have the funds credited sooner toward tuition payments.

"From Cornell's perspective," Saleh says, "I'm sure this is going to work. It will be very good for students and for the university."

Cornell was named Nov. 15 as one of 105 institutions - out of 900 eligible applicants to begin the program as of next year. U.S. Education Secretary Richard Riley says that it will save taxpayers \$4.3 billion over five years and will offer students more flexibility in repaying loans, with those earning less after graduation allowed to repay more slowly.

Cornell students will also see an immediate 2 percent reduction in the amount of each year's loan that is deducted for non-university administrative costs. On a loan of \$4,000, for instance, \$240 now comes off the top for federal administrative purposes; next year, the figure would be \$160, Saleh says.

Under the current system, a student fills out an application for a Stafford Loan early in the spring term. Cornell rules on eligibility and, if eligible, the student must get a loan application from a bank, send it in, and wait for the bank to send a check to Cornell. Then Cornell notifies the student, the student signs the check, and Cornell processes it as a payment to the student's account.

Under the bankless, new system, the student still fills out the application in early spring and Cornell evaluates it. But at the same time that Cornell notifies a student that he or she is eligible, it also sends a promissory note. As soon as the note is signed and returned to the Financial Aid Office, funds are immediately transferred electronically to the Bursar's Office.

While Saleh's office will have to deal for the first time with promissory notes and will face more accounting questions, it will spend no time handling bank checks or loan applications. He says the net effect will be at worst a draw; at best, there could be a reduction, over time, of one or two full-time jobs.

Saleh is less confident that the change will be easily handled by the Education Department in Washington. It is the department, instead of banks, that will oversee the collection of loan repayments.

Riley is immediately hiring 100 new employees and has said he could add an additional 500 over five years.

Under the current system, students pay nothing until graduation. So, during their college years, the government pays their interest to the lending banks - at 3.1 percent above the going rate for treasury bills. Thus, if a treasury bill pays 4 percent interest to investors, the government pays the banks 7.1 percent.

With banks out of the picture, the Education Department will float treasury bills to raise money to make the loans. So the government will still be paying the 4 percent; however, it will save the entire 3.1 percent additional now paid the banks - some \$465 million a year on \$15 billion. The government will also save money now paid to third-party "guarantors," agencies that try to collect on loans on which students have defaulted to the banks.

Because the Education Department has not yet specified the sliding repayment scale, it is impossible to estimate how much difference that might make to some students.

Labor's stake



Peter Morenus/University Photography

Edward Cohen-Rosenthal (left), director of the Cornell Work and Environment Initiative, welcomes United Steel Workers of America President Lynn Williams to the International Symposium on Work and the Environ-ment, held here Nov. 16-19. The union leader spoke on "Labor's Stake in **Environmental Change."**

There's still time to make your pledge to United Way's campaign

Philosopher Yogi Berra said it best: "It ain't over till it's over."

Officially, the campus United Way campaign concluded at Thanksgiving; but with 84.3 percent of the \$545,000 campus goal recorded as of Dec. 1, campaign officials aren't ready to call it quits.

not been turned in to campus volunteers

About 2,500 Cornell pledge cards have

or to the Tompkins County United Way office in downtown Ithaca, according to Henrik N. Dullea, vice president for university relations and chair of the Cornell campaign.

"We're still aiming to meet our dual goal of \$545,000 and 50 percent participation," he said.

So far, Cornell's participation rate is 34 percent.

The countywide goal is \$1,515,000, and 76 percent of that has been reached as of Dec. 1.

Two county divisions - Ithaca College and Health and Human Services have surpassed their goals, and three others are approaching the 90 percent level, based on pledge cards submitted as of this

Dullea said that some Cornell employees have inquired about how much to donate,

60

40

but there's no definite guideline.

"It's a personal decision," he said, noting that the average donation at Cornell last year was about \$2.25 a week. "If you're a first-time donor, you might consider giving an hour's pay per month."

Donors can specify the agencies to be supported, or let United Way respond where the needs are greatest.

Payroll deduction is available effective in January, or donors can write one check.

Composer Sierra wins ASCAP international award again

By Carole Stone

Composer Roberto Sierra, assistant professor of music, has received a Special Award again this year from the American Society of Composers, Authors and Publishers (ASCAP).

ASCAP, based in New York City, represents 35,000 members in numerous countries and distributes royalties to its writermembers. It gives its Special Awards each year, in both classical and popular music categories, to artists whose music is frequently performed without admission, such as in churches, schools and small concert

Sierra, 40, was born and raised in Puerto Rico and increasingly is becoming wellknown on the classical music scene for his masterful blend of Caribbean, Latin American and classical music.

Alex Ross, a music critic for The New York Times, called Sierra's 1991 Trio Tropical, performed in Bridgehampton, N.Y., in mid-August, "as fine a piano trio as has appeared in recent years." This season, the latest CD of Sierra's music will be released, featuring the Milwaukee Symphony Orchestra performing his orchestral music.

In his Aug. 12 review, Ross wrote: "This Puerto Rican composer is a master of rhythm and atmosphere, gathering Caribbean, Latin American and jazz elements into a classical idiom rooted in Bartok. In this new piano trio, these diverse sounds intersect within a keenly demarcated frame; the result is a sensuous, ever-shifting musical picture,

poised between impressionism and rhythmic modernism."

Trained in both Puerto Rico and Europe. Sierra studied at the Conservatory of Music and the University of Puerto Rico, then the Royal College of Music and the University of London, the In-



music faculty at Cornell.

and the Hochschule fur Musik in Hamburg, where the renowned Gyorgy Ligeti was his After serving as director of cultural

activities at the Uni-

stitute for Sonology in Utrecht, Holland,

versity of Puerto Rico and later as chancellor of the Puerto Rico Conservatory of Music, Sierra became composer-in-residence with the Milwaukee Symphony Orchestra in 1989, and in 1992 he joined the

Sierra teaches graduate students music composition and co-directs Cornell's Composer's Forum, which brings renowned composers to campus to discuss their work with students. This year, he also is teaching an undergraduate music theory course in 20th-century music.

ASCAP presented special awards this year to some 1,000 classical music composers and some 1,500 popular music composers. Sierra has received special awards from ASCAP for the last several years.

Solving the Riddle on the Hill

The solution to the Morse code riddle being sent from the Herbert F. Johnson Museum of Art between Nov. 20 and 26

Q: What is that which is a small mirror in a house made of fur branches?

A: Our eye. Knowledge is power.

The solution to the riddle being sent from the museum between Nov. 27 and Dec. 3 is: Q: What is it that is a small blue jar filled with popcorn?

A: The sky. There is no limit.

A new riddle will be sent between Dec. 4 and 10, and another between Dec. 11 and 17.

T	he Internati	onal Morse A	Alphabet:
A *-	N -•	Numerals:	Punctuation:
B - • • • C - • - •	O	1 •	Full stop •• •• ••
CH	Q	2 • •	Hyphen - • • • Apostrophe • •
D	R •-•	4	Semicolon - • - • - •
F • • - •	S ••••	5 • • • • • 6 – • • • •	Exclamation **
G•	U ••-	7•••	
H	V •••-	8•	
J •	X - • • -	0	
K - • -	Y - • Z • •		
M			

Streett leaves dean's office for classrooms and labs

By Larry Bernard

William B. Streett gazes out the window of the dean's office in Carpenter Hall at the building across Campus Road.

It is there, Olin Hall, where he will return to a career as a professor of chemical engineering when he vacates his position as dean of the College of Engineering at the end of this semester.

But before that change can be complete, "I have a lot of library and classroom work to do," he says, anticipating how he must reacquaint himself with the academic program in chemical engineering and progress in his field of research - experimental measurements of fluid properties - since he left teaching and research to be the college's chief administrator a decade ago.

Streett, 61, is retiring as the Joseph Silbert Dean of Engineering at the end of the calendar year and will continue as a professor in the School of Chemical Engineering. His successor is expected to be named this month.

"I have genuinely enjoyed this job," Streett said. "I have been privileged to serve in an important post during the presidency of Frank Rhodes, and I have great admiration and respect for the two provosts I worked with, Bob Barker and Mal Nesheim. I have enjoyed my relationship with faculty, staff and students in the College of Engineering. We have an extremely talented group here. My interaction with alumni has been especially stimulating and rewarding.'

West Point

Streett, a 1955 graduate of West Point, served on active duty in the Army for 23 years, including 15 years on the faculty at West Point, before retiring with the rank of colonel in 1978. During his Army career, he earned M.S. and Ph.D. degrees in mechanical engineering from the University of Michigan and spent two years as a research fellow at Oxford University under fellowships awarded by NATO and the Guggenheim Foundation. He is the author of more than 120 publications on studies of fluids and computer simulation of molecular liquids.

Streett came to Cornell as a senior research associate in chemical engineering in 1978. He was appointed to a professorship in 1981 and became associate dean for graduate study and research that same year. With the departure of Dean Thomas Everhart in 1984, Streett was appointed acting dean and then to a five-year term as dean the following year. He was reappointed for a second five-year term in July 1990 but for personal reasons is leaving the post this year.

He believes that changes in higher education today should be viewed from an historical perspective. According to Streett, the tradition in engineering of a hard-nosed,

demanding program, conducted in a "boot camp" atmosphere is in part a result of the military origins of engineering.

"Military traditions of discipline, hard work, competition and individual responsibility have encouraged independence and self-confidence. But the systematic exclusion of women and minorities over the first 150 years of engineering education, and the almost ruthless 'weeding out' of those who did enter, have left engineering ill prepared to bring about needed changes in gender and ethnic diversity," he said.

Another important influence on higher education, according to Streett, has been generous government funding of research.

"This support, driven directly and indirectly by national defense interests, helped build the best systems of graduate education and research in the world. Cornell's accomplishments in these areas have made it one of the world's great universities, and this has attracted the best faculty and the brightest students. But the ground rules are changing. In the future universities will be judged not only on the quality of their research and graduate programs, but increasingly on how well they prepare young women and men, at the undergraduate level, to go out into the country and address the technological, economic, social and cultural problems confronting our society."

Streett has encouraged changes designed to make engineering more "user friendly," especially for freshmen and sophomores. The college now offers to first-term freshmen an engineering seminar course, a onecredit pass/fail elective in which students meet one hour per week with their faculty adviser to talk about anything related to engineering or to their student experience.

The college also revamped the introductory math course, which now is taught in sections of 25 students each. A new introductory computer science course, designed for freshmen who have little experience with computers, also is taught in small sections.

Streett also re-established a strong focus on faculty advising. Because many undergraduate students did not receive careful attention in the advising process, the college



Sharron Bennett/University Photography

William B. Streett (right) chats with Bill Brinkman of AT&T during a luncheon earlier this year at the Johnson Museum of Art. "I have genuinely enjoyed this job," Streett says of the deanship that he is leaving at the end of this month.

now has a policy that all faculty, regardless of rank, serve as advisers.

Other programs are aimed at attracting and retaining women and underrepresented minorities. Said Streett, "By the year 2020, 40 percent of the college-age population will be black and Hispanic. We must bring them into the mainstream of education and into professions such as engineering."

Acknowledging a problem among some students who come to college with weak skills in writing and no experience in public speaking, Streett instituted a communications program for upperclass engineering students. For example, an electrical engineering lab may have a communications component, as part of the effort to develop skills in writing and speaking. Stand-alone courses in engineering communications, covering both writing and speaking, also are offered. "The communications group includes some of the best teachers on the faculty," he said.

The outgoing dean also has made efforts to reward excellence in teaching as much as distinction in research has been rewarded in the past. He has set aside part of the faculty salary increase each year and awards Dean's Prizes to recognize and reward excellence in teaching and advising. He has adopted a policy that nominations for election to endowed professorships are based on true distinction in teaching as well as scholarship.

"There is frequent criticism of research universities, that research is done at the expense of teaching. I have often commented on the need for more attention to teaching and advising undergraduates, and I have received a lot of flak on this issue. But it was never the case that I considered graduate education and research to be of diminishing importance. In these days of rapid changes in technology, research and good teaching are inseparable, but it is the collective responsibility of the faculty to get the right balance of emphasis."

Optimistic

Despite the challenges, Streett remains optimistic about the Engineering College. "We are headed in the right direction," he said. "This year we enrolled the largest freshman class in Cornell history [862 students] and the largest master of engineering class [366 students], as well. We have about 700 M.S./Ph.D. students and \$58 million in annual research expenditures. The college is in excellent shape."

He also cited as a success the increasing collaboration between Cornell engineering and industry, including the Design Research Institute, through which six Xerox scientists work full time at Cornell, and the Electronic Packaging Alliance, a partnership with four companies - IBM, Digital Equipment, Amp and Carborundum.

Among the biggest challenges, he said, is to change the culture of the institution. "We've got to have faculty ownership of initiatives that address issues of gender and ethnic diversity. We must continue to challenge our students through a rigorous and demanding program, but we must also reach out to them and help them to feel connected. That has not been a tradition in engineering, but it has to become one."

Former Dean Cranch will lecture Dec. 6

Edmund T. Cranch, professor emeritus and former dean of the College of Engineering, has returned to Ithaca and is teaching in the Department of Theoretical and Applied Mechanics during this academic

Cranch will lecture on "Frontiers in Engineering Education" on Monday, Dec. 6, from 3 to 4 p.m. in B-14 Hollister Hall.

Cranch's talk, sponsored by the Synthesis Engineering Education Coalition, will explore engineering's greater utilization of the master's degree because of the rapid change in technology, engineering's growing complexity, the diverse career fields that students enter and the impossibility of crowding ever more material into a fouryear curriculum.

Ammons wins second National Book Award



Professor A.R. Ammons (left) stands with fellow National Book Award winner E. Annie Prouix at the Nov. 17 ceremony in New York City. Prouix won the fiction award for her novel "The Shipping News."

By Carole Stone

A.R. Ammons, one of the nation's most acclaimed poets, garnered another major award on Nov. 17 when his book-length poem Garbage won the National Book Award for Poetry.

Ammons, who is the Goldwin Smith Professor of Poetry, has taught in the English Department since 1964. Since then he has won the National Book Critics Circle Award, the Bollingen Prize, the Levinson Prize, a MacArthur "Genius Award" Fellowship and the Lannan Foundation Award.

"Most of the awards haven't had much effect, but this one has," said Ammons, noting that wholesalers have sold out the book, and there are few copies left in stores.

"This was true even before the award was announced; it's been true since the nomination."

Some of the excitement about the poem's publication earlier this year by W.W. Norton and its nomination for the \$10,000 book award focused on its title and ostensible subject. Garbage was inspired, Ammons said, by the sight of a huge landfill along Interstate 95 in Florida, just north of Dade

Ammons, who is known for a sharp wit as well as a vivid imagination, said the enormous, terraced trash heap reminded him of an ancient temple or ziggurat, like the Tower of Babel, and he developed the thought into one of the central images of the 121-page poem.

Ammons will read from Garbage and other poems in a public reading on Saturday, Dec. 4, at 8 p.m. in the annex of the Community School of Music and Art on State Street. The event is sponsored by the Lila Wallace-Reader's Digest Fund and was arranged by poet David Lehman. Ammons said he plans to read his latest poem and some of the poems from his first book, Ommateum, published in 1955. He will also read from his Collected Poems: 1951-1971 and Selected Poems, and he may respond to requests from the audience. For information about the Dec. 4 reading, call 272-1474.



Proud students decorated Professor Ammons' door with bits of garbage.

Celebrating Cornell in Philadelphia, November 18 - 21

Did Cornell cause a traffic jam?

Enroute to the Thursday night reception on Nov. 18, aboard one of the charter buses that shuttled people among downtown hotels and the new Pennsylvania Convention Center, two bus drivers communicated by two-way radio. Commenting on what was unusually heavy Thursday night traffic, one driver lamented, "It's taking forever to get around tonight, I wonder what's going on in Center City."

Without any other cue, and almost in unison, passengers on the bus shouted, "It's Cornell!"

At the Friday night gala reception and dinner-dance in the Convention Center, Penn's interim president, Claire M. Fagan, said the two universities "share wonderful memories on and off the gridiron."

Fagan admitted that, prior to assuming the presidency, she had never attended a football game. After six months in office and the fall sports season, Fagan said she still doesn't understand "why the quarterback often throws the ball to a spot on the field where there are no other players."

Rhodes quipped that Penn might have had an edge 100 years ago, winning only because it was a cold and rainy day in Philadelphia, "and we're not used to that kind of weather in Ithaca."

The Friday night gala attracted Cornellians from across the nation, including recent graduates and even a member of the Class of 1923, James B. "Burt" Nichols of Wilmington,

Saturday was a sports day - on the Schuylkill and in Franklin Field. It was so brisk (not much above freezing) and windy that Penn's crew decided not to row on the river.

Following a mid-morning reception for thousands under a tent at 34th and Walnut streets, it was off to Franklin Field where the Big Red won the first half of the 100th contest between the Ivy rivals. At half time, former Big Red twoway halfback John "Skeeter" Skawski '48, M.Ed. '52, Ed.D. '57, reminisced about the 1945, '46 and '47 Big Red games with Penn, and the 1950 game - the last he attended in Philadelphia — that attracted 17,846 fans and a hurricane. The Big Red took that one, 13-6.

"The weather was so bad," he recalled, "the windshield wipers on our car didn't work."

In the second half, it was all Penn and then some, with Cornell losing 17-14 in front of 22,618, including the largest Cornell contingent in decades.

-David I. Stewart

Photographs by **Chris Hildreth**



The Cornell alumni crew team pauses before entering competition on the Schuylkill.



Among the 22,618 at Penn's Franklin Field to watch the 100th meeting between the Big Red and the Quakers were thousands of Cornell fans who had much to cheer about, despite an eventual 17-14 loss.

Sagan tells alumni and students how science can mistake automobiles for life forms

"Is there life on Earth?"

Before a large audience that included some 400 invited Philadelphia-area high school students, astronomer Carl Sagan, the David Duncan Professor of Astronomy and Space Sciences, discussed a topic that was the cover story of the international science journal Nature on Oct. 21.

To ascertain whether Earth's scientists are measuring the right data when they send probes like Galileo and Voyager into space to look for life on other planets, Sagan and his colleagues utilized data from a Galileo fly-by of Earth in 1990 as a control experiment in the search for extraterrestrial life by modern interplanetary spacecraft. Their analysis was described in detail in the Nature article.

First, Sagan reviewed for his Philadelphia audience some history of modern science, from the days of Copernicus, when humans believed they were at the center of the universe, to modern times, when we realize that our small planet circles a "humdrum middle-aged" star "out in the galactic boondocks."

More humbling, he said, is the fact that even among this blue planet's various species, humans are not very much different from their nearest relatives, the chimps, with whom we share 99.6 percent of our active genes.

Though we have debunked many human conceits through research of our own planet and its life forms, humans still do not know whether they are the only intelligent life in the

The chance of this planet being the only inhabited world is tiny," said Sagan in his slide-illustrated lecture, "but that is at best a plausibility argument, not a scientific explanation. The only fair conclusion about extraterrestrial life we can make is that we don't know yet. We're at the very earliest stages of looking."

In its fly-by of Earth, the Galileo spacecraft measured significant amounts of chlorophyll, an indication of organic life. In looking at measurements of other gases, as well as geometric patterns built on the planet's surface, Sagan said we can conclude that Earth's "dominant organisms" are "polite, pastel-colored creatures two to three meters long" who enter small boxlike structures in which they dwell. The parasitology of these dominant creatures show that they have "little beings that enter and leave them," he added, illustrating that pure analytical methods sometimes lead to faulty conclusions like thinking that automobiles are a life

Sagan issued a strong warning about the need to utilize our technologies wisely.

"Humans have acquired world-transforming technology without the corresponding wisdom to know how to use it," he said. His message was dire: in 5 billion years, our sun will explode into a red giant and leave nothing of Earth but "ashes and atoms." The one artifact of 20th century Earth's inhabitants that may survive that destruction is the Galileo spacecraft itself, carrying its recorded messages far into the outer reaches of space.

Sagan's last slide was a photo taken of Earth by Voyager when the spacecraft was so far away that its home planet shone as a tiny blue dot.

'This blue dot speaks of fragility and vulnerability," Sagan concluded. "It eloquently cries out to us to care for it and cherish it - the only home we've ever known."

—Linda Grace-Kobas

Rendell asks for more aid to cities

Sober commentaries on the problems facing America's cities and universities were made at the President's Lunch.

Philadelphia Mayor Edward G. Rendell, whose efforts to revitalize the city included development of the Pennsylvania Convention Center, where Nov. 19 events were held, vividly described the problems facing major U.S. cities and called for a "Marshall Plan for Cities" that would involve government incentives for economic development projects.

President Frank H.T. Rhodes spoke on the theme, "Universities: Trashing a National Treasure," which he has been developing for a book he is writing. He delineated a list of public concerns about higher education: its cost, quality of the undergraduate experience, multicultural issues and academia's isolation from social issues.

Rhodes' recommendations begin with development of a clear statement of the university's mission. He emphasized that universities must be "responsible stewards" of their resources, that the undergraduate experience must be enhanced, that the "strengths of diversity" must be utilized, and that the role of university research must be re-examined.

"We shall not profit if we simply respond in a point-bypoint way to the evening news," Rhodes said.



Claire M. Fagan (right), Penn's interim president, joins Cornell President Frank H.T. Rhodes at Franklin Field in Philadelphia.

Celebrating Cornell in Philadelphia, November 18 - 21

Faculty panelists share their views on ...

... U.S. and Japan in a collapsing world order

"The new world order has turned out to be a new world disorder," and the fragmentation of nations is "the paramount fact of our time" that conceivably could bring about the demise of Canada, China and even Great Britain as nations, Professor Walter F. LaFeber told alumni and others gathered in Philadelphia.

Pointing to the more than 180 countries represented in the United Nations, a number that he said is sure to grow, LaFeber said that the world more and more resembles the political landscape prior to the imperialism of the 19th century.

But nations do not go away without a fight, LaFeber warned. One way they have of protecting themselves: banding together with other nations into free markets that protect the interests of the member nations.

Speaking about "Revolutionary America Loose in an Unstable World," LaFeber described current events as not merely a political transformation but a technological and economic revolution that would shape the world just as much as did the industrial revolution.

The Soviet Union "rotted from inside out," he said, because it couldn't accommodate technological change. When President Mikhail Gorbachev recognized the need to open Soviet society, that society fragmented and collapsed,

It remains true that information is power, but when information is so diffused and instantaneous because of satellite communications, power also is diffused, he said.

LaFeber also suggested that heightened class conflict is emerging in the United States, as demonstrated by the debate over the North American Free Trade Agreement.

Economic progress diminished class conflict in the United

States in the postwar era, LaFeber said, and class-based disputes often evolved into conflicts centered around race. But now, "It would be a great irony if at the same time that Marxism is discounted, class conflict dominates politics,"

LaFeber was joined in his presentation by Professor Karen Brazell, who discussed "Re-creating Japan and

According to Brazell, Japan is self-consciously reinventing itself as it explores four key issues: pacifism, the role of women, internationalism and traditionalism.

Japan's pacifism, encoded in its postwar constitution, is undergoing debate as the nation comes to terms with its role as a world leader, Brazell said. In addition, women, who traditionally have been asked to be "the good wife and wise mother," increasingly are filling roles as undercompensated "part-time" and "temporary" workers, even if they've worked 40 hours or more a week at the same job for several years.

Last summer's royal wedding, when the emperor married a 29-year-old, U.S.-educated career officer of Japan's foreign service, demonstrates the strain that tradition is undergoing in modern Japan, she added.

Brazell began her remarks by saying that she usually doesn't like to lecture after lunch (people might take naps) or after President Frank H.T. Rhodes (self-explanatory to this alumni audience), but that she does like speaking to alumni, because, unlike students, they didn't have to be there, they didn't stay up all night studying organic chemistry, they're probably not trying to flirt with the person sitting next to them, and they are old enough to understand historical references to periods before 1983.

-Mark Eyerly



A mummer struts his stuff at the Big Red Welcome Buffet Supper, held at the Pennsylvania Academy of the Fine Arts, the oldest art museum in the country.

Enjoying traditions of Brotherly Love

"We hoped to bring to Cornellians some of the traditions of Philadelphia, which are the traditions of our country," James W. Williams '63 said of the Big Red Welcome Buffet Supper, which he co-chaired with his wife, Sharon H.

Held at the Pennsylvania Academy of the Fine Arts, the oldest art museum in the country, on Nov. 18, the buffet supper offered a wealth of artistic and culinary treasures to the several hundred people who attended. While a sequined and feathered Mummers' string band regaled listeners with lively tunes, people feasted on various Philadelphia culinary traditions, from Chinese stir-fry and Italian pastas to seafood, hoagies and cheese steaks.

Among those in attendance at the supper were James and Patricia Stocker, who co-chaired the memorable San Francisco celebration in 1991.

James Stocker '51 said that they came to lend support to L. William Kay II '51, a classmate who co-chaired the Philadelphia event with Barbara Kaplan '59. Stocker said he sees multifaceted off-campus events like those held in the two cities as an important way that Cornell can strengthen its relationships with alumni.

"We're glad our West Coast event started this new wave," he commented. "Bill called on us in the early stages of planning this event, and it's been fascinating and fun to see it unfold. I think events like this are a major new way to reach alumni that combines academic, social and cultural

Another alum at the supper was Marie Lavallard '32, who came to Philadelphia from her home in Fayetteville, Ark. A graduate of the College of Agriculture and Life Sciences, she taught and was in charge of publications in the Division of Agriculture at the state university in Fayetteville for many years.

She said she returns to the Ithaca campus every spring "to see what's happening."

Mingling with faculty, deans, university officials and former classmates at the supper were many of the 77 volunteers from the greater Philadelphia area who helped put together the weekend events. Volunteers were recruited by the mother-daughter team of Barbara Potter Sperry '61 and Susan L. Sperry '92.

-Linda Grace-Kobas

. Political ideas and institutions in the 1990s

The U.S. presidency and the Supreme Court were analyzed in presentations by Professors Theodore Lowi and Richard Polenberg in another educational symposium.

Lowi predicted that Bill Clinton will be a one-term president.

In the post-Cold War period, international affairs will not engage U.S. presidents as they did in the past, Lowi said. Thus, presidents will not be able to use their important "rallying effect" to generate enthusiasm and support against real or perceived threats. Domestic affairs are a "downward line" for presidents, he added, with the president "a bearer of bad news - and we like to kill the messenger.

The Cold War is over and we won - so why do we feel so bad?" Lowi asked. Americans don't need a powerful, "Imperial" presidency anymore. He advocated a return to "representative government, a reflective republicanism" and called for the formation of a three-party system, a rallying cry that garnered Lowi national media attention during the last presidential campaign.

Technology and new forms of family relationships will dominate the Supreme Court calendar in the coming years, predicted Polenberg, who also thinks that the Court will play a "less pivotal and controversial role" in the future than it has in the past.

The Clinton administration is less likely to try to overturn existing liberal cases before a conservative court as the Reagan and Bush administrations tried to do, he said. New cases will involve decisions relating to issues like surrogate parenthood, the right to die, mandatory drug and HIV testing, family relationships and parental rights.

The current court will not "play dice" with individual liberties defined during the Warren and Burger eras by overturning previous decisions like Roevs. Wade, Polenberg said. Rather, it will focus on how to balance the rights of individuals in an era when genetic testing can define parenthood in ways never possible before, and when technology can invade human liberties as never before.

—Linda Grace-Kobas

· . . The changing world of stock market investments

The use of technology in investment trading and the growth of small investors and mutual funds has opened up Opportunities that are outpacing legal regulations, two professors told alumni gathered in Philadelphia.

With CNN and CNBC reporting stock fluctuations virtually instantaneously around the world, "I hardly read the Wall Street Journal anymore; it's too late," said Professor Avner Arbel. "It is not an investment tool anymore."

And not only do investors have access to immediate performance information, but the number of mutual funds to choose from has surpassed the number of individual stocks offered on the New York and American stock exchanges, he Pointed out. Plus, many investment houses allow clients to transfer funds among accounts with no or minimal service

"People can use their phones to buy and sell stocks at nearly no cost," Arbel said. More and more firms are offering "concept investing," allowing clients to invest in a Particular industry or in a particular nation.

Even with these growing investment opportunities, "The message still is: In order to make it, you have to earn it. There's a lot of work here," Arbel said.

Law Professor Jonathan Macey said that the law cannot keep pace with these developments and, even if it could catch up, it wouldn't know what to do.

Much of America's securities regulations date from the 1930s, he pointed out, and nations have wildly varying laws and norms regarding security dealings.

Often, even the best-intentioned regulations unleash nefarious consequences, Macey said. For example, instituting higher capital requirements for

banks to ensure that the banks can withstand larger invest-

ment losses does not take into account the relative risk of banks' investments. In addition, banks regulated the same way tend to make similar kinds of loans with similar risks, he pointed out. Regulators instead should handle the risks they oversee as if they're overseeing a portfolio, Macey suggested.

-Mark Eyerly



Alumni and guests who attended Professor Lynn Jelinski's talk on "Scientific Capital: Charting the Future with Biotechnology" donned 3-D glasses to fully appreciate images of biological science at work.

Strategic task forces seek campus comment on reports

Task Force #1: Educating the Leaders of Tomorrow

A. The future of undergraduate education at Cornell.

. What are the shared goals for the education of all undergraduates at Cornell, and what is the appropriate balance between these common elements and the intellectual diversity of Cornell's schools and colleges?

 How can Cornell's structure of departments, divisions, and colleges and its forms of academic decision-making become more effective in defining and supporting its educational goals?

* Are there changes to the university's calendar and its undergraduate degree programs that could make more ef-

fective both the use of the university's resources and the achievement of its educational goals?

 How can the non-academic experience of our undergraduates best support the university's educational goals?

B. The Cornell student body of the future.

· What will be the future size and makeup of the undergraduate student body?

· What recruitment, tuition and financial aid policies will be necessary to attract this student body to Cornell, and what claims will these policies make on Cornell's resources?

Task Force #2: Generation and Dissemination of Knowledge

A. Suggest ways in which Cornell's unique strengths can be used to maintain and advance its leadership role in research and scholarship.

 How should Cornell respond to the changing societal expectations of, and commitments to, higher education?

· How can undergraduate involvement in research best be used to enhance their education?

 What consistent methods and standards should be applied to make decisions about the expansion, combination, reduction or elimination of research and outreach programs? the emerging vision of service to the global community?

B. Define Cornell's strategic local, state, national and global publics and how to best serve them.

. How should Cornell's program priorities and organizational structure be realigned or redefined to serve those

. How can the relationship between the statutory and endowed units be optimized to support that service respon-

How should the land grant mission be reconciled with

Task Force #3: Exercising Effective Stewardship – Conserving and Enhancing Our Human, Physical and Fiscal Resources

A. Elucidate how Cornell can become a more effective organization that uses both its employees' experience and the best practices of other organizations as a basis for continuously improving its customer service.

· How can Cornell nurture an organizational culture that honors and rewards employees for such qualities as leadership, innovation, collaboration, service, responsiveness, and mutual respect?

. How can responsibility, accountability and the reward structure best be aligned with institutional goals?

B. Define how best to make decisions concerning maintenance of existing facilities.

major changes to administrative programs and services.

· What consistent methods and standards should be applied to make decisions about administrative program and service expansion, combination, reduction or elimina-

 How can institutional partnerships on and off campus best be used to leverage Cornell's resources in providing quality programs?

C. Assess and evaluate the financial trade-offs inherent in new construction versus investments in adequate

Task Force #4: Creating the Faculty of the Future

A. Describe how faculty privileges, roles and responsibilities will evolve and how evaluation and incentive structures must change to support this evolution?

 Should the relative balance among teaching, research and service change and if so, how?

. How should any changes be reflected in the reward

· Given the uncapping of retirement and the need for faculty renewal, evaluate the current tenure system.

B. Describe the faculty of the future.

. How should Cornell build on its strengths and deal with its weaknesses in recruiting and retaining a demographically diverse, high-quality faculty in the 21st cen-

· Given the inevitability of short- and long-term enrollment changes, what is the optimal distribution of the academic staff among tenure-track and non-professorial

The charges to the four strategic planning task forces are printed at left.

As the strategic-planning process moves toward conclusion — with a draft report due in May — the four task forces have set public meetings during the next 10 days to report on their progress and gather campus comment.

The times and locations of the public forums are:

 Creating the Faculty of the Future — Dec. 6, 4 to 5:30 p.m., Kaufmann Auditorium, Goldwin Smith Hall. The chair is John Hopcroft, associate dean, College of Engineering.

· Exercising Effective Stewardship (conserving resources) - Dec. 7, 3 to 4:30 p.m., Kaufmann Auditorium, Goldwin Smith Hall. The chair is Fred Rogers, vice president for finance and treasurer.

 Extending the Frontiers of Knowledge (research and extension) — Dec. 10, 4 to 5:30 p.m., 122 Rockefeller Hall. The chair is Norman Scott, vice president for research and

· Educating the Leaders of Tomorrow (undergraduate education) — Dec. 16, 4:30 to 6 p.m., 122 Rockefeller Hall. The chair is Don Randel, dean of the College of Arts and

At each session, there will be a very brief summary of the overall strategic-planning process and a brief introduction by the chair. Most of the 90 minutes will be given to the gathering of audience views.

Broad and continuous participation of the entire campus community has been emphasized since President Frank H.T. Rhodes announced in August 1992 the university's commitment to a strategic-planning process.

That September, the 27 members of the newly formed Strategic Planning Advisory Board — including Rhodes and Provost Malden C. Nesheim — each interviewed a dozen people to get a sense of campus priorities. Last winter, 2,200 faculty, staff and students answered surveys toward the same end. Then, seven study groups with more than 100 members gathered views from more than 1,000 others on their way to identifying 49 issues considered vital to Cornell's mission and operations.

The fact-finding funneled down into the formation last summer of four task forces, which will go beyond issue identification to setting goals, objectives and strategies.

The task forces are scheduled to give their separate reports to the advisory board around mid-March, according to Vice President for Planning John Wiesenfeld. After three meetings in April, the board will consolidate the four reports into a draft plan of about 20 pages and will attach the separate reports in an appendix. Wiesenfeld says further campus discussion and response will be welcome before the plan takes effect in July 1995.

That plan, which will be periodically reviewed, is intended to provide the administration and individual colleges with clear priorities to guide policy choices.

Anyone with questions about the forums may call the Office of Institutional Planning and Research at 255-7540.

President Rhodes releases statement on campus issues

President Frank H.T. Rhodes issued the following state-

'Allow me to reflect with the Cornell community on the happenings of the last ten days. A series of thoughtless acts of vandalism have proved to be the trigger for a string of events with serious consequences. Some unknown persons painted graffiti on a large exhibit on the Arts Quad, and removed part of the lettering associated with the display. To add insult to injury, some of the slogans painted were clearly acist. I deplore these acts, and I deplore also the subsequent painting of the Founder's statue. Contemporary works of art will often be controversial, as much in their interpretation as in their style, but to deface them in this way betrays the nature of the university. We must accept controversy and conflicting viewpoints, not as differences to be suppressed, but as opportunities for better understanding.

"It would be idle to pretend that the campus climate always represents that ideal and does not reflect in considerable degree the climate of the larger society of which we are a part. Members of minority groups still face obstacles, and discrimination and separation by racial groups remain a fact of life. We must continue to address these concerns with patience and honesty.

"I am told that it was the offense of this vandalism and its implication of an unsympathetic campus attitude that led a group of Hispanic students to occupy Day Hall. The occupation itself was not only a violation of the Campus Code but its continuation caused disruption and inconvenience to many students, faculty and staff. Furthermore, the tensions it produced were a severe threat to campus safety, as the injuries to two Campus Police Officers plainly showed. We shall continue an investigation to identify those responsible

"Those who occupied Day Hall argue that they had a legitimate complaint. So they had, but no complaint can justify the unlawful occupation or blockade of campus buildings which inevitably invite the threat of violence. We cannot accept such behavior as a means to the resolution of

"I am pleased to say, however, that I believe that we have now begun to heal some of what has threatened our health as a community. Today the Provost, a number of the deans and I met with Hispanic students to discuss their concerns. Many of the goals they described are worthy objectives that the faculty and administration also share. Today's meeting recognized that we can achieve these goals by cooperation, rather than by an atmosphere of confrontation.

"The major topic of discussion at today's meeting was an oral proposal presented by the students for a Latino living center. I reminded the students that I had the greatest reservations about the increasing tendency on the campus toward separation, division, and fragmentation. This was a concern I expressed last spring, when I noted our "increasing tendency within the campus to define ourselves in terms of groups or factions," and said that, "I would express this same view if presented with requests for living units from other racial, religious, ethnic, or special interest groups." This was not a casual comment; it is a principle that I have discussed widely on the campus, not only with advocates of the Gay/Lesbian/Bisexual Coalition, who made the proposal for a living unit, but also with leaders of the Student Assembly, the FCR Executive Committee, the Deans' Council, the Executive Staff, and the Board of Trustees. It remains my conviction that a University should be a place without any barriers to thought or discussion and that University housing should promote the openness that that ideal represents, rather than separation.

"In the last six months or so, we have begun to develop a more explicit housing policy through the continuing work of Dean Don Randel and the Strategic Planning Committee on Undergraduate Life. This committee asserts the importance of linking the learning and living experiences on campus, as did the proposal of a few years ago by the Residential College Committee chaired by Professor Isaac

"The proposal that was put before us today by the Hispanic students contained several elements that are fully consistent with the larger goals of the University and took particular pains to address my concerns about fragmentation. In fact the program, if successful, would not only help us to encourage greater openness and mutual understanding. I have therefore told the students that if the program has strong links to existing undergraduate educational programs; if, like Akwe:kon, it takes pains to ensure racial and ethnic diversity and openness; if it comes as a proposal from the faculty of Hispanic American Studies and gains the support of the Faculty Council of Representatives; if it has satisfactory governance and admission provisions, and if it is financially responsible in the light of existing budgetary constraints, the Provost and I would be willing, not only to consider it, but also to endorse it before the Board of Trustees, who have the ultimate responsibility for its accep-

"The spirit in which today's meeting was conducted has helped to ease the tensions that were provoked by the recent confrontation. I look forward to its continuation in the days

"Ours is a university for all people and it can achieve its highest hopes only by cooperation and mutual respect. The campus community can provide a new model in this endeavor, respecting our diversity, while at the same time renouncing the divisions that too often continue to characterize our larger society and thereby reaffirming the spirit of openness, civility, generosity and trust that have for so long characterized Cornell at its best."

Whitcomb Fellows named

By Kristin Costello

Johnson Graduate School of Management Professors Pradeep Chintagunta and Jerome Hass have been chosen as the first recipients of Clifford H. Whitcomb Faculty Fellowships.

The fellowships were established by Clifford Whitcomb, a member of the Johnson School's first graduating class in 1948, to recognize outstanding faculty initiative and performance.

"The challenges to keep pace with the international business management scene are formidable," said Whitcomb, who was president and CEO of Prudential Property and Casualty Insurance Co. before his retirement in 1988. "To provide the school's excellent faculty with funds to meet those challenges seemed like a good idea to me, and I was glad to support it."

Dean Alan G. Merten noted that "with Cliff Whitcomb's leadership, Cornell now has a unique way to recognize and support the work of its best faculty.

"While many faculty fellowships will be established in the years to come, we and Cliff can always be proud of the fact that the Whitcomb Fellowships were the first to be established," Merten said.

The income from the one-year awards will be used to support both professors' teaching and research activities.

Chintagunta, an assistant professor of marketing, is currently researching issues related to brand repositioning, new brand introduction and the estimation of brand use from household goods scanner-panel data.

Chintagunta is also interested in determining the most effective advertising strategies for manufacturers in competitive markets and studying the influence of marketing activity on timing and brand choice.

Currently, he is studying issues pertaining to the motion picture industry, specifically, the introduction time and performance of movies. Chintagunta's teaching areas include market research, planning and quantitative models.

Hass, a professor of finance and business strategy, has been teaching the core finance course for virtually all his 27 years at the Johnson School and is the force behind the school's Business Strategy course. Often co-taught with the school's executive-inresidence, the class features several guest lectures from people in industry as well as an exercise involving the Cornell Management Game, a computer simulation that Hass developed.

Hass was a Mobil Scholar in 1991-92. His fields of interest are corporate and capital market finance, business strategy and policy, and the economics of energy and regulation.

He has been a consultant to a number of organizations, including the executive office of the president of the United States, the Environmental Protection Agency and the Enterprise Institute, as well as for various corporations. He is currently a special consultant for National Economic Research



Chris Hildreth/University Photography
Pradeep Chintagunta (left) and Jerome
Hass

Associates.

Hass has served as an expert witness in more than 30 judicial and regulatory proceedings. He has taught courses in Belgium, Ukraine and Russia, and is a faculty member of the Graduate School of Business Administration in Zurich.

Russo named the Johnson Family Professor

By Kristin Costello

J. Edward Russo, professor of marketing and behavioral science in the Johnson Graduate School of Management, has been named the S.C. Johnson Family Professor of Management.

The professorship is funded by the most tecent gift of the Johnson family to the school.

"Professor Russo is a truly full-service faculty member," said Dean Alan G. Merten. "He is an excellent teacher, his research extends the boundaries of theory and practice, and he is eager to take leadership roles in the service activities of the school," Merten added.

Russo, who holds a doctorate in mathematical psychology, is researching decisionmaking and decision-aiding for managers and consumers.



Russo

He has published work in the areas of advertising, behavioral methodologies, consumer-information aids, decision processes and improving managerial decisions.

Russo has also co-

written the first

book for managers

on the behavioral as-

pects of decision-making, Decision and Traps.

The book has been translated into five languages, including Chinese.

Russo has taught at the University of Chicago and the University of California, San Diego.

He is currently on a one year sabbatic leave at Duke University's Fuqua School of Business.

The S.C. Johnson Family Professorship of Management is the third professorship endowed by the Johnson family, one being held by marketing and psychology Professor Alice M. Isen and the other, the Robert W. Purcell Professor of Management, held by finance Professor Maureen O'Hara.

Protest continued from page 1

ate student and two non-HASP faculty, will develop the details of the proposal for consideration by the provost, the Faculty Council of Representatives, and ultimately the Board of Trustees."

Rhodes also issued on Tuesday a statement deploring the recent vandalism of Hispanic artwork on the campus and commenting on general issues affecting the environment for minority faculty, students and staff at Cornell. (The text of Rhodes' statement appears on Page 8.)

The occupation of Day Hall began with a rally on the Arts Quad on Friday afternoon, Nov. 19, at the site of The Castle Is Burning, the controversial artwork by Daniel Martinez that is part of the Herbert F. Johnson Museum of Art's exhibition of site specific works by eight Hispanic artists. Latino students protested acts of vandalism to the artwork and demanded that more attention be paid to issues of concern to Latinos. Approximately 200 students marched to Day Hall after several attempts to block pathways on the quad and demanded a meeting with Rhodes, who was in Philadelphia for a long-planned alumni celebration. (For coverage of that event, see Pages 6 and 7).

Unable to immediately schedule their desired meeting with Rhodes and Nesheim, the students decided to remain on the third floor of Day Hall.

They developed a list of demands that included calls for Rhodes and Nesheim to "immediately condemn the destruction of the [Martinez] artwork and instruct public safety to put officers to protect it," and that Rhodes "acknowledge the problems of Latino students on campus in this statement, specifically the decrease in overall financial aid and resources for Latino students."

Other demands were for a policy statement to be issued regarding the recruitment, admission and retention of Latino students; a fully funded coordinated schedule of activities within Latino month related to Latino culture and history; increased money allocated to books, films and periodicals about the history of Latinos in America for the University Library; a special fund to bring visiting professors to Cornell "to fill in the voids in regards to Latino faculty"; a Latino psychologist hired for Psychological Services, as well as additional Latino staff in the seven colleges; and more courses in Latino-American history.

After discussions with university officials failed to persuade the students to leave Day Hall on Saturday, Rhodes, Nesheim and others cut short their Philadelphia activities to return to campus that night. Rhodes, Nesheim and Dullea attempted to meet with all the student demonstrators in Day Hall on Saturday night, but student leaders for a variety of reasons refused to allow Rhodes to address the group.

After repeated requests to end the occupation were rejected on Sunday, officials warned the 70 demonstrators at 2 a.m. Monday that they faced immediate suspension if they did not leave the building. No demonstrators left. Persons who ordinarily work in Day Hall offices reported to alternate sites Monday morning.

A rally that drew about 200 students occurred at noon on Monday, as supporters of the demonstrators blocked traffic on East Avenue. By mid-afternoon on Monday, the administration and students reached an agreement. The students occupying the building left it in an orderly and peaceful manner and temporary suspensions of the demonstrators were lifted. There was no damage to the building and students had made a significant effort to clean the third floor before their departure, as well as to continue to pursue their studies during the course of the protest.

While all charges against students for the unlawful occupation of the building per se have been withdrawn, the university is continuing investigations into the injuries suffered by two Cornell Police officers during the four-day protest. Capt. William Boice and another officer received injuries on Friday and Saturday evenings when groups of students rushed doors in an attempt to get more demonstrators into the building. Boice was treated and released at Tompkins Community Hospital for a knee injury Saturday night.

A first meeting was held Monday night, Nov. 22, among Rhodes, Nesheim and faculty that included Hispanic American Studies Program Director Jose Piedra, among others, and student leaders.

Wittink is named to endowed professorship

By Kristin Costello

Dick R. Wittink, a professor of marketing and quantitative methods in the Johnson Graduate School of Management, is the holder of a newly endowed chair, the Henrietta Johnson Louis Professorship of Management.

The chair was established by Michael Louis, great-grandson of Samuel Curtis Johnson, the founder of S.C. Johnson and Son, in honor of his mother, Henrietta Johnson Louis.

Alan G. Merten, dean of the Johnson School, said, "Professor Wittink has the unique ability to be very analytic and demanding in his teaching and research, while at the same time providing a truly human touch to all that he does."

Wittink's expertise is in the areas of consumer preference measurement, econometric models of purchase behavior, and other approaches to capturing the voice of the consumer.

Widely published in the field of marketing, he was one of the first market researchers to make use of the data provided by supermarket scanners.

Next semester, Wittink will be teaching two courses, Market Research and Models and Methods for New Products. In the latter course, students examine the determination

of customer preference where institutions have the opportunity to make changes to their products or services.

Rather than trying to understand a hypothetical situation, students study actual choices made by consumers, said Wittink. Working on group projects,



Wittink

they choose a product or service category, conduct a small survey and follow the standard procedure involved in customer preference assessment.

"Students have done some very interesting projects in the past," Wittink said. "In one case, a group analyzed the opportunity for electrical automobiles to be a viable competitor in the automobile market."

Originally from the Netherlands, Wittink also holds a permanent, unsalaried appointment on the faculty of economics at the University of Groningen, where he has conducted some of his research on marketing.

His work there has involved looking at the extent to which managers overreact to one another's marketing activities. By analyzing data provided by scanners, he and a Dutch colleague determined that managers tend to react more to each other's activities than they should, based on consumer response to those same activities.

The result, he said, is that brand managers are often more concerned with "being competitive as opposed to being customer oriented." Wittink suggests that such an environment ultimately culminates in the kinds of price wars we see in the airline and computer industries.

In 1992, Wittink was named a Mobil Scholar. He is currently an associate editor of the International Journal of Forecasting and an editorial-board member of Marketing Science, the Journal of Marketing and the International Journal of Research in Marketing.

This is the second professorship Louis has endowed at the school in honor of his mother. The first is held by Professor Richard Thaler, whose focus is behavioral economics.

The 8:05 p.m. handbell change ringing by the Ithaca Guild of Change Ringers will be followed by the candle procession of the Sage Chapel Choir at 8:15 p.m. Organist William Cowdery will not only perform solo organ works but will accompany the congregational singing of carols. Soloist Renee Sokol will perform the "Recitative" and "Aria" from Handel's *Messiah*. The Sage Chapel Choir, drawn from the Ithaca and Cornell communities, will present traditional holiday music: Advent chants, works by Bach, and folk carols mixed in with seasonal readings by President Frank H.T. Rhodes, Professor Emeritus Donald Eddy, Rev. Robert Johnson, Rev. John Taylor and Rachel Goodman, director of the choir. Professor Thomas Sokol is directing this year's event. The Chapel's decoration is supervised by Douglas Gumaer, manager of Michaleen's Flower Shop. The concert is free, and an early arrival is recommended.

· New student compositions for Macintosh and synthesizers, under the direction of David Borden, will be performed at an informal concert by the composers and their friends on Dec. 7 at 8:15 p.m. in 301 Lincoln Hall.

Cornell Concert Commission

The Cornell Concert Commission is proud to present the jazz act Joshua Redman Quartet in concert Dec. 5 at 8 p.m. in Statler Auditorium. Tickets are on sale at the Willard Straight Hall box office, Rebop Records and Ithaca Guitar Works. Prices are \$5 for Cornell students, \$8 for the general public.

Statler Concert Series

Planist Andre Watts will join members of the Chamber Music Society of Lincoln Center in performance at Statler Auditorium on Thursday, Dec. 2, at 8:15 p.m. Tickets for the concert are \$12.50 to \$21 for students and \$15 to \$25 for the general public at the Lincoln Hall ticket office. The office is open Monday to Friday, 9 a.m. to 1 p.m. Tel.: 255-5144. VISA and Mastercard are accepted.

Bound for Glory

Dec. 5: Bound for Glory presents its 4th annual holiday special, featuring the Burns Sisters and a cast of thousands. Much of the local acoustic music scene will be on stage in the Commons Coffeehouse in Anabel Taylor Hall. Admission is free, and children are welcome. Bound for Glory can be heard Sundays from 8 to 11 p.m. on WVBR-



Owen Gingerich, an astrophysicist from Harvard University, will give the sermon Dec. 5 at 11 a.m. Music by the Sage Chapel choir, under the direction of Thomas Sokol, and William Cowdery, Sage Chapel organist. Sage is a non-sectarian chapel that fosters dialogue and exploration with and among the major faith traditions.

African-American

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

Baha'i Faith

Tuesdays, 8:15 a.m. prayers, Loft 3, Willard Straight Hall. Fridays, 7 p.m., speakers and open discussion, meet at the Balch Archway. Sunday morning dawn prayers. For details, call 253-2401.

Catholic

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

Christian Science

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

Episcopal (Anglican)

Sundays, worship and Eucharist, 9:30 a.m., Anabel Taylor Chapel.

Friends (Quakers)

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

Jewish

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

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

Korean Church

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



David Lynch-Benjamin/University Photography Steven Hauck as Jekyll in "The Strange Case of Dr. Jekyll & Mr. Hyde," playing through Dec. 4 at the Center for Theatre Arts.



1993 Kino International Corp.

Aki Kaurismaki's "La Vie de Boheme" will play in Willard Straight Theater on Dec. 4 at 7:30 p.m. and on Dec. 7 at 7:40 p.m.

Muslim

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

Protestant Cooperative Ministry

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

Sri Satya Sai Baba

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

Zen Buddhist

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

Agricultural Economics

"Current and Future Advances in Mathematical Programming and Modelling," David Jensen, IBM's Watson Research Center, Dec. 2, 9 a.m., 302 Warren Hall.

Applied Mathematics

"Tractability of Multivariate Problems," H. Wozniakowski, Columbia University and University of Warsaw, Dec. 3, 4 p.m., 456 Theory Center.

"Gravitational Lenses and Cosmological Parameters," Ed Turner, Princeton University, Dec. 2, 4:30 p.m., 105 Space Sciences.

Biochemistry

"Heat Shock Factor and Transcription of Nucleosomal Templates," Robert Kingston, Massachusetts General Hospital, Dec. 3, 4 p.m., large seminar room, Biotechnology Building.

"Pathways of Protein Folding," Robert Matthews, Penn State, Dec. 8, 4:30 p.m., 700 Clark Hall.

Boyce Thompson Institute

"Ecosystem Response to Elevated Carbon Dioxide," Harold Mooney, Stanford University, Dec. 8, 3 p.m., Boyce Thompson Auditorium.

"Lasers in Medicine and Laser Safety," Philip Lempert, Dec. 2, 4:40 p.m., 119 Baker

City & Regional Planning

"Historic Preservation Planning in Washington and Philadelphia," Pat Wilson, National Trust for Historic Preservation, Dec. 3, 12:15 p.m., 115 Tiaden Hall.

Cooperative Extension Forum

"Environmental Protection and Enhancement," Ken Cobb, Waste Management Institute; Bob Nolan, Home Study Program; and John Peverly, soil, crop & atmospheric sciences, Dec. 6, 8:30 a.m., 401 Warren Hall.

Ecology & Systematics

Phylogeny, Biogeography and the Evolution of Mimicry in Heliconius Butterflies," Andrew Brower, American Museum of Natural History, Dec. 8, 4 p.m., A106 Corson Hall.

European Studies

"Colonial Discourse and the European Male Masochist, "John Noyes, University of Cape Town, Dec. 3, 12:15 p.m., 153 Uris Hall

Fruit & Vegetable Science

"Overview of a Vegetable Improvement Program," Molly Kyle, fruit & vegetable science, Dec. 2, 4 p.m., 404 Plant Science.

Geological Sciences

"Modeling Corona Reactions," Kodjo Attoh, Dec. 2, 4:30 p.m., 1120 Snee Hall.

"Rapid Expulsion: An IgE Mediated Intestinal Immune Response," Robin Bell, Baker Institute, Dec. 3, 12:15 p.m., Boyce Thompson Auditorium.

International Nutrition

'The Effect of High Dose Retinol in Guatemalan Children Hospitalized for Pneumonia," Chris Kjolhede, Johns Hopkins University, Dec. 7, 3:30 p.m., 200 Savage.

Materials Science & Engineering

"Growth, Processing and Surface Chemistry Issues in Metalorganic Molecular Beam Epitaxy of II-VI Materials," Jenna Zinck, MTS, Dec. 2, 4:30

Ceramics Afternoon: "Novel Synthetic Approaches to Materials," 2:20 p.m., 140 Bard Hall. Speakers include: Leonard Interrante, Rensselaer Polytechnic Institute; Walter Klemperer, University of Illinois at Urbana-Champaign; and Phillip Messersmith, materials science & engineering.

Mechanical & Aerospace Engineering

"Manufacturing in the '90s: Though This Be Madness, Yet There Is Method in It," Bill Hudson, president of AMP, Dec. 2, 4:30 p.m., 155 Olin Hall.

Neurobiology & Behavior

"Sodium Salt Taste Transduction: Lingual Epithelial Voltage-Perturbation Reveals Two Topologically Distinct Sensors," John DeSimone, Virginia Commonwealth University, Dec. 2, 12:30 p.m., A106 Corson Hall.

"A Bird for All Seasons: Confessions of a Bird Photographer," Marie Read, neurobiology and behavior, Dec. 6, 7:45 p.m., Fuertes Room, Lab of Ornithology, 159 Sapsucker Woods Road.

Pharmacology

"Mechanisms of Signal Transduction by RAS," Dafna Bar-Sagi, Cold Spring Harbor Laboratory, Dec. 6, 4:30 p.m., G-3 Vet Research Tower.

Physiology & Anatomy

"Retinal Pigment Epithelium - A Model System to Explore Lysosomal Enzyme Function," Jharna Ray, Baker Institute, Dec. 7, 4 p.m., G-3 Vet Research Tower.

Plant Biology

Plasmamembrane," Peter Steponkus, soil, crop &

Continued on page 11

Save those stamps!

In an effort to save time and money, please send your calendar submissions through campus mail.

Not only will your notice arrive sooner, your budget director will be grateful.

The Chronicle receives campus mail twice a day, and it should be addressed as follows:

Chronicle Calendar

Village Green

840 Hanshaw Road.

The submission deadline for the calendar is 10 days prior to the publication date.

Thanks!

atmospheric sciences, Dec. 3, 11:15 a.m., 404 Plant Sciences.

"Breaking and Entering: Early Stages in Plant Host-Fungal Pathogen Interaction," Rick Howard, Dupont, Dec. 9, 11:15 a.m., 404 Plant Sciences.

Psychology

"Dopamine, Seratonin and the Structure of Personality and Emotion," Richard Depue, human development & family studies, Dec. 3, 3:30 p.m., 202 Uris Hall.

Rural Sociology

"Social Class Versus Cultural Explanation for Intergenerational Welfare Use," Mark Rank, Washington University, Dec. 3, 3:30 p.m., 32 Warren

Soil, Crop & Atmospheric Sciences

"Multiple Effects Analysis of Variance of Field Data," Rich Zobel, soil, crop & atmospheric sciences and plant breeding, Dec. 7, 3:30 p.m., 135 Emerson Hall,

Southeast Asia Program

"Where is the Indonesian Economy Headed," Hal Hill, Columbia University, Dec. 2, 12:20 p.m., Kahin Center, 640 Stewart Ave.

Synthesis Coalition

"Frontiers in Engineering Education," Edmund Cranch, former dean of the College of Engineering, Dec. 6, 3 p.m., B-14 Hollister Hall.

Theoretical & Applied Mechanics

"Helping the Aging Aircraft Problem: Simulation of Curvilinear Crack Growth in Pressurized Thin Shells," Anthony Ingraffea, civil engineering, Dec. 8, 4:30 p.m., 205 Thurston Hall.

Women's Studies

"Infertility: Preventing, Managing, Coping," Constance Shapiro, human service studies, Dec. 7, noon, G-01 Biotechnology Building.



Department of Theatre Arts

Theatre Arts will present "The Strange Case of Dr. Jekyll and Mr. Hyde," by David Edgar, on Dec. 3 and 4 at 8 p.m. in the Proscenium Theatre. Tickets are \$6 and \$8. Edgar's adaptation of this science fiction classic is both a theatrical feast and an intellectual challenge. The play reveals the story of Jekyll and Hyde as a piece of moral hideand-seek: a thriller which holds you on the edge of your seat and makes you think.

ACSW Meetings

The Advisory Committee on the Status of Women regularly holds brown bag luncheons open to the entire community on the fourth Tuesday of each month. For more information, contact Risa Lieberwitz, associate professor of industrial and labor relations, ACSW chairwoman, at 255-3289.

AIDS Memorial Quitt

The Names Project AIDS Memorial Quilt will be on view Dec. 2 and 3 in the Memorial Room of Willard Straight Hall.

Alcoholics Anonymous

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

Book Signings

On Dec. 2 from noon to 2 p.m., Meg Splendor will be at the campus store to sign copies of her book/audio tape for children, Dream Catcher.

On Dec. 3 from 3 to 5 p.m., Professor Meredith Small will be signing copies of her book Female Choices: Sexual Behavior of Female Primates in the campus store.

Equestrian Center

The Cornell Equestrian Center is offering a unique holiday gift idea: eight one-hour riding lessons for \$125 in a heated indoor arena. Lessons begin Jan. 3. Call 255-3625 for information.

Hotel School

· Cafe Pacifico, run by the graduate students at the Hotel School, is in operation at Banfi's Restaurant on Friday nights from 6 to 9 p.m. Dress is casual. Prices are reasonable, with appetizers starting at \$4 and entrees from \$9.75. Reservations are recommended. Major credit cards and Cornellcard are accepted. Call 257-2500.

• The theme Dec. 2 for Terrace Cafe and Bistro

A holiday wreath workshop will be held Dec. 7 from 7 to 9:30 p.m. Class members will make individual wreaths using cinnamon, nutmet, red and white flowers, leaves, etc. Preregistration and prepayment are necessary for classes, Call Cornell Plantations at 255-3020 for more information.

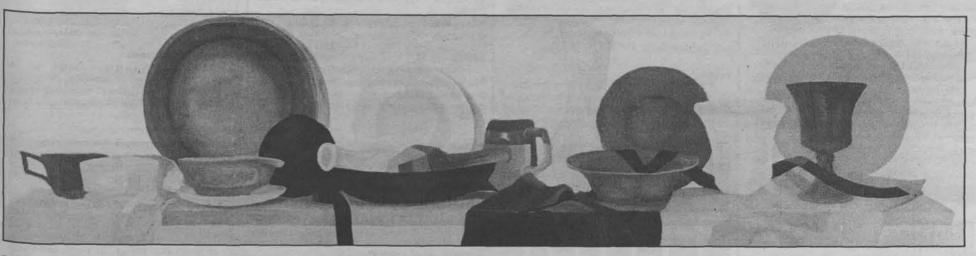
Writing Workshop

Writing workshop walk-in service, free tutorial instruction in writing available all semester:

• 178 Rockefeller Hall: Sunday, 2 to 8 p.m.; Monday through Thursday, 3:30 to 5:30 p.m. and 7 to 10 p.m.

· Robert Purcell Community Center Board Room: Sunday through Thursday, 8 to 11 p.m.

• 112 Noyes Center: Sunday through Thursday, 8 to 11 p.m.



This untitled work by Associate Professor Gregory Page is on view at the Herbert F. Johnson Museum of Art as part of its Department of Art Faculty Exhibition through Dec. 19.

(Home games in ALL CAPS) Records are as of Monday.

Men' Basketball (0-1)

Dec. 4, at St. Louis, 1:05 p.m. Dec. 7, CLARKSON, 7 p.m.

Women's Basketball (1-0)

Dec. 3, SHERATON CLASSIC, 5:30 p.m. Dec. 4, SHERATON CLASSIC, consolation, 1 p.m.; championship, 3 p.m. Dec. 8, BUFFALO, 6:30 p.m.

Men's Hockey (1-3-1)

Dec. 3, at Yale, 7:30 p.m.

Dec. 4, at Princeton, 7:30 p.m. Dec. 7, BOSTON COLLEGE, 7:30 p.m.

Women's Hockey (0-3)

Dec. 4, at Colby, 2 p.m. Dec. 5, at New Hampshire, 1 p.m.

Men's Polo Dec. 3, SKIDMORE, 7:30 p.m.

Dec. 5, at Yale, 3 p.m.

Women's Polo

Dec. 4, SKIDMORE, 8:15 p.m. Dec. 5, at Yale, 1 p.m.

Men's Squash (0-3)

Dec. 4, at Harvard, 1 p.m.

Men's Swimming (1-2) Dec. 4, COLUMBIA, 3:30 p.m.

Women's Swimming (1-1) Dec. 4, COLUMBIA, noon

Dec. 7, at Ithaca College, 6 p.m.

Men's Indoor Track Dec. 4, CORNELL RELAYS

Women's Indoor Track Dec. 4, CORNELL RELAYS

Wrestling (0-3) Dec. 5, at Penn State Open

Harriers Clas, Woeller keep on running

By Patrick Gillespie

Prior to 1993, no school had ever won the men's and women's Heptagonal team championships in the same year. Neither had any school had both the men's and women's individual winners.

That ended when senior Brian Clas and junior Laura Woeller of the Cornell cross country teams each won their respective individual titles and paced the Big Red men and women to the winners circles. Clas, a native of

country

wonders when you

stay healthy," said

coach Lou Duesing

Endicott, won the 1993 Heptagonal championship at Van Cortlandt Park in the Bronx on Oct. 29 with a time of 24:49.1 over the five-mile course. With Clas leading the way, the Cornell men won their first Heps title since 1963. He was Cornell's first champion since Jon Anderson won the individual crown in 1970. "You can work

after the Heps race. "If Brian wasn't injured

last year, he may have won his second title in

Two weeks later, on Nov. 13, he placed

Woeller

a row,"

fifth at the NCAA Region II qualifying meet in Leesburg, Va., with a 29:21.8 clocking. That fifth-place finish qualified Brian for the NCAA Division I cross country championship, where he finished 12th with a time of 29:54.9.

"Brian has saved the best for last," said Duesing. "Clearly, he's had his best cross coun-

try season this year." In addition to the above mentioned races, Classet the course record at the Penn State Invitational, scorching the talented field with a time of 25:40 - a full 10 seconds ahead of the sec-

ond-place runner - over the 5.2-mile course in State College, Pa.

"Brian is a tough character," Duesing said. "He's not going to take a back seat to

Last year, Clas came back from an injury during his sophomore season that also slowed his progress at the beginning of his junior campaign, and earned All-America, All-East and All-Ivy honors. He placed 29th at the 1992 NCAA cross country championships, was 16th at the IC4As and finished fourth at

On the women's side, Woeller, a Fulton, N.Y., native, has had a very successful junior campaign. Like Clas, she won the Heptagonal championship with a time of 17:53.8



over the 3.1-mile course, leading the Big Red women to their third consecutive title.

Woeller, who placed seventh at the Penn State Invitational on Oct. 17 with a time of 17:45, ran a 17:37.5 over the 5,000-meter course at the NCAA qualifier and came through the chute in 16th place. She finished 26th and was Cornell's top finisher at 17:13.9 at the NCAA championships.

"Laura is running a lot better than she did last year," Duesing said. "She's running with confidence. Important races for her were at Seattle and at Penn State. She learned that she was better than she thought she was and has used that in these last two races. She wasn't feeling up to par at the NCAA qualifying meet but still ran very competitively."



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

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

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

Cornell International Folkdancers

All events are open to the Cornell community and general public. Admission is free, unless stated otherwise. No partner needed. For further information, call 277-3638.

Dec. 5: 6:30 p.m., planning meeting; 7:30 p.m., instruction and request dancing, North Room, Willard Straight Hall.

Theatre Arts

The Fall Dance Concert, a compilation of original faculty and student choreography, will be presented Dec. 2, 3 and 4 at 7:30 p.m. in the Class of '56 Dance Theatre at the Center for Theatre Arts. Tickets are \$3. For more information, call 254-ARTS between 12:30 and 5:30 p.m., Monday through Friday

Johnson Art Museum

The Herbert F. Johnson Museum of Art, on the corner of University and Central avenues, is open Tuesday through Sunday from 10 a.m. to 5 p.m. and Wednesdays to 8 p.m. Admission is free. Telephone: 255-6464.

· Kandinsky's "Small Pleasures," on loan from the Guggenheim Museum and supplemented by Kandinsky works on paper from the museum's permanent collection, on view through March 20.

· "Our Century on Paper," an exhibition of 20thcentury drawings from the museum's permanent collection, on view through Dec. 12.

· "Revelaciones/Revelations: Hispanic Art of Evanescence," an exhibition of museum installations, through Dec. 19.

· Cornell Art Department Faculty Exhibition, through Dec. 19.

• "100 Years of People-Watching: Photographs From the Permanent Collection," through Jan. 6, 1994

• "Themes in Renaissance Prints," through Jan. 23, 1994

· Related to the "Revelaciones/Revelations" exhibit, Book Trial #3, centering on "Race and Mind: The Fair Measuring of Intelligence," will be held Dec. 3 at 4:30 p.m. in the Black Box Theatre, Center for Theatre Arts.

· Thursday Box Lunch tours: As part of the Box Lunch Tours: Art Through the Ages series, the museum will offer the topic of Modernism on Dec. 2. This series includes an hourlong talk every other Thursday from noon to 1 p.m. Afterward, lunch can be enjoyed in the sixth floor conference room.

· Weekend walk-in tours: Every Saturday and Sunday during the academic year from 1 to 2 p.m., the museum offers a free tour of either a special exhibition or an aspect of the permanent collection. Please check at the museum for topics and sneakers

Kroch Library

"In Her Own Hand," an exhibition of women's diaries, letters and memoirs, is on view through Dec. 17 at the Carl Kroch Library - Rare and Manuscript Collections, Exhibition Hall, Level 2B.

Tjaden Gallery

Prints by Yazmine Acevedo, through Dec. 4.

Paintings by Alyssa Norton, Dec. 4-11.

Films listed are sponsored by Cornell Cinema unless otherwise noted and are open to the public. All films are \$4.50 (\$4 for students), except for Tuesday night Cinema Off-Center (\$2) and Sunday matinees (\$3.50). Films are held in Willard Straight Theatre except where noted.

Thursday, 12/2
As part of World AIDS Day, a screening of "And the Band Played On" will take place at 7:30 p.m. in the Memorial Room, Willard Straight Hall.

"Flirting" (1989), directed by John Duigan, with Noah Taylor, Thandie Newton and Nicole Kidman, 7:40 p.m.

"True Romance" (1993), directed by Tony Scott, with Christian Slater and Patricia Arquette, 10 p.m.

Friday, 12/3

A sneak preview of Richard Attenborough's film "Shadowlands" will be held at 4 p.m. Producer Brian Eastman will introduce the film and lead a Monday, 12/6

"The Oak," 7:30 p.m.

Tuesday, 12/7

"La Vie de Boheme," 7:40 p.m. "World's Best Commercials 1992," 10 p.m.

Wednesday, 12/8

"Twenty Years Later" (1984), directed by

Eduardo Coutinho, 7 p.m.
"Jurassic Park" (1993), directed by Steven Spielberg, with Jeff Goldblum, Sam Neill and Laura Dern, 9:40 p.m.

Thursday, 12/9

"Menace II Society" (1993), directed by Allen and Albert Hughes, with Tyrin Turner, Jada Pinkett and Vonte Sweet, 7:30 p.m.

"Jurassic Park," 9:40 p.m.

· Thesis/Dissertation: The thesis/dissertation submission deadline for a January 1994 degree is Jan. 14, 1994. Students should see the Graduate School thesis adviser (walk-in office hours 8:30 a.m. to noon, 1:30 to 4 p.m. weekdays) for approval of the format of their thesis/dissertation before submitting the final copies to the Graduate School

 Spring 1994 Registration for graduate students will be conducted from 8:30 a.m. to 4 p.m. in the lounge, Sage Hall, on Thursday and Friday, Jan. 20 and 21

· Conference Travel Grants: Applications are due at the Graduate Fellowship Office, Sage Graduate Center, by Jan. 1, 1994, for February 1994 conferences. Applications are available at gradu-

positions in the graduate programs begins with four information sessions:

· Dec. 6, noon to 1 p.m., Hasbrouck Community Center (on campus bus 81).

Jan. 19, 5 to 6 p.m., Big Red Barn.
Jan. 25, 7:30 to 8:30 p.m., Big Red Barn.
Jan. 31, noon to 1 p.m., Anabel Taylor Hall.

If you have questions or wish to reserve a space in one of the information sessions, contact Peggy Randall at 255-7290.

East Asia Program

"The Reform of Property Markets and Its Implications for China's Economic Development," Andrew Hamer, the World Bank, Dec. 3, 4 p.m., 498 Uris Hall.

German Studies

John Noyes of Capetown University will give a talk on German colonial literature, Dec. 8, 4:30 p.m., 177 Goldwin Smith Hall.



Music Department

. On Dec. 3 at 8:15 p.m. in Barnes Hall, "A Taste of Indonesia" will be presented by director Martin Hatch and his gamelan ensembles to celebrate the holiday with traditional Indonesian sing-



Charles Harrington/University Photography

The annual Sage Chapel Christmas Concert is scheduled for Dec. 5 and 6 at 8:15 p.m.

post-screening discussion. For free passes, call 254-2700 by noon on Thursday, Dec. 2.

"The Oak" (1992), directed by Lucien Pintilie, 7:30 p.m.

"True Romance," 8 p.m., Uris.

"Flirting," 9:55 p.m. "Life of Brian" (1979), directed by Terry Jones, with Graham Chapman, John Cleese and Terry Gilliam, 10:45 p.m., Uris.

Saturday, 12/4

"The Secret Garden" (1993), directed by Agnieszka Holland, with Maggie Smith, Kate Maberly and Heydon Prouse, IthaKid Film Festival. 2 p.m., \$2/\$1.50 kids 12 and under

'Sweet Sweetback's Baadasssss Song" (1971), directed by Melvin Van Peebles, with Van Peebles, the Black Community and Brer Soul, 7:05 p.m.,

"La Vie de Boheme" (1992), directed by Aki Kaurismaki, with Matti Pellonpaa, Evelyn Didi and Andre Wilms, 7:30 p.m.

"True Romance," 9:20 p.m., Uris. "World's Best Commercials 1992," 9:50 p.m. "Life of Brian," midnight, Uris.

Sunday, 12/5

"Life of Brian," 4:30 p.m. Cornell Student Film Show, 7:30 p.m. ate field offices; registered graduate students invited to present papers or posters are eligible.

· University Holiday: The Graduate School offices will be closed during the official university winter holiday, Friday, Dec. 24, until Monday, Jan. 3. The offices also will close on Thursday, Dec. 23,

· Foreign Language and Area Studies Fellowships: Applications for 1994-95 are available in the graduate field offices and the Graduate Fellowship Office. Application deadline is Jan. 28. Award includes 9-month stipend of \$8,000 plus full tuition for 1994-95 academic year; available to citizens or permanent residents of U.S.

· Javits Fellowship: Available to doctoral candidates who are U.S. citizens or permanent residents in the fields of arts, humanities or social sciences. Stipend up to \$14,000 plus \$9,000 for tuition; Cornell provides remainder of tuition. Applications will be available in early- to mid-December in the Graduate Fellowship Office; deadline is early February.

1994 Summer Support: Dec. 15 is the deadline for U.S. citizens and permanent residents for filing documents with the Graduate Fellowship Office for 1994 summer awards.

· Campus Life Positions: Graduate Community Assistant positions may be available in Hughes Hall, Hasbrouck, Maplewood Park, Pleasant Grove, Schuyler House and Thurston Court. The selection process for full-time graduate student live-in ing, dances and instrumental music. There also will be a mini bazaar selling snacks and crafts. Admission is free.

· On Dec. 4 at 5 p.m. in Barnes, chamber music by Beethoven and Dvorak will be performed by student ensembles directed by John Hsu. Featured compositions are Beethoven's "Trio in C Major, op. 87" and his "Sonata in A Minor, op. 23. The last piece of this program is Dvorak's "Quintet in A Major, op. 81.

· Under the direction of Assistant Professor of Music Mark Scatterday, the Cornell Wind Symphony and Chamber Winds will present their annual "Winter Concert" on Dec. 5 at 2 p.m. in Bailey Hall. Featured are Jacob's wind phrases of Vaughan Williams' Fantasia on "Greensleeves," "Mars" from Holst's The Planets, and "Finale" from Shostakovich's Symphony No. 5. Other works are by Chance, Reed, Jenkins, as well as Rachmaninov's "Symphonic Dance, opus 45 no. 3." The percussion ensemble will start the program with Roldan's Ritmica No. 5.

· Director of Cornell Jazz Ensembles Karlton Hester will conduct his jazz groups in a concert

Dec. 5 at 8:15 p.m. in Barnes Hall. • The annual Sage Chapel Christmas Program will be held Dec. 5 and 6, both at 8:15 p.m. The Cornell chimesmasters from McGraw Tower will ring out, prior to and following, the seasonal event.

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