

## Rhodes cites gains since '77 but sees hard work ahead

By Sam Segal

President Frank H.T. Rhodes, in his state-of-the-university address to the faculty Oct. 12, recalled Cornell's great strides since his first such address in 1977 but also urged their continued commitment during the coming years of change and constraint.



Rhodes

"As we make the transition to a new administration," said Rhodes, who will step down next June 30, "we must refuse to allow our present constraints to dampen our creative thinking or adventurous experimentation."

Rhodes thanked those present who were members of the Faculty Council of Representatives and generally praised faculty citizenship that transcends individual teaching and research interests in pursuit of the good of Cornell.

He urged their help in maintaining a community that is "critical but also civil,

candid but also nurturing, whose members are committed together in a common quest for understanding."

In his final such speech to the faculty, Rhodes noted that some things hadn't changed since his first. Seventeen years ago, he recalled, he touched on budget, the changing calendar, SUNY relations, mandatory retirement and faculty salaries. But beneath the surface, there was trouble that has since been overcome:

- Applications had fallen for five years, including a drop of nearly 1,500 from 1976 to 1977.

- There had been a decade of budget deficits, with a consequent drain on the endowment.

- Need-blind admission, only a year old, was threatened, and a faculty-student committee was looking into merit-based financial aid.

- While Cornell had begun a campaign for \$230 million, it had raised less in each of the campaign's first two years than before the campaign.

This year, Rhodes noted, applications rose to more than 21,000 – up 50 percent

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Sharron Bennett/University Photography  
**Carl Sagan, the David Duncan Professor of Astronomy and Space Sciences and director of Cornell's Laboratory for Planetary Studies, at his birthday celebration Oct. 14.**

## Two-day symposium marks Carl Sagan's 60th birthday

By Larry Bernard

From planetary exploration and the search for life in the universe, environments of other worlds and our own and the possibility of time travel along space-time warps, to science education and popularization, nuclear war and winter, the Cold War and religion, science and pseudoscience—a two-day symposium last week in honor of Carl Sagan's 60th birthday covered it all.

"These whole two days, it's like a dream. To have everyone you love, everyone you admire, get them in two rooms and have them talk about what you're interested in, it's like, well, I don't what it's like, but it's great!" said a somewhat overwhelmed Sagan as he was feted at a banquet Friday night. "I just wish I could spend hours with each of you one-on-one."

With 24 speakers over 48 hours covering all the issues closest to Sagan, the David Duncan Professor of Astronomy and Space Sciences and director of Cornell's Laboratory for Planetary Studies, the symposium by the Department of Astronomy and Space Sciences featured scientists and policy-makers from around the world, as well as audiences of students, faculty, staff and the public in the Statler Auditorium Thursday and Friday. It was cosponsored by the New Millennium Committee of the Planetary Society and *Parade Magazine*.

"It takes two days and 25 speakers to merely outline Carl's work. It shows the astonishing breadth, from astronomy and public policy to education, of his interests," President Frank H.T. Rhodes said during a toast to Sagan at the Friday banquet.

Here are some of the highlights:

### Planetary Exploration

The nation must continue its exploration of the solar system, said Wesley Hunt-

Complete coverage of symposium, Pages 6-8

ress, NASA associate administrator for space science who was a substitute speaker for Daniel Goldin, the NASA administrator who could not attend. "We need to complete a full reconnaissance of the solar system, and begin an era of surface mapping," he said.

But more, "it's time to expand the purview of planetary science, and detect and classify planets around other stars, what their atmospheres are like and whether they are inhabited or whether they are habitable. We also need to complete a map of the universe along the entire electromagnetic spectrum."

Huntress defined NASA's mission: "To explore the universe, to seek out new planets, to search for life throughout the universe. To survey, explore, sample every accessible body in our solar system, and to fully engage the public and the higher education enterprise in what we are doing."

### Around the Solar System

Edward C. Stone, director of NASA's Jet Propulsion Laboratory and a physics professor at the California Institute of Technology, described the planetary program and took the audience on a tour of the solar system based on explorations over the past two decades. He described the Magellan mission that found, as Sagan had predicted, that a runaway greenhouse effect robbed Venus of all its surface water.

"Venus didn't tell us much about the origins of life," Stone said, "but it told us that if you take a planet just like Earth and just move it ever so slightly, it becomes quite inhospitable."

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## Cornell study finds whole milk is fat villain in preschoolers' diet

By Susan Lang and Metta Winter

Although more than 80 percent of preschoolers overload on dietary fat, simply switching from whole to reduced-fat milk products would bring their diets in line with current dietary guidelines, a Cornell analysis shows.

"For children ages 2 to 5, whole milk

contributes 6.4 grams of fat, or 11 percent of the total fat consumed, and 4 grams of saturated fat, which is almost 18 percent of the saturated fat consumed daily," said Frances E. Thompson, Ph.D., who conducted the analysis of U.S. Department of Agriculture survey data while a research associate at Cornell.

Simply by substituting skim milk, 1 per-

cent milk and part-skim cheeses for higher fat-milk products, the researchers calculate that the diets of most preschoolers would become consistent with dietary guidelines that only about 30 percent of total calories should come from fat. In addition, the resulting diet would almost meet the goal of less than 10 percent of total calories from saturated fat. The substitutions would shave

10 grams of fat and 6 grams of saturated fat from the typical preschooler's diet, the researchers said.

After whole milk, sweet grain products such as cookies, cakes, pies and doughnuts ranked next as a major source of total fat, followed by processed meats (franks, sausages, lunch meats and bacon) and grain

*Continued on page 4*

## Police arrest man in library

Cornell police arrested a man in Uris Library Oct. 16 and charged him with two counts in connection with a series of thefts in the library over the past few weeks.

David G. Mau, 19, of 204 Willard Way, Ithaca, was arrested by Cornell Police Officers Ronald Scarofilo and Karen Smith in Uris at approximately 10 p.m. Sunday as he allegedly was searching through the contents of a stolen backpack.

In conjunction with New York State Police and Ithaca Police Department, campus police executed search warrants on Mau's car and residence. He was charged by Cornell Police with criminal possession of stolen property in the fourth degree and petit larceny. Additional charges were filed by State Police.

Mau was arraigned in Lansing Town Court and was remanded to Ithaca City Jail. No bail was set. The investigation is continuing, according to Cornell Senior Investigator Scott Hamilton.

## NSF director to visit for town meeting

Neal Lane, director of the National Science Foundation, will visit Cornell on Tuesday, Oct. 25, to take part in a live, interactive Town Meeting with researchers from around the country.

Lane, a physicist who has headed the NSF since last year, will meet with faculty from Cornell and three other supercomputing centers and from New York universities via an interactive Town Meeting from 11 a.m. to 12:15 p.m. in Room 471 of the Cornell Theory Center. Cornell faculty may participate in the live discussion.

Lane also will meet with undergraduate and graduate students, and will tour three of the NSF-supported laboratories at Cornell: the Laboratory of Nuclear Science and Cornell High Energy Synchrotron Source; the National Nanofabrication Facility and the Theory Center. The Theory Center houses the National Supercomputer Facility, one of three national centers supported by the NSF for the worldwide research community.

Lane will meet with President Frank H.T. Rhodes and other Cornell administrators, and will have dinner with Rhodes, New York Lt. Gov. Stan Lundine and research executives from New York-based industry.

## CORNELL Chronicle

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## Strategic planning



President Frank H.T. Rhodes speaks recently to Arts and Sciences faculty about the university's draft strategic plan. At left is Arts and Sciences Dean Don M. Randel. Rhodes is speaking with faculty and other groups, seeking input on the proposed plan.

Peter Morenus/University Photography

## BRIEFS

■ **Food industry award:** The Cornell Food Industry Management Home Study Program received the Distinguished Extension Program (Group) Award from the American Agricultural Economics Association during the association's annual meeting in August. Home Study is a distance-learning program in the Department of Agricultural, Resource and Managerial Economics that works primarily with people in the retail food industry. During its 30-year history the program has enrolled more than 300,000 students.

■ **NSF grant:** The Paleontological Research Institution (PRI) has received a grant of more than \$380,000 from the National Science Foundation. The funds are earmarked to improve PRI's fossil and shell collections and will be disbursed over the next two years. The institution is located at 1259 Trumansburg Road, Ithaca.

■ **Crisis Hostel here:** The Crisis Hostel, a respite house for people experiencing an emotional crisis, will open in downtown Ithaca on or about Nov. 1. The

hostel is an innovative, voluntary alternative to psychiatric units or mental hospitals and is founded on the principle that people in crisis have the right and responsibility to make their own decisions. It is one of the first projects of this type in the country. The principal investigator is Jeanne Dumont, Cornell Ph.D. '93. The hostel is funded by the state Department of Health and Human Services and is administered by the Mental Health Association of Tompkins County.

## APPOINTMENTS

**Davydd J. Greenwood**, John S. Knight Professor of International Studies and director of the Mario Einaudi Center for International Studies at Cornell, completed his second five-year term as director on June 30, 1994. Following a year of academic leave, Greenwood will return to full-time academic duty, assuming a Goldwin Smith Professorship in anthropology.

## Police continue investigation of death in gorge

Ithaca police are continuing their investigation into the death of Steven K. Michitsch, 19, whose body was recovered from Fall Creek gorge Sunday evening.

Michitsch, of Albertson, N.Y., was a sophomore majoring in agricultural and biological engineering. He was a member of Sigma Alpha Epsilon fraternity.

The Tompkins County Medical Examiner issued a report saying the cause of death was blunt trauma, consistent with a fall.

"Cornell is deeply saddened by the tragic death of Steven Michitsch," Vice President for Student and Academic Services Susan H. Murphy said. She added that university officials are cooperating fully with Ithaca police in their investigation and that the university is conducting its own review of the incident.

Michitsch is survived by his parents, Wilhelm and Helga Michitsch of Albertson, and other family members. Funeral services will be held tomorrow at St. Aidan's R.C. Church in Williston Park, N.Y.

Arrangements will be announced for a memorial service on campus.

## OBITUARIES

**Philip J. McCarthy**, professor emeritus of economic and social statistics in the School of Industrial and Labor Relations, died Oct. 10 at Tompkins Community Hospital. He was 76.

McCarthy joined the faculty of the School of Industrial and Labor Relations in 1948 and taught statistics until his retirement in 1988. He was founder and director of Cornell's Statistics Center.

An internationally known expert on sampling theory and applications, McCarthy served as consultant on major studies on index number sampling problems, employment and criminal justice statistics.

He was a Fellow of the American Statistical Association and both served on a variety of university and government panels. During World War II, he conducted military research at Columbia and Princeton universities.

McCarthy earned an undergraduate de-

gree from Cornell in 1939 and a doctorate from Princeton University in 1947.

He is survived by his wife, Jane A.L. McCarthy, a son and three daughters, several stepchildren and grandchildren.

In lieu of flowers, gifts may be made to the School of Labor Relations, c/o The Dean's Office, 187 Ives Hall, Cornell University, Ithaca, NY 14853.

◆ **W. Harry Everhart**, an ichthyologist who specialized in fishery management and chairman of the Department of Natural Resources here from 1972 to 1982, died Oct. 1 in Falmouth, Maine, of complications of Alzheimer's disease. He was 76.

Before joining the Cornell faculty, Everhart held academic positions at the University of Maine at Orono and Colorado State University, and served as chief of the

fisheries division of the Maine Department of Inland Fisheries and Game. He was appointed professor of natural resources emeritus at Cornell in 1983, and was a consultant for the Great Northern Paper Co.

Everhart earned his doctorate from Cornell in 1948. The author of several textbooks and numerous scientific articles, his research ranged from fish behavior and the evolution of trout populations to the effects of oil-shale exploration and nuclear-power generation on aquatic fauna.

Surviving are his wife, Lillian Eastman Everhart, of Cundys Harbor, Maine; two daughters, Sheila E. Belanger of Marietta, Ga., and Sondra Everhart of Saco, Maine; a son, Harry Watson Everhart of Cundys Harbor; two brothers, Dr. Robert J. Everhart of Boerne, Texas, and Dr. Donald L. Everhart of Sandwich, Mass; five grandchildren and a great-grandson.

# Cornell trustees will meet on campus Oct. 20-21

By Sam Segal

Cornell's Board of Trustees will meet in open session Friday, Oct. 21, during the annual campus gathering of the trustees and the Cornell University Council, a worldwide body of 440 active alumni volunteers.

The events also will include a speech Thursday evening by U.S. Attorney General Janet Reno and President Frank H.T. Rhodes' state-of-the-university address to a joint

trustee-council session at 9 a.m. Friday.

The board's public session, in the Herbert F. Johnson Museum of Art, will run for 90 minutes, from 2:15 p.m. Matters discussed will include the 1993-94 financial report, six-year enrollment trends and reports from standing committees.

Several committees also will have public sessions today:

- The Committee on Land Grant and Statutory College Affairs' full meeting -

from 6:30 p.m. in the Statler Hotel's Pennsylvania Room - will be open for discussion on a range of program and financial matters affecting Cornell's state-assisted colleges.

- The Buildings and Properties Committee, meeting at 9 a.m. in the Statler's Yale-Princeton Room, will be open for the first few minutes to hear status reports on ongoing projects.

- The Committee on Academic Affairs and Campus Life's 6:30 p.m. meeting, in the

Statler's Rowe Room, will be open for the first half-hour to hear an overview from Trustees Ronay Menschel and John Neafsey and an update on the strategic-planning review of graduate and professional education.

A limited number of tickets for the full board's open session will be available at 9 a.m. Friday at the Information and Referral desk in the Day Hall lobby. No tickets are needed for the open sessions of the trustee committees.

## Janet Reno on campus today

U.S. Attorney General Janet Reno will return to campus today.

She is scheduled to present an address to the public in Barton Hall at 5 p.m. The doors will open to ticketholders at 2:30 p.m.

A member of Cornell's class of 1960, Reno's appearance in Ithaca is part of Cornell's Trustee-Council annual meeting. This will be her first return to campus since she assumed the attorney general's post; she served as a member of the Cornell Council, a worldwide alumni group, from 1972 to 1975.

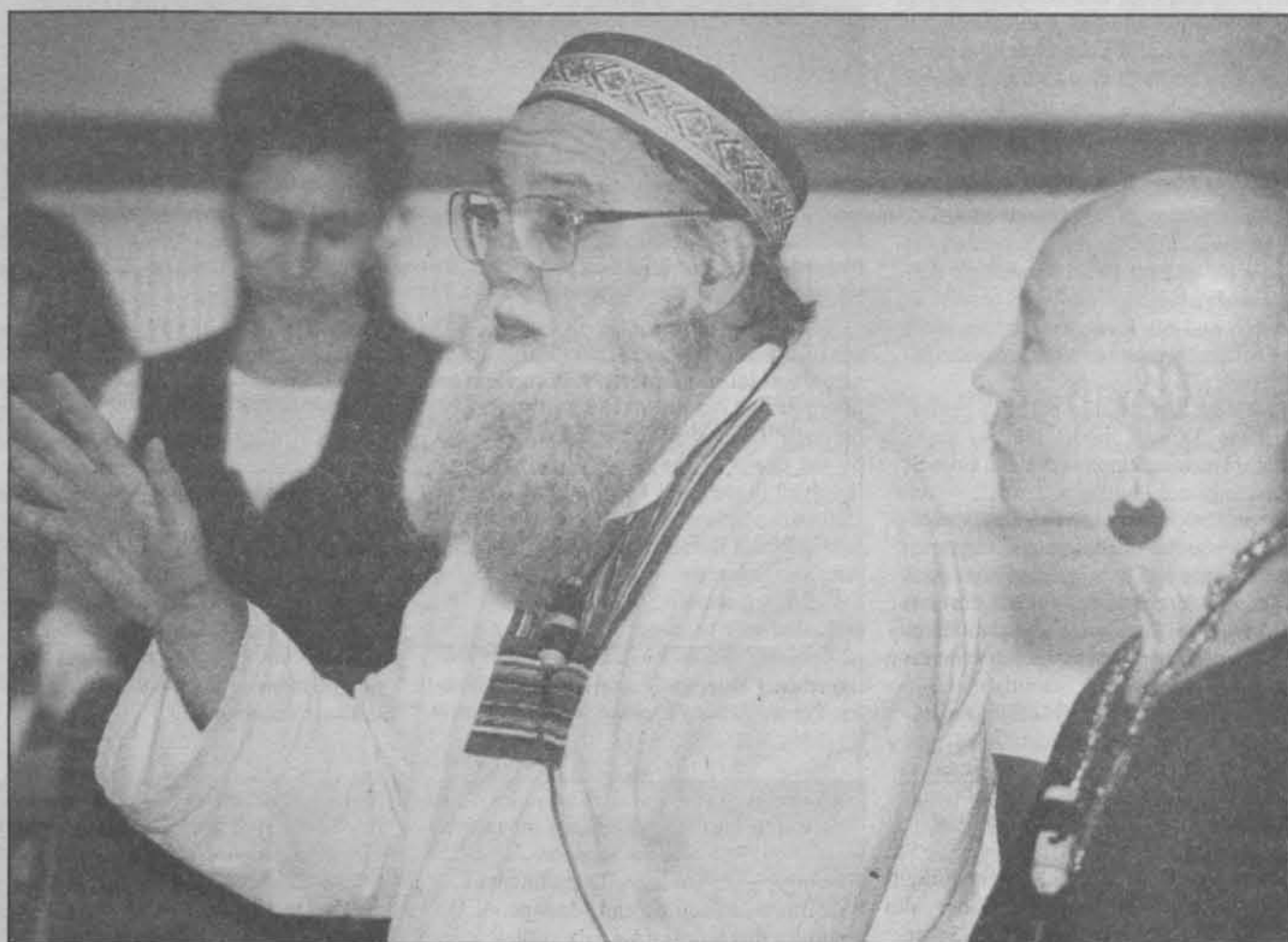
Tickets to Reno's speech are free, but are required for admission because of limited seating. They were distributed, on a first-come, first-served basis, beginning Oct. 18 at the Information and Referral Center in Day Hall, Willard Straight Hall ticket office, Robert Purcell Community Center on North Campus, Noyes Community Center on West Campus and at the DeWitt Mall ticket office in downtown Ithaca.

Reno's lecture also can be viewed on closed-circuit television feeds to be provided in Alice Statler Auditorium and Alumni Auditorium in Kennedy Hall. Time-Warner Cable Channel 7 in Tompkins County also plans to carry the speech live.

Reno was appointed the nation's first female attorney general by President Clinton on March 12, 1993.

In addition to serving on the University Council from 1972 to 1975, Reno was on the Steering Committee of Alumni Leaders from 1984 to 1990. In 1990, she was one of 120 original members of the President's Council of Cornell Women.

## Stories of the spirit



Arthur Waskow, left, a longtime social and political activist and author, and his wife, Phyllis Berman, executive director of the Riverside Language Program for adult immigrants and refugees, led an "Evening of Spirituality and Storytelling" Oct. 15 in the One World Room of Anabel Taylor Hall. The event was sponsored by CRES, the Center for Religion, Ethics and Social Policy.

Sharon Bennett/University Photography

## Flu shots are available here

Influenza vaccine shots for Cornell students, faculty and staff members are available during clinics at Gannett Health Center through Nov. 4.

Flu vaccine is recommended for individuals with chronic medical conditions, such as heart or lung disease, asthma or diabetes, as well for those who wish to minimize the risk of contracting influenza and disrupting routine activities during epidemics.

The \$8 charge may be paid by cash, check, bursar billing or credit card.

Clinics in the main lobby of Gannett Health Center are scheduled for the following times: Friday, Oct. 21, 8:30 through 11:30 a.m. and 1:30 through 4 p.m.; Monday, Oct. 24, 1:30 through 4 p.m.; Tuesday, Oct. 25, 8:30 through 11:30 a.m. and 1:30 through 4 p.m.; Thursday, Oct. 27, 8:30 through 11:30 a.m. and 1:30 through 4 p.m.; Monday, Oct. 31, 1:30 through 4 p.m.; Wednesday, Nov. 2, 8:30 through 11:30 a.m.; and Friday, Nov. 4, 8:30 through 11:30 a.m. and 1:30 through 4 p.m.

## Youth services attract United Way's attention

By Darryl Geddes

No longer content only to teach sewing and homemaker skills, the Girl Scouts of America has experienced wholesale changes since its inception some 80 years ago. These changes, which include computer classes and career development workshops, reflect the new responsibilities and opportunities women have today.

But what hasn't changed at Girl Scouts is its overall mission. "We are a values-based education program that provides year-round activities designed to meet the needs of today's girls," said Judy Gallagher of the Seven Lakes Girl Scout Council, which coordinates the scouting experience for some 12,000 girls in 13 counties, including Tompkins. "We give them values to live by and guide them in their adult life; we are a place for them to belong and work toward the betterment of the community."

The Girl Scouts' most famous fund-raiser is its annual cookie sale, but the Seven Lakes Girl Scouts Council also receives assistance from United Way of Tompkins County. Last year United Way provided \$32,000 in support for the council. "These funds are extremely important to us," Gallagher said. "They help us fund workshops, maintain troops and train volunteers, such as troop leaders and workshop participants."

Susan E. Kiner, a lecturer in business communications at Cornell's School of Hotel Administration, volunteers as leader of a local troop and of campus scouts, college-aged women who continue their Girl Scout

service by volunteering as local troop leaders. "Girl Scouts prepares girls to be skillful planners and decision-makers," she said.

United Way also supports area youth programs in many other ways.

Through education and outreach programs, the Alcoholism Council helps young people develop decision-making and refusal skills to keep away from drugs and alcohol. The council provides programming to area schools, youth organizations and summer camps as well as clinical services to young people who have alcohol or drug problems or are children of alcoholics.

The council's many services are very

much in demand, said Cheryl Caister, director of educational services of the Alcoholism Council.

"We saw more than 750 people last year; about 20 percent of these individuals were under the age of 24," she said. "Many seek our help on their own, others are referred by the courts or other agencies."

Council funding comes from a variety of sources, including United Way, which allocated \$33,470 to the council last year.

The Drop-In Children's Center, which provides short-term temporary child care, is another United Way agency that continues to see a rise in the demand for services.

"More and more people use our services the way they would have used an extended family in the past," said Lynne Jackier, director of the Drop-In Children's Center.

Children can be dropped off at the center for up to three hours. Care is provided by paid child-care specialists and volunteers, among them Cornell students.

"We are grateful for Cornell's support," Jackier said. Cornell recently gave a contribution to the center to acknowledge the assistance it provides Cornell families. Many of Cornell's faculty, staff and graduate students use the center's services.

Jackier also is thankful for the longtime support of the United Way, which last year allocated \$7,800 to the Drop-In Children's Center. "Several years ago, we experienced a 64 percent cut in county funding," Jackier said. "Without help from the United Way we wouldn't have been able to continue our operations."



## Professorship named to honor Lee Teng-hui

By Sam Segal

Cornell has named an endowed professorship in honor of Lee Teng-hui, president of the Republic of China on Taiwan and a Cornell Ph.D. alumnus.

The Lee Teng-hui Professorship of World Affairs was made possible by a \$2.5 million endowment gift provided anonymously by friends of Lee in Taiwan.

"The Lee Teng-hui chair," said President Frank H.T. Rhodes, "honors an alumnus who has achieved what few other Cornellians have — international distinction as both a scholar and political leader."

After studying in Japan and at Iowa State University, Lee, who had done pioneering research with the Chinese American Joint Commission on Rural Reconstruction, came to Cornell for his Ph.D. studies in agricultural economics. His thesis, "Intersectoral Capital Flows in the Economic Development of Taiwan, 1895-1960," was cited by the American Association of Agricultural Economics as the best doctoral dissertation of 1969.

"Lee Teng-hui's research provided the rationale for investment in agriculture during the early stages of Taiwan's economic expansion and his leadership as president has significantly advanced democratization," Rhodes said, adding:

"President Lee has thus played a central role in the Taiwan model that so many nations are now seeking to emulate. Cornell is proud to honor him."

The professorship will be a joint appointment between the Department of Agricultural, Resource and Managerial Economics and the Department of Economics. The endowment also will support a graduate-student fellowship in one of those departments or in Asian studies.

Mei Tsu-Lin, Cornell's Hu Shih Profes-



President Lee Teng-hui, left, and Cornell President Frank H.T. Rhodes exchange gifts during Rhodes' trip to Taiwan last January.

sor of Chinese Literature and Philosophy, said a special committee would conduct an international search for the first holder of the chair. The committee has been appointed by the deans of the two Cornell colleges involved in the joint appointment — David Call of the College of Agriculture and Life Sciences and Don Randel of the College of Arts and Sciences.

"As with our Hu Shih chair, which was endowed four years ago, the Lee Teng-hui professorship does more than honor a distinguished alumnus," said Vice President for Public Affairs Richard Ramin. "It also

recognizes and celebrates Cornell's century-old China connection, which has produced an active exchange of students and scholars in many fields — especially agriculture."

Ramin added that endowed professorships are a top priority of Cornell's \$1.25 billion capital campaign.

"By endowing such a chair with perpetual funding," he said, "the donors do more than honor President Lee and the chair's incumbent; they also help the university sustain its financial strength and academic excellence."

### Milk *continued from page 1*

mixtures (macaroni and cheese and pizza). These foods contributed 4.8, 4.6 and 4.1 grams of fat per day, respectively.

For saturated fat, cheese was the next most significant source after whole milk, contributing almost 2 grams daily, or 8 percent of the daily total, closely followed by processed meats.

Thompson now is a researcher at the Division of Cancer Prevention and Control at the National Cancer Institute in Bethesda, Md. Her co-author, Barbara A. Dennison, M.D., is with the Department of Pediatrics, College of Physicians and Surgeons, Columbia University. Their analysis was supported by the Human Nutrition Information Service, U.S. Department of Agriculture, and the New York state Department of Health, Bureau of Nutrition.

Using the Cornell National Supercomputer Facility, a resource of the Cornell Theory Center, the researchers analyzed the diets of 547 children, ages 2 to 5, from the U.S. Department of Agriculture's 1985 and 1986 Continuing Surveys of Food Intakes by Individuals. The study was published in the May 1994 issue of the *American Journal of Public Health*.

Cornell experts, however, remind consumers that different recommendations apply to children younger than two years of age. Infants under age 1 should not consume cow's milk, one-year-olds should drink only whole milk, and two-year-olds should start drinking reduced-fat milk. That's the advice of Christina Stark, M.S., R.D., a nutritionist in Cornell's Division of Nutritional Sciences and Cornell Cooperative Extension Service.

Babies less than one year of age should drink either breast milk or iron-fortified formula, Stark recommends. Cow's milk has inadequate iron levels for this age group and a relatively high proportion of protein and minerals per calorie. Metabolizing cow's milk requires more water than breast milk or formula; for some small infants, drinking cow's milk would put them at potential risk for dehydration.

Children between the ages of 1 and 2, on the other hand, should drink only whole milk, not low-fat or skim milk. "This is a



Sharon Bennett/University Photography

Christina Stark, a nutritionist in the Division of Nutritional Sciences and Cornell Cooperative Extension Service, surveys milk with varying amounts of fat.

time of rapid growth, and it's important not to place restrictions on the amount of calories or fat consumed at this age," Stark said.

After age 2, children should drink reduced-fat milk, ideally progressing from 2 percent milk to 1 percent milk and eventu-

ally to skim milk. In total, they should consume at least two, and even three (or four for teens), calcium-rich dairy products per day, including reduced-fat cheese and yogurt. Ice cream, frozen yogurt and cottage cheese, however, have much less calcium per serving, she said.

## Cornell Club has teleconferencing

By Sam Segal

The Cornell Club in Manhattan has acquired new teleconferencing equipment and is inviting faculty and staff to use it for face-to-face meetings and classes involving audiences in both Ithaca and New York City.

Alumni anywhere in the world, if they have compatible equipment, also are welcome to use the club's equipment for the New York City end of meetings or conferences.

The club's Picture-Tel equipment — like that already owned by the Johnson Graduate School of Management and the School of Industrial and Labor Relations — provides a 27-inch video monitor at each end and allows participants to jump into the discussion at will, by talking toward tabletop microphones.

Because the transmission medium is telephone lines rather than satellite, the cost is relatively inexpensive.

A department in Ithaca would pay \$20 an hour for the phone-line connection, plus \$75 to \$125 an hour to the club for use of the equipment and overhead. That does not include room rental.

"We've tested the system with some very successful programs connecting Johnson School students in Ithaca with alumni and faculty down here," says the club's assistant manager, Craig Lasnier. "In talking with the university, we felt it was important to provide the means to enhance long-distance learning opportunities, whether for executives, undergraduates or alumni."

Lasnier says tailored arrangements can be made at additional cost. Catering can be provided, for instance, and, if there is a particularly large group at the club, the video can be projected electronically onto a large screen.

Questions may be directed to Lasnier, at (212) 986-0300.

### Rhodes *continued from page 1*

from 1977 — students and faculty are of top quality, need-blind admission continues, budgets are in balance and the current campaign for \$1.25 billion is about four months ahead of schedule, having raised almost \$1.1 billion by the end of August.

In the years ahead, Rhodes said, Cornell must give high priority to the teaching and advising of undergraduates, who will increasingly be from minority groups, foreign countries and older age brackets.

They will have greater interest in work and family and more need for off-campus learning and alternate teaching methods. Even as the public resists large tuition increases, he added, universities will face limited government support for research and modest growth in both government and private funding.

The two-year-old strategic-planning process, Rhodes said, has armed Cornell to make choices during such constrained times.

He said stronger department chairmanships and careful evaluation of operations against unit missions would help strengthen research; great care in making tenure offers, now that there is no mandatory retirement, would leave more flexibility to move in new academic directions; and using new technologies, in conjunction with new partners and alliances, would help reinvigorate the land-grant mission to apply the benefits of research.

In these and other areas, Rhodes said, the faculty must play a key role in turning strategic-planning guidelines into concrete changes of program and culture.

# Latino Center is alive with academic, social activities

By Sam Segal

Every Friday afternoon, in a lounge in Class of '22 Hall, two dozen undergraduates gather for the discussion section of Ben Olguín's course, Introduction to Latino Literature.

On Tuesday evenings, in the same lounge, a mix of undergraduates and graduate students attend a three-hour independent-study section taught by Héctor Vélez.

The lounge is in the Latino Living Center, which was approved by the Board of Trustees last spring and already is vibrant with intellectual, cultural and social activities.

"The level of activity in less than two months is what surprises me," says Tom Hirschl, an associate professor of rural sociology who is a faculty member-in-residence for Class of '22 Hall. "The Latino Center is probably the most active residential unit on West Campus."

Díamar Martínez, a human ecology junior from West New York, N. J., agrees that the pace is hectic, as students sort out committee assignments, plan and attend events, debate the center's formal name and future course and do their school work.

"Those of us who worked to establish the center last year all have a vision of what it should be," she says, "but at the same time, like all students, we have to do a hundred things in a day. So there's a struggle of focus — how much on academics, how much on personal life and how much on making our center a great place."

While organization and focus still are open questions, there is consensus among Martínez, Hirschl and other involved faculty and students that the center should be strongly rooted in Cornell's academic and intellectual life.

"It was wonderful of Ben Olguín to bring his section here," Martínez says, "to reach out and say, 'the center's here and we're going to use it.'"

Olguín's and Vélez' classes are in fact a kind of affirmation of a commitment made last winter and spring, when a student-faculty committee was working with the administration on the design for such a center. A strong connection to academic programs was a prerequisite for approval.

That commitment is being pursued not only by the residents' Academic Committee but also by the newly formed faculty Steering Committee of the Hispanic American Studies Program (HASP), which has taken a strong and active interest in guiding the center.

The Steering Committee includes Olguín, an assistant professor of English; Vilma Santiago-Irizarry, an assistant professor of anthropology; and Vélez, an associate professor of sociology and acting director of HASP.

Santiago-Irizarry says their approach to the Latino Center reflects their approach to HASP itself:

"We want to forge a clearer identity that reflects a responsiveness to student interests," she says. "We want to build cohesiveness and academic rigor; quality is absolutely fundamental. The last thing we want to hear is that people say our courses are easy A's."

The academic theme means more than intramural classes. Last month, for instance, Hirschl and a group of students attended the Bailey Hall multiculturalism debate between



In photo above Blenda Pinto, director, talks with students during a reception held at the Latino Living Center Oct. 16 for students and faculty involved with the Hispanic American Studies Program and the center. Below, HASP steering committee members meet at Sage Hall. From left are Vilma Santiago-Irizarry, Héctor Vélez and Ben Olguín.



Peter Morenus/University Photography

government Professor Martin Bernal and author Dinesh D'Souza. Afterward, a small group returned to Hirschl's apartment to continue the debate.

There also have been such events as informal dinners with faculty, a conference on western hemisphere trade, a talk and dinner with a Mexican muralist from California, and an AIDS-awareness program that included the showing of the movie "Philadelphia." As part of activities marking Mexican independence, Mexican Senator-elect Heberto Castillo Martínez was to speak at the center but was unable to get a visa to enter the United States.

The AIDS program was held at adjacent Class of '28 Hall; and, as Martínez notes, all of the center's activities are advertised and open to everyone.

This reflects another point of agreement between the administration and the center's advocates, that its orientation would be "in-

clusive rather than exclusive," devoted to Latino culture yet actively seeking connections and common activities with the wider community.

"We're excited about being a place where people can learn a vast amount," Martínez says. "Sharing is important, both with the wider campus and among ourselves and there's a wide range of difference among us."

The first contingent of residents, she notes, includes several Asian-Americans, Texas Chicanos and non-Hispanic whites, as well as Latinos with roots in Cuba and Puerto Rico.

"It's not a Latino ghetto," Vélez says. Nor does he think the center will ever attract a huge number of Latino students.

"Many are on a professional track and don't have the interest or time; they won't join the Latino fraternity either. What we want is options, and the center is an important one."

For some Latino students, he says, it fills a transitional need, providing social and emotional comfort after the break from life at home. "And these areas of life can't be completely separated from the academic. If you're not comfortable, it will be harder to do well in class."

One further option under consideration is establishing associate memberships for students who don't choose to live in the center but want to play an active role.

While there has been concern expressed about campus fragmentation into racial and ethnic groups, the statistics do not suggest any mass migration to Cornell's "ethnic houses" — Ujamaa, Akwe:kon and the Latino Center. Their total number of residents is about 1.5 percent of the undergraduate student body. Put another way, more than 99.8 out of every 1,000 Cornell undergraduates do not live in these houses.

The center's full-time director, Blenda Pinto, is certain that the number of residents this year — 34 — will increase substantially next year. By the time the trustees approved the center last March 18, many students already had made room arrangements for this year.

Pinto, who works closely with the HASP steering committee and with Campus Life, says the pace and variety of activities already is straining the limited space.

Next year, the Class of '22 space now occupied by the West Campus Fitness Center will be restored to lounge space, enabling a further expansion of activities for the center.

"It will help us integrate day-to-day living with academic life," Olguín says. "The weight room will be perfect for events like poetry readings, and the center will become even more a part of the total educational experience."

## Conference focuses on multicultural issues, medieval Spain

By Dennis Shin

With a focus on multicultural issues during the Middle Ages, scholars will examine "Languages of Power in Islamic Spain" in a series of lectures and discussions sponsored by various Cornell academic departments Nov. 4 and 5 at the A.D. White House.

Aimed at bringing together a diverse group of academics who specialize in the field of medieval Spain, the conference will feature speakers on history, architec-

ture, literature and related fields. In addition to visiting scholars and representatives of other universities, two Cornell faculty members, Ross Brann of the Department of Near Eastern Studies and Ciriaco Arroyo of the Department of Romance Studies, are scheduled to participate.

According to Brann, the topics to be discussed find a common theme in that each deals with a communicative text using some form of language.

"Whether in the form of buildings, art or literature, language is often used as a

medium for expressing power relations between groups or among groups in a society," said Brann, who teaches a course on Muslims, Christians and Jews in Islamic Spain.

The conference will concentrate on this struggle to display power, which engaged three religious communities in conflict. Brann says that although Muslims, Christians and Jews functioned as one society, there existed distinct religious and social divisions. Lectures are expected to reveal such elements of a multiethnic

society and also strike a chord with similar American social conditions today.

"This makes medieval Spain, especially the part of it that was Islamic, an interesting focus for discussing how groups interact and take issue with one another culturally against the background of political and religious conflict," Brann said.

Brann said the conference should attract anyone interested in the dynamic of how subcultures use discourse to defend themselves and how a majority culture uses discourse to promote its interests.

## CORNELL, SCIENTISTS CELEBRATE

## Scientists must communicate better, Sagan colleagues agree

By William Steele and Larry Bernard

If Carl Sagan's dreams of solar system exploration and a safe, livable planet are to come true, scientists must communicate more effectively.

In the third session of a symposium celebrating Sagan's 60th birthday, some of his friends and colleagues offered thoughts on why 94 percent of Americans are "scientifically illiterate," and what might be done about it.

Martha Haynes, professor of astronomy and the Astronomy Department's director of undergraduate studies, set the stage for the series of speakers who appeared Friday morning in Statler Auditorium by quoting Sagan: "There is no aspect of modern life that does not depend on science... but we have changed things so that no one understands it. This is a recipe for disaster."

Ann Druyan, coauthor with Sagan and his wife, pointed out that the first scientists in ancient Greece didn't think of themselves as separate from the people. It was only later, she said, that science became the property of an elite who set themselves apart in a special place, the *academum*.

But ordinary people need science as a "baloney detection kit," she said. "We lie to each other, and to ourselves. We need a machine that whispers in our ears, 'this was true before, but it isn't now,'" she said.

"If we want to have a democracy," she added, "we have to keep the dream that everyone should know something about nature and how it works. But there are people who think maybe we should have a class of people who just do the dirty work and don't need to understand these things."

Druyan concluded proudly, "Carl is fighting that idea more than anyone I know."



Druyan



Randi



Press

### Science Education

One of the obstacles to science education is the prevalence of pseudoscience and crackpot science, according to magician James Randi, who has made a career of debunking the claims of psychics, dowers and others who claim to have paranormal powers. Randi and Sagan are among the original founders of the Committee for Scientific Investigation of Claims of the Paranormal (CSICOP).

Among the dubious ideas that refuse to die even in the face of contrary evidence, Randi cited creation science, homeopathy, psychic archaeology, perpetual motion, faith healing and recovered memories of childhood trauma.

"Many people find comfort in 'magical thinking,' he said. "It offers easy answers—no thinking required, it's there," he explained. "One hundred percent certainty is what people are looking for. But the world isn't like that."

Philip Morrison, a former professor of physics at Cornell and now M.I.T. professor emeritus, reiterated the problem of scientific illiteracy, offering examples of some fundamental ideas that are widely misunderstood and seldom taught: that air is a "fuel" and is consumed along with gasoline in a car engine, or that plants build their

mass from carbon dioxide and water, not from something in the Earth.

Since scientific "facts" are always changing, he said, science education should focus on teaching "how we know what we know." That means having students do science themselves. As an analogy, he said, "Books don't always tell the truth. The solution is to have the students make a book."

### Science in Pictures

Another way to convey science is with pictures, according to Jon Lomberg, an artist who has illustrated many of Sagan's books and magazine articles. Lomberg paid special homage to Chesley Bonestell, whose realistic paintings of scenes on other planets appeared on magazine covers and posters in the 1950s and inspired many young people to study astronomy, and many others to go into scientific illustration.

"People are sometimes surprised that an artist is inspired by science," Lomberg said, "but if the sunset can inspire an artist, why not the sun?"

In turn, he said, pictures can convey scientific ideas as well as inspiration to students. They are also good value for the money, he added. "The way you teach grades four to nine varies," he said, "but they can all use the same images."

However, he noted that scientific illustration requires research as well as inspiration, for example to put stars in the right place or show Saturn's rings in the proper order.

He lamented that there is no real career path for scientific illustrators, except in biology, and that few scientists understand the importance of illustration. "There ought to be a semester in graduate school just on how to prepare the slides for a lecture," he declared.

### Teaching Science

William Aldridge, executive director of the National Science Teachers Association, complained that most schools have "Third World technology for teaching science." He echoed Morrison: "Textbooks show what we know, but not how we know it, and kids memorize that stuff."

He also agreed with Druyan that the educational system singles out an elite to be educated in science. "Only 14 percent of the population has studied science, and we are the only industrialized nation where that's true," he said.

He lauded Sagan's work in popularizing

**'Religion lives in an age of science. There was a time science lived in a world of religion, and we didn't do so well. We hope, dare I say, we pray, you do better.'**

— Joan Campbell

science as having value for teachers as well as the general public. "Science teachers need the inspiration of extraordinary people who know how to communicate science," he said.

Some of the most positive words of the day came from Walter Anderson, editor of *Parade* magazine, for which Sagan has written 48 articles over the past 11 years. Noting that *Parade* has the largest circulation of any magazine in the world, Anderson cited Sagan as one of "a handful of writers who have brought scientific comprehension to so many people."

When he was a teen-ager, Anderson recalled, the only publications he could find that informed him about science were *Popular Science* and *Popular Mechanics*. Today, he said, science news is widely available in



Four speakers from the symposium honoring Carl Sagan, along with Sagan, participated in a panel discussion on "Science and the Public Service." They were, from left, Kip Thorne of the California Institute of Technology, Sagan, Georgi Arbatov of the Russian Academy of Sciences and a former advisor to the

newspapers and general interest magazines as well as specialized science magazines.

"This hasn't happened because editors decided it was good for you," he announced. "It is because there is urgent public demand for and interest in science news."

Still, he said, the public needs to be educated about how to interpret that news. "Science literacy means not just learning to read about science but learning to understand it," he said.

This means that science writing must be "informative and enlightening, but also interesting and stimulating," he said, and also that scientists must take responsibility for ensuring that their work is reported accurately. "I'm amazed at how scientists lose their discipline when it comes to communication," he said.

In discussing the session later Sagan himself echoed that thought. "I think learning to communicate should be part of the training of scientists," he said.

### Scientists and Politicians

The relationship of science and power was the topic for Richard Garwin, a scientist at IBM. Garwin criticized the nation's policy as it related to science and technology. For instance, President Reagan's Strategic Defense Initiative, or Star Wars, was an example of misused technology by those in political power.

"If I accost a person on the street with a gun and demand \$100 or I will kill you, that's armed robbery and I go to jail," Garwin said. "If I accost a person on the street and demand \$100 and say my brother will kill you, that's extortion, and I go to jail. But if I say give me \$300 billion or the Russians will kill you, I'm declared a great patriot and I am perhaps elected to high office."

Garwin pointed out problems in the interaction between science and power, including that Congress is "90 percent posture and 10 percent performance," but that is one of the things you have to put up with in a democracy.

### End of the Cold War

Following him, Georgi Arbatov of the Russian Academy of Sciences spoke on the nuclear arms race. He said that "no one was ready" for the end of the Cold War, no policies were in place to deal with it and no strategies devised. A new strategy of international cooperation is needed, he said.

### Nuclear Winter

Richard Turco of the University of California at Los Angeles, also a co-author with Sagan on nuclear winter, described that paper and illustrated the effects of nuclear winter with a photo taken at Kuwait—midday, but the sky was black due to the smoke of burning oil



Yervant Terzian, left, chairman of the department at Friday's banquet in

"We deprived you of an enemy," Arbatov said. "We deprived ourselves of an enemy. Never had the powers spent as much on military power as during the nuclear era, and we were not ready. Because we don't have the United States as an enemy and you don't have us, our major enemy is the proliferation of nuclear weapons. All other nations will ask, why shouldn't we? This is the most important thing that has to be taken into account now."

He added, "Not a single country has a viable, thought-through long-term policy." Arbatov also commented that neither the United States nor Russia won the cold war. "If anyone won, it's the Japanese and West Germans," he said.

# A T E S A G A N ' S 6 0 T H B I R T H D A Y



Sharon Bennett/University Photography

icipated Friday in a news conference for media organized by the Cornell News Service. Also present were Edward Stone, also of Caltech and director of the Jet Propulsion Laboratory, and Soviet presidents, and Paul Horowitz of Harvard University.



Astronomy Department, presents a bust of Aphrodite to Carl Sagan as a gift from Sagan's honor.

fields. "No one had looked at the global, environmental change from smoke. It can turn day into night," Turco said.

Such a blanket can cool the Earth's surface and have significant effects on food production. "Severe climactic disturbances could result," he said, "just as Martian global dust storms cooled that surface."

James Hansen, a NASA environmental scientist and climatologist, said that 1990 was "the warmest year of the century" in terms of average temperature globally. Still, "we will see the record 1990 global temperature exceeded more than once" before the century is out. Is that evidence of global warming? "By the end of the 1990s, the decade should be average. I'm confident we will have a record by the end of the decade."

## Science and Religion

The Rev. Joan Campbell of the National Council of Churches spoke on science and religion. She called on scientists to share goals with the world's religions.

"There is a possibility of sharing our engagement of common life," she said.

After recounting the efforts to get the ecumenical religions to issue a global letter to save the environment, Campbell said that religion and science can find partnership. "We don't have to agree on how the natural world was made in order to save it. Good science and good religion are making book."

She concluded, "I believe the ecumenical community can find a shared sense of life with the community of scientists."

## Science and Society

The symposium's final speaker was Frank Press, former head of the National Academy of Sciences and science adviser to President Carter, who spoke on science and the social conscience.

More scientists should follow in Sagan's tradition, Press said, of becoming involved in social issues if their expertise lends itself to the debate. "Too many scientists . . . care

Continued on page 8

## Preserve, cherish planet, Sagan tells audience of 2,000 at Bailey

By Larry Bernard

Every culture throughout civilization has thought itself the center of the universe — a "geocentric conceit" that wrongly gives humans the idea that the universe was created for them, Carl Sagan said last week.

"The stars rising and setting are a great clock and calendar in the sky. Our ancestors took comfort in that. The stars were put there for our benefit, they thought," Sagan said. "But the idea that the universe was made for us, just because we are here, to me seems to resonate with the same psychic wellsprings that our nation is the center of the universe, that our gender, our ethnic group, our melanin content or clothing style is important or central and that alternative ways of being human are less important than we are. We also are vulnerable to this siren song."

Sagan, the David Duncan Professor of Astronomy and Space Sciences, made his remarks at a public lecture Thursday night, "The Age of Exploration." His talk, to 2,000 people who filled Bailey Hall, was part of the two-day symposium in honor of his 60th birthday (Nov. 9) organized by the Astronomy Department. President Emeritus Dale Corson introduced him.

Sagan gradually and philosophically challenged each notion of why humans believe they in particular and Earth in general must be important. The notion that the planet is at the center of the universe clearly is misguided, he said.

"No, we're not at the center, where it looks important or at least, well-lit," Sagan said. "We are in an obscure corner 35 million light years from the center of the galaxy, the galactic boonies." That perhaps the galaxy is at the center of the universe does not hold as well, he said. "There is no center of the universe in 3D space. There may be 100 billion galaxies, and all of them appear to the observer to be running away from you."

He then challenged the idea that if there is nothing special about us in space, perhaps there is something special in time. But, he said, 99.98 percent of the life of the universe existed before humans arrived.

## Asteroid for wife is birthday gift

By Larry Bernard

Among the birthday gifts bestowed at the birthday festivities last week for Carl Sagan was an asteroid — not for Sagan, but for his wife and coauthor, Ann Druyan.

"Carl already has an asteroid named for him," said Louis Friedman, executive director of the Planetary Society, in making the presentation at a Friday evening banquet in Sagan's honor. The society's New Millennium Committee cosponsored the symposium with the Astronomy Department and *Parade* magazine. "Carl has chosen as our gift to him, the naming of Asteroid Druyan."

The near-Earth asteroid, number 4970, is in close orbit with Sagan's number 2709, which was named for him several years ago. Both have "good, stable orbits" in the inner asteroid belt, and are about the size of Ithaca, the same size as the object that is thought to have crashed into Earth 65 million years ago, wiping out the dinosaurs.

Also presented was a gift from the Astronomy Department, a bust of Aphrodite, as a memento of Sagan's interest in the ancient Greeks. And from modern Greece, scientist Nicholas Spyrou brought for Sagan . . . a bust of Aphrodite. Now Sagan has a matching set.

The Astronomy Department graduate students presented a gift, given by Tyler Nordgren — an editorial cartoon, which Nordgren pens when he is not studying binary galaxies with Astronomy Chairman Yervant Terzian.

Calling them the "great demotions," Sagan said that the idea that humans are particular to a creator of the universe is off-base. Humans and chimpanzees, for example, share 99.6 percent of their active genes, and chimps make and use tools as humans do. "It's very clear that there is nothing in us that is qualitatively different than our nearest chimpanzee relatives," Sagan said.

As for extraterrestrial intelligence, he said, some people say that the fact that no signal has been found is evidence that no such civilization exists. "We haven't found life, much less intelligence. But in our ignorance, geocentrists find hope. They confuse absence of evidence with evidence of absence," he said.

Displaying photos of the planets taken by

**'Our posturings, our imagined self-importance, the delusion that we have some privileged position in the universe seem to me challenged by this point of pale light.'**

— Carl Sagan

Voyager 1 as it left the solar system, looking back for a final picture, Sagan pointed out the small dot that was Earth, alone in the void of space. This "pale, blue dot," which Sagan has titled his next book due out this month, "is the only home we've ever known," and humans should "preserve and cherish the pale, blue dot."

After his talk, Sagan gave an example of how humans can merit the self-importance many people already believe exists.

"Those who think they're important, let them go do something important," he said. "You want self-esteem? How about let's make a planet where no one is starving, a planet where no ethnic group has it over another, a world where everyone has equal access to power, a world where, and this is my own idiosyncrasy, where we go to other worlds."

Cornell undergraduates were represented by Baquera Haidri, a freshman engineering student who said she was turned on to science as a young girl by Sagan's books. She read a poem to Sagan and presented a gift as well.

Terzian, the James A. Weeks Professor of Physical Sciences and chairman of the Astronomy Department, read letters from Sagan's colleagues around the world, and then one with birthday wishes from Vice President Al Gore.

In another surprise, Terzian read a letter written to him by Hamdou Seyni, 21, then a student in Africa, who said he was excited by *Cosmos* and could he have advice on how to set up an astronomy club. Terzian brought the student from Africa to the banquet, where Seyni gave Sagan gifts from his country. "How could I know that innocent letter would lead to this?" he asked.

Also toasting Sagan were representatives from the Russian government, NASA, the National Science Foundation and Walter Sullivan, science writer emeritus of *The New York Times*. President Frank H.T. Rhodes cited Sagan as "the embodiment of everything that is best about Cornell faculty — scholarship, teaching and service. Carl's performance in each has been stellar."

Said Sagan, when the testaments were finished: "I am extremely touched. These two days will be with me forever. I will try to be worthy of what you've given me these last two days."

## CELEBRATING SAGAN'S 60TH

## Sagan continued from page 1

Io and Europa, moons of Jupiter, made interesting studies. "Europa has an icy crust. It has the smoothest surface in the solar system. There are no mountains, no impact craters, suggesting an ocean of liquid water under the surface," he said.

He also said that cosmic collisions, such as that of Comet Shoemaker-Levy 9 and Jupiter this summer, "are important to the evolutionary processes of these bodies," and that "they may have to do with the origins of life."



Sagdeev

## Russia in Space

Roald Sagdeev, former head of Russia's equivalent to NASA, described his country's planetary program, which, he said, "is not yet born." In 1988, Sagan went to Russia to discuss the possibility of a joint mission to Mars. "In fact, we had the technology," Sagdeev said. But Gorbachev failed to persuade President Reagan.

As for the future, a possibility remains for a robotic mission to Mars in 1998. The Russians also are looking at an unmanned mission to Venus, a lunar landing, a return of samples from Phobos, and, perhaps, reviving the joint U.S.-Russian manned mission to Mars, Sagdeev said.

## A Return to Mars?

Bruce Murray, former director of the Jet Propulsion Lab at the California Institute of Technology and a founding member with Sagan of the Planetary Society, described the Mars program and what we have learned since the first Mariner probe in 1965. Mariner showed a lunar-like surface that was up to 4 billion years old. "This was a fossil surface, with no erosion. The idea of life on Mars plummeted," Murray said.

But there were surprises. "There was an enormous volcano, Olympus mons. It's so big it would take care of the whole Eastern seaboard," Murray said. Also, the polar regions showed evidence of global atmospheric changes and climatic fluctuations. "But the shocker were these huge cuts in the surface, caused by catastrophic flooding," he said.

"Clearly, Mars had a powerful aqueous history. Mars probably is lifeless now. But there is evidence of ancient water... It had an active history, it had time for life to form. The argument is hard to refute. The scientific focus now is to search for the residue of this ancient life. How far do we have to go?" Murray said.

## Life in the Cosmos

In discussing environments of Earth and other worlds, O. B. Toon of NASA's Ames Research Center and a collaborator of Sagan's, explained the early-sun paradox, one of the scientific problems Sagan is trying to understand in the laboratory:

When the sun was relatively young 2 billion years ago and not as hot as it is now, why wasn't the Earth a frozen block of ice, as other planets are now further out in the



Peter Morenus/University Photography

Sagan last week with his wife and co-author, Ann Druyan.

solar system? Instead, Earth's geological and fossil record shows the planet teemed with oceans and life already had begun when the sun should not have been warm enough to support it. On the other hand, when the sun got really hot, warmer than it is now, why didn't Earth overheat, with an oven-like surface temperature like that of Venus, an environment so hostile even spacecraft can survive only a few hours on the

## Celestial Collisions

Christopher Chyba, a former Ph.D. student of Sagan's now with the National Security Council, discussed possible origins of life in a cosmic context. Collisions of bodies in the solar system, he said, are integral to the formation of life and may account for life on Earth.

"A lot of cosmic bodies are rich in organic materials," Chyba said. "Halley's

## ET, Phone Earth

Frank Drake, of the University of California at Santa Cruz and director of the SETI Institute, described the past efforts of the search for extraterrestrial intelligence. Sagan and Soviet scientist I. Shlovskii wrote a book describing possible ways to search for ET (*Intelligent Life in the Universe*, 1966). And now, Drake said, "there is a great deal of evidence that planets like our own are abundant. It suggests modes of life are abundant in the Milky Way."

Today, using radio telescopes such as the one at the Cornell-operated Arecibo Observatory, "SETI is capable of detecting signals anywhere in the universe," Drake said.

Paul Horowitz of Harvard University described current search programs. SETI programs can monitor 60 million channels. His own program can monitor 68,000 channels at once.

"Interstellar telegrams are cheap," Horowitz explained. "It costs only about \$1 per word out to 1,000 light years." He added that there are plenty of likely candidates, with 1 million stars similar to the sun within that distance.

Later at a news conference, Horowitz elaborated on signals his program has found — five signals that cannot be explained. "These are definitely radio transmissions of some sort and they are not interference from Earth. They have all the characteristics of what we're looking for. We've gone back to look for them and in no case have we found a repeat; in fact, it's almost as if the sky is even quieter," he said.

## Back to the Future

Finally on Thursday, Kip Thorne of the California Institute of Technology described the possibility of time travel through black holes or "worm holes." A worm hole is a "short circuit" in space that connects distant points. Someone traveling through it would reach a remote location about the same instant that he or she left.

Such a thought experiment was instigated by Sagan, not through his research, but through his fiction, said Thorne, author of the recently published book *Black Holes and Time Warps*. Sagan's book *Contact* featured a heroine who travels through a black hole and, though she is gone all day, returns to her starting point one second after she left. Now, Sagan is working on the screenplay for a Hollywood movie and Thorne is consulting.



**'Yes, it's likely there are other civilizations out there and technologically, we've got everything we need. There have been 50 searches to date. . . . There aren't any civilizations in the galaxy beaming right at us, and probably no super-intelligent civilizations.'**

— Paul Horowitz

surface? Could Mars or Venus have harbored life, or harbor life in the future?

"Venus receives twice the solar energy and Mars receives half the solar energy, than Earth," said Toon, who was one of the authors with Sagan on the paper that described nuclear winter. "Venus has a runaway greenhouse, Mars is cold. Venus lacks water, Mars lacks geologic activity. Mars is twice the size of the moon and half the size of Earth. It is the distance from the sun and planetary size that determine habitability."

The future aim is to look for planets in this "habitable zone" around other stars, where perhaps there may exist "gaseous balloons of life" or other hospitable environments, he said.

Press said that in this country, "about 50 percent of all legislation being considered in Congress has a science or technology aspect," from population growth and the ozone hole to carbon emissions, fisheries regulation and the endangered species act. And at the United Nations conference on world population held this year in Cairo, the world's scientists said that science could not prevent the hunger and disease that would come from uncontrolled population growth.

Now, in the era after the Cold War, the nation should "strive to be strong. Recognize the intrinsic rewards of research."

comet is 25 percent organic. This material is much more abundant in the outer solar system, where it's sent on a sort of conveyor belt to bring elements in. A heavy bombardment of asteroids early in Earth's history may have served to bring elements to earth."

David Morrison, of NASA's Ames Research Center, said that short-term efforts would be on searching for fossil life on Mars, a likely candidate for life since there was time for at least microbial forms to evolve during the planet's oceanic period. "Mars is sterile today, but it once thrived with water. Life is probably bacterial, microbial. They dominate life on Earth. We can look for remnants of thermal springs. It will probably be difficult to find evidence of life on Mars, but it's so fundamental we have to look."

Morrison also discussed the potential of an impact on Earth today. "There is a statistical risk that impacts are substantially greater than 1 in 1 million. Should we invest now in defense? I and others think no. But we should detect them. Right now, the entire staff devoted to looking for asteroids that could impact Earth is 12 to 14 people, smaller than the staff at an average McDonald's."

Morrison continued, "Impacts are a natural part of the environment on Earth. In the long-term, protection is essential. Sometime, if a civilization is to survive, we have to deal with this problem. The dinosaurs didn't — and look what happened to them."

## Scientists continued from page 7

little about social outreach," Press said. "Science matters deeply in the economic and military affairs of a nation."

He said that scientists who helped make the atomic bomb, and then witnessed its potential for destruction, became opponents of its use. "They realized that science had indeed known evil," Press said. "The separation of science from the national goals was a fiction."

But there were difficulties faced "by those in the vanguard of the social conscience," he said, citing the physicist Sidney Drell who opposed the bomb and was shouted off the lectern in Corsica.



# Second annual Fall Arts Festival to be held Oct. 20 to 30

By Lisa Bennett

The arts at Cornell will be showcased during a second annual Fall Arts Festival to be held Thursday, Oct. 20, to Sunday, Oct. 30.

The 10-day festival, which is organized by the Cornell Council for the Arts, offers concerts, theater performances, film showings, creative writing readings, dance, art and design exhibitions and lectures on the arts.

Highlights include:

• **Apparel Design:** Lecture and exhibition by leading illustrator of fashion Steven Stipelman, who teaches at the Fashion Institute of Technology and Parsons School of Design, at 1 p.m. on Sunday, Oct. 30, in E405 Martha Van Rensselaer.

• **Architecture:** A lecture series on "Pragmatic Visions: Modernism and the American City," will be presented by Gwendolyn Wright, associate professor of American architecture and urban history at the Graduate School of Architecture, Planning and Preservation at Columbia University, at 5:30 p.m. on Monday, Oct. 24, through Friday, Oct. 28, in 200 Baker Lab.

• **Dance:** The Yamabushi Kagura Troupe of Mt. Hayachine, Japan, will perform ritual folk dances at 8 p.m. on Monday, Oct. 24, in the Statler Auditorium. Kagura is a way of telling stories associated with Shintoism and Buddhism by means of symbolic gestures and movement, instrumental music and song. For ticket information, call 255-6222.

The Saga Dance Company also will perform *The Karelia Suite*, with five women dancers presenting vignettes from

## Discover the Arts Cornell University Fall Arts Festival '94

the past that continue to inhabit their minds in the present, at 3:30 p.m. on Sunday, Oct. 30, at the Herbert F. Johnson Museum of Art.

• **Design:** Works exploring concepts of place, space and void will be constructed by students of professors Paula Horrigan, in Landscape Architecture, and Jan Jennings, in Design and Environmental Analysis, on Saturday, Oct. 29, and Sunday, Oct. 30. It will be completed and on display by 4 p.m. Oct. 30 on the Agriculture Quad.

• **Film:** A rare screening of D.W. Griffith's masterpiece, "Intolerance," one of the most influential silent films ever created, with live piano accompaniment by Philip Carli at 7 p.m. on Saturday, Oct. 22, in Willard Straight Hall. This showing will be of a 35mm print, reconstructed from the original by the Museum of Modern Art. Tickets, priced at \$4.50 for the general public and \$4 for students, may be purchased at the door.

• **Music:** Numerous concerts will be held, including: Roy Howat, a Scottish pianist, violinist and conductor, who will perform works by Debussy and other French composers at 8:15 p.m. on Thursday, Oct. 20, in Barnes Hall; the Cornell Chamber Winds, Glee Club and Chorus, which will perform Stravinsky's *Symphony of Psalms* at 8:15 p.m. on Saturday, Oct. 22, in Bailey Hall; and Cornell Contemporary Chamber Players with guest composer Bernard Rands and soprano Judith Kellock, who will perform Rands' *Canti Lunatici*, among other works, at 8:15 p.m. on Saturday, Oct. 29, in Barnes Hall.

• **Readings:** New radio plays will be read by playwright and visiting professor Carey Harrison and students at 4:30 p.m. on Friday, Oct. 21, in Kaufmann Auditorium of Goldwin Smith Hall.

• **Theatre:** *The Glass Menagerie*, written by Tennessee Williams and directed by Bruce Levitt, professor and chair of the Department of Theatre Arts, will be performed at 8 p.m. on Oct. 20 to 23, and 26 to 29, and at 2 p.m. on Oct. 23, 29 and 30, in the Class of '56 Flexible Theatre at the Center for Theatre Arts. For ticket information, call 254-ARTS.

• **Visual Arts:** Four special exhibits will be on display at the Johnson Museum: "The Mexican Muralists and Prints," "Cultural Signs in Contemporary Native American Art," "William H. Johnson: Homecoming" and "The People's Choice: From Imperial City to College Town," paintings created by Russian emigre artists Vitaly Komar and Alexander Melamid from a survey of the artistic tastes of 1,001 Americans. For more information, call 255-6464.

For more information about any of these events, please contact the Cornell Council for the Arts at 255-7161.

## Cornell's 1994 Fall Arts Festival • October 20 - 30

### Architecture

"Pragmatic Visions: Modernism and the American City" with Gwendolyn Wright, Columbia University  
Lecture • 200 Baker Lab • 24-28 • 5:30 p.m.

### Design

Place, Space, Void  
Landscape Architecture and Design & Environmental Analysis • Constructed: 29-30 • Completed: 30 • 4 p.m. • Agriculture Quad

### Apparel Design

"Fashion Illustration: A Creative Process" with Steven Stipelman, FIT and Parsons School of Design  
Lecture/Reception • Martha Van Rensselaer • 30 • 1 p.m.  
Exhibition • Martha Van Rensselaer • 31-11/10

### Creative Writing

New Radio Plays by playwright Carey Harrison  
Reading • Kaufmann Auditorium, Goldwin Smith Hall • 21 • 4:30 p.m.

### Dance

Kagura by the Yamabushi Kagura Troupe, Japan  
Performance • Statler Auditorium • 24 • 8 p.m.

Karelia Suite by the Saga Dance Company  
Performance • H.F. Johnson Museum of Art • 30 • 3:30 p.m.

### Film

"Intolerance" with Philip Carli, piano  
Film Screening • Willard Straight Theatre • 22 • 7 p.m.

"The Eye of Vichy"  
Film Screening • WSH Theatre • 20 • 4:30 p.m.

"Francois Truffaut: Stolen Portraits"  
Film Screening • WSH Theatre • 21 • 7:30 p.m. • 23, 4:30 p.m. • 24, 9:20 p.m.

"Le Grand Bonheur"  
Film Screening • Uris • 23 • 7:30 p.m.

"A Tale of Winter"  
Film Screening • WSH Theatre • 28, 29 • 4:30 p.m.

Set in Motion: Video Artists on Art  
Film Screening • CTA Film Forum • 25 • 7:30 p.m.

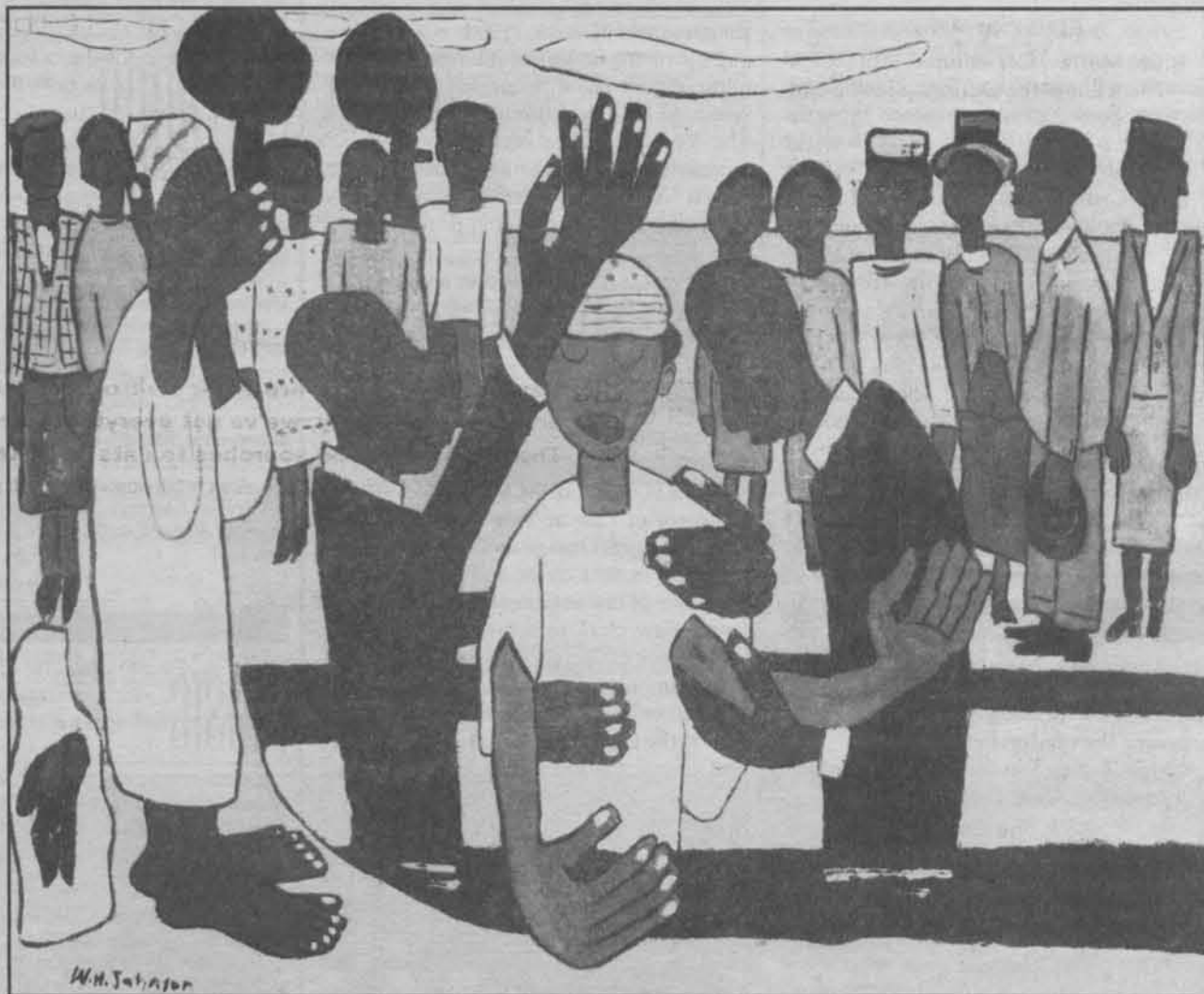
### Music

Roy Howat, Piano  
Concert • Barnes Hall • 20 • 8:15 p.m.

Baroque Masterpieces: Monosoff-Young-Wolf Trio  
Concert • Barnes Hall • 21 • 8:15 p.m.

First Piano, Then Jazz with Robert Cowie  
Concert • Barnes Hall • 23 • 4 p.m.

Tom Beghin, Fortepiano  
Concert • Barnes Hall • 25 • 8:15 p.m.



National Museum of American Art, Smithsonian Institution, Gift of the Harmon Foundation

"I Baptize Thee," by William H. Johnson, is on view at the Johnson Museum through Oct. 30.

Rands' *Canti Lunatici* with Cornell Contemporary Chamber Players and soprano Judith Kellock  
Concert • Barnes Hall • 29 • 8:15 p.m.

Stravinsky's *Symphony of Psalms* with Cornell Chamber Winds, Glee Club and Chorus  
Concert • Bailey Hall • 22 • 8:15 p.m.

### Theatre

"The Glass Menagerie" by Tennessee Williams  
Performance • Center for Theatre Arts • 20-30 • 8 p.m.

### Visual Arts

"The Mexican Muralists and Prints From the Williams Collection"  
Exhibition • Johnson Museum of Art • through 10/30

"Cultural Signs in Contemporary Native American Art"  
Exhibition • Johnson Museum of Art • through 10/30

"William H. Johnson: Homecoming"  
Exhibition • Johnson Museum of Art • through 10/30

"The People's Choice: From Imperial City to College Town"  
Exhibition • Johnson Museum of Art • 10/21 - 1/8/95

"Celebrating the Art of the Americas"  
Public Program Day • Johnson Museum of Art • 29 • 11 a.m. - 4 p.m.

"Spring '94 Work by Students of the Rome Program"  
Exhibition • Hartell Gallery, Sibley Dome • through 21

"Work by 4th Year Design Students"  
Exhibition • Hartell Gallery, Sibley Dome • 24-28

"Photos and Mixed Media" by Athena Robles '95  
Exhibition • Olive Tjaden Gallery, Tjaden Hall • 22-29

"Resuscitating Bouguereau" with Robert Rosenblum  
Lecture • Schwartz Auditorium, Rockefeller Hall • 22 • 2 p.m.

## Noted architecture educator to present lecture series Oct 24-28

Gwendolyn Wright, a professor in Columbia University's Graduate School of Architecture, Planning and Preservation, will present five lectures on "Pragmatic Visions: Modernism and the American City" during the Preston H. Thomas Lecture Series, which begins Oct. 24. All lectures, which are free and open to the public, will be held at 5:30 p.m. in Room 200 Baker Lab.

Lectures and dates are:

- "Celebrating Contingencies," Oct. 24
- "Frank Lloyd Wright: Nature's Geometry," Oct. 25
- "Kahn and Stonorov: Methodical Communities," Oct. 26
- "Wurster and Demars: Experiments with the Ordinary," Oct. 27
- "Revisions and Realities Today," Oct. 28

Wright headed Columbia University's Buell Center for the Study of American Architecture from 1988-92, where she sought to strengthen scholarship in the field of

American architecture. She is the author of *Moralism and the Model Home: Domestic Architecture and Cultural Conflict in Chicago, 1873-1913* (University of Chicago, 1980), *Building the Dream: A Social History of Housing in America* (Pantheon, 1981) and *The Politics of Design in French Colonial Urbanism* (University of Chicago, 1991).

Wright, who has been the recipient of numerous awards and fellowships, received master's and doctoral degrees from the University of California at Berkeley.

Since its inception in 1976, the Preston H. Thomas Memorial Lecture Series in Architecture has brought to campus distinguished members of the architecture community. The series was established by Mr. and Mrs. Leonard B. Thomas of Auburn, N.Y., and is named for their son, who was killed in an auto accident in 1975. At the time of his death, Preston Thomas was a student at Cornell majoring in architecture.

## International banking expert to present Einaudi Lecture Oct. 25

Giorgio P. Szego, editor of the *Journal of Banking and Finance* and an internationally known authority on banking, finance and monetary economics, will deliver the Einaudi Lecture Oct. 25 at 4:30 p.m. at the A.D. White House. The lecture is free and open to the public.

Szego, holder of the Einaudi Chair in European and International Studies at Cornell, will speak on "The Relationship Between Banking and Commerce: From the Warnings of Luigi Einaudi in 1918 to the Current Debate."

Szego, whose campus visit is sponsored by the Institute for European Studies, is

teaching a course this semester on the economics of financial market regulation.

The Italian-born Szego has taught at numerous universities in the United States, including Purdue, Northwestern, Loyola and the University of Pennsylvania, and in Italy, at the universities of Milan, Cagliari, Venice, Bergamo and Rome.

A former president of the European Finance Association, Szego has been a consultant to the International Monetary Fund, The World Bank, and is currently the Italian representative on the Organization for Economic Co-operation and Development on Financial Markets.

## Legal scholars to debate torts

Noted legal scholars from across the country will participate in a colloquium examining issues surrounding class actions and mass torts Oct. 23 and 24 at Cornell Law School.

"This conference is extremely timely and important to the legal community, especially as we follow the progress of numerous class actions — most significantly those dealing with breast implants and asbestos," said Roger C. Cramton, the Robert S. Stevens Professor of Law at Cornell Law School, who is helping to organize the conference.

"Mass Torts: Serving Up Just Desserts," will begin Oct. 23 at 7 p.m. with a foreword by Senior Judge Jack B. Weinstein of the U.S. District Court for the Eastern District of New York.

Weinstein was named Lawyer of the Year by the *National Law Journal* in 1993 and taught procedure and evidence at several law schools, including Columbia University before being named to the federal bench in 1967. Moderator will be Cramton. All sessions are free and open to the public and take place in the MacDonald Court Room of Myron Taylor Hall.

Panel I, which convenes immediately following Weinstein's remarks, examines "Re-designing the Federal Class Action to Handle Mass Torts." Presentations are by: John C. Coffee, the Adolf A. Berle Professor of Law at Columbia University Law School and the American Law Institute's reporter on litigation remedies for *Principles of Corporate Governance and Structure* (1988-1993); and Richard L. Marcus, professor of law at Hastings College of Law.

Commentators are: Jonathan R. Macey, the J. DuPratt White Professor of Law at Cornell Law School; Geoffrey P. Miller, the Kirkland & Ellis Professor at the University of Chicago Law School; and Judith Resnik, the Orrin B. Evans Professor of Law at USC

Law Center.

Panel II, which meets Oct. 24 at 9 a.m., features presentations on "The Tort System and its Alternatives in Handling Mass Torts" by Peter H. Schuck, the Simeon E. Baldwin Professor of Law at Yale Law School and author of *Agent Orange on Trial: Mass Toxic Disasters in the Courts*; and John Siliciano, professor of law at Cornell Law School and former law clerk to retired U.S. Supreme Court Justice Thurgood Marshall.

Commentators are: James A. Henderson Jr., the Frank B. Ingersoll Professor of Law at the Cornell Law School; Francis E. McGovern, the Francis H. Hare Professor of Torts at the University of Alabama School of Law; and Robert L. Rabin, the A. Calder Mackay Professor of Law at Stanford Law School.

Panel III, which begins at 1:15 p.m., features presentations on "Lawyers, Legal Ethics and Mass Tort Class Actions" by Susan Paris Koniak, professor of law at Boston University School of Law and a co-principal investigator on the Keck Project in Comparative Ethics; and Carrie Menkel-Meadow, professor of law at UCLA School of Law.

Commentators are: John Leubsdorf, professor of law at Rutgers University School of Law; and Charles W. Wolfram, the Charles Frank Reavis Sr. Professor of Law at Cornell Law School.

Senior Judge William W. Schwarzer of the U.S. District Court for the Northern District of California and director of the Federal Judicial Center, will join Weinstein in offering closing remarks at 3:45 p.m. Schwarzer was appointed to the federal bench in 1976 and is currently director of the Federal Judicial Center.

The colloquium is sponsored by the W.M. Keck Foundation, the Cornell Law School and the *Cornell Law Review*, which will publish colloquium papers in its May 1995 edition.



"Li' Sis," (1944) oil on paperboard. One of William Johnson's paintings exhibited at the Johnson Museum, Oct. 21-Jan. 8.

## CALENDAR

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Center on West Campus and at the DeWitt Mall ticket office downtown. Limit two per person.

### University Lectures

"Feminism and Women's Writing in Contemporary Cuba," Nara Araujo-Carruana, University of Havana, Oct. 24, 4:30 p.m., Goldwin Smith Hall Auditorium.

### Women's Studies Program

"Gender, Ethnicity and Social Change Among the Anlo of Ghana: A Model for Analyzing the History of Complex Social Relations," Sandra Greene, Africana studies, Oct. 24, 4:30 p.m., G08 Uris Hall.

## MUSIC

### Music Department

• On Oct. 20 at 8:15 p.m. in Barnes Hall, French music will be performed by Roy Howat. This performance includes Gabriel Faure's "Nocturne no. 6, op. 63"; Claude Debussy's "Five Etudes"; Chabrier's "Ten pieces pittoresque" and Faure's "Barcarolle no. 5, op. 66." Free.

• On Oct. 21 at 8:15 p.m. in Barnes Hall, the Monosoff-Yeung-Wolf Trio will present "Baroque Masterpieces" including works by Tommaso Antonio Vitali, Heinrich Biber, Arcangelo Corelli, J.S. Bach and Jean-Marie Leclair. Free.

• Mark Scatterday will conduct the Cornell Wind Symphony Oct. 22 at 8:15 p.m. in Bailey Hall. It will perform Prokofiev's "March, op. 99," Hindemith's "March from the Symphonic Metamorphosis" and Khachaturian's "Armenian Dances." Free.

• The Robert Cowie Trio presents an afternoon of improvised music on Oct. 23 at 4 p.m. in Barnes Hall. The trio features George Reed, drums; Peter Chwazi, bass; and Robert Cowie, piano. Free.

• Fortepianist Tom Beghin will perform music by Haydn and Beethoven on Oct. 25 at 8:15 p.m. in Barnes Hall. Free.

### Cornell Concert Commission

The Jesus & Mary Chain, Velvet Crush and Mazzy Star will perform on Oct. 23 at 8 p.m. in Bailey Hall. Students, \$8/\$10 and general public, \$12/14. Tickets are available at Willard Straight Box Office, Ithaca Guitar Works, Rebob Records or by calling Ticketmaster.

### Bound for Glory

Oct. 23: Bound for Glory can be heard Sundays from 8 to 11 p.m. on WVBR-FM, 93.5.

## religion

### Sage Chapel

Roger Badham, Drew University, will give the sermon on Oct. 23 at 11 a.m. 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

Fridays, 7 p.m., firesides with speakers, open discussion and refreshments. Meet at the Balch Archway; held in Unit 4 lounge at Balch Hall. Sunday morning dawn prayers and breakfast, 7 a.m. For details, call 253-2401.

### Catholic

Weekend Masses: Saturday, 5 p.m.; Sunday, 10 a.m., noon 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, 11 a.m., meeting for worship at the Edwards Room, Anabel Taylor Hall. Adult discussions most weeks at 9:50 a.m., 314 Anabel Taylor Hall.

### Jewish

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

Shabbat Services: Friday, 6 p.m., Anabel Taylor Hall; Conservative, Founders Room; Reform, Chapel; Orthodox, Young Israel, call 272-5810 for time.

Saturday Services: Orthodox, 9:15 a.m., Edwards Room, ATH; Conservative/Egalitarian, 9:45, Founders Room, ATH.

### Korean Church

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

### Muslim

Friday Juma' prayer, 1:15 p.m., One World Room, Anabel Taylor Hall. Daily Zuhr, Asr, Maghreb and Isha' prayers at 218 Anabel Taylor Hall.

### Protestant Cooperative Ministry

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

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# CALENDAR

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## Sri Satya Sai Baba

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

## Zen Buddhist

Tuesdays, 5 p.m.; Thursdays, 6:45 p.m., chapel, Anabel Taylor Hall.

# seminars

## Africana Studies & Research Center

"Senegal River: Large Dams and Small People - Managing an African River," Michael Horowitz, SUNY Binghamton and Institute for Development Anthropology, film and seminar, Oct. 20, 4:30 p.m., B-14 Hollister.

## African Development

"Horticulture in Zimbabwe," H. Chris Wien, fruit and vegetable science, Oct. 24, 12:20 p.m., 208 West Sibley.

## Applied Mathematics

"Implicit Solid Modeling: Computer-Aided Geometric Design via Computer Algebra," Duane Storti, University of Washington, Oct. 21, 4 p.m., 456 Theory Center.

## Biochemistry

"Probing the Structure-Function Relationship of Petunia S-RNases Which Control Recognition and Rejection of Self Pollen," Teh-hui Kao, Penn State University, Oct. 21, 4 p.m., large conference room, Biotechnology Building.

## Biogeochemistry

"Carbon Cycling in Peatlands Along a Latitudinal Gradient: Relationships to Global Climatic Change," R. Kelman Wieder, Villanova University, Oct. 21, 4 p.m., A106, Corson Hall.

## Biophysics

"Mechanical Aspects of Ameboid Locomotion," Elliot Elson, Washington University Medical School, Oct. 26, 4:30 p.m., 700 Clark Hall.

## Cellular and Molecular Medicine

"Representational Difference Analysis," Nikolai Lisitsyn, Cold Spring Harbor Lab., Oct. 24, 4:30 p.m., G-3 Veterinary Research Tower.

## Chemistry

TBA, Ross Kelly, Boston College, Oct. 24, 4:40 p.m., 119 Baker.

## Cognitive Studies Program

"Positron Emission Tomographic Studies of Language," Alan Lockwood, SUNY Buffalo, Oct. 21, 12:20 p.m., 204 Uris Hall.

"Lexicalized Grammars - Lexicalized Tree-Adjoining Grammars," Aravind Joshi, University of Pennsylvania, Oct. 27, 4:30 p.m., 106 Morrill Hall.

## Einaudi Center

"Local Governments as Industrial Corporations: An Organizational Analysis of China's Transitional Economy," Andrew Walder, Harvard University, Oct. 21, 4:30 p.m., G08 Uris Hall.

## Electrical Engineering

"High Density Optoelectronic Interconnections Using Optically Powered OEICs," Stephen Forrest, Princeton University, Oct. 25, 4:30 p.m., 219 Phillips.

## Energy Engineering

"Clean Coal Technologies," James Markowsky, American Electric Power Corp., Oct. 20, 12:20 p.m., 118 Ward Lab.

## Entomology

"Interspecific Mating in Ants and the Evolution of Sperm Parasitism: A Model of Natural Selection for Hybridization," Gary Umphrey, University of Western Ontario, Oct. 20, 4 p.m., A106 Corson.

"Phylogeny of the Holometabola with Emphasis on the Position of the Strepsiptera: Molecular and Morphological Evidence," Michael Whiting, entomology, Oct. 27, 4 p.m., A106 Corson Hall.

## European Studies

"Racism and Resistance in Unified Germany," May Ayim, author, Oct. 21, 12:15 p.m., 153 Uris.

"Committees as Actors of Arenas: the Danish Case," Henrik Jensen, Aarhus University, Oct. 21, 12:15 p.m., 153 Uris.

## Floriculture & Ornamental Horticulture

"Issues of Quality Control During Golf Course Construction," Norman Hummel Jr., undergraduate seminar, Oct. 20, 12:20 p.m., 37 Plant Science.

## Food Science

"Beta-carotene: Recent Developments in Metabolism and Chemoprevention," Robert Parker, nutrition, Oct. 25, 4:15 p.m., 204 Stocking Hall.

## Fruit & Vegetable Science

"Non-chemical Weed Control - Moving Backwards or Forwards?" Johan Ascard, visiting fellow, Oct. 20, 4 p.m., 404 Plant Science Building.

"Geopositioning Satellites - Agricultural Uses?" Paul Stachowski, Agway Crops Research Project, Oct. 27, 4 p.m., 404 Plant Science Building.

## Genetics & Development

"Analysis of mutants in a Specific Accessory Gland Gene (Acp26 Aa) of *Drosophila melanogaster*," Laura Herndon, Oct. 26, 12:20 p.m., small seminar room, Biotechnology Building.

## Geological Sciences

"Lattice-gas Cellular Automata and Multiphase Flow Through Porous Media," Dan Rothman, MIT, Oct. 25, 4:30 p.m., 1120 Snee Hall.

## Immunology

TBA, Cliff Snapper, University of the Health Sciences, Oct. 21, 12:15 p.m., Boyce Thompson Auditorium.

## Latin American Studies

"Cuban Culture in a Changing World," Nara Araujo-Carruana, University of Havana, Oct. 25, 12:15 p.m., 153 Uris Hall.

## Materials Science & Engineering

"Supersonic Molecular Beam Scattering as a Probe of Thin Film Deposition Processes," Jim Engstrom, Oct. 20, 4:30 p.m., 140 Bard Hall.

## Mechanical & Aerospace Engineering

"Evolution of the Modern Manufacturing Initiatives (CORNIGAN at Aeroquip)," Howard Selland, Aeroquip, Oct. 20, 4:30 p.m., 155 Olin Hall Lounge.

## Microbiology

"Actinomycetes in the Chesapeake Bay," Russell Hill, Center for Marine Biotechnology, Oct. 27, 4 p.m., G10 Biotechnology Building.

## Near Eastern Studies

"Recent Finds From the Period of the Bar Kokhba Revolt," Hanan Eshel, Bar-Ilan University, Oct. 27, 4 p.m., 374 Rockefeller Hall.

## Ornithology

"Written in Feathers: A New Way of Assessing Nutritional Condition of Birds," Thomas Grubb, Ohio State University, Oct. 24, 7:30 p.m., Fuertes Room, Lab of Ornithology.

## Physics

"The Computing Environment of the Future," Malvin Kalos, Oct. 24, 4:30 p.m., Schwartz Auditorium, Rockefeller Hall.

## Physiology & Anatomy

"Restitution and Complex Dynamics in Cardiac Tissue," Robert Gilmour Jr., physiology, Oct. 25, 4 p.m., G-3 Veterinary Research Tower.

## Plant Biology

"Intercellular and Nuclear Transport in Plants," Vitale Citofsky, SUNY Stony Brook, Oct. 21, 11:15 a.m., 404 Plant Science Building.

## Plant Breeding

"Comparisons Between Linkage Maps of Trititi Chromosomes in Rice, Oats," Alan Van Deynze, plant breeding, Oct. 25, 12:20 p.m., 135 Emerson.

## Plant Pathology

"An Electronic Weather Monitoring Network in New York for Disease Forecasting and Fungicide Reduction," Curt Petzoldt, Integrated Pest Management, Geneva, Oct. 25, 3 p.m., A133 Barton Laboratory, Geneva.

"The Land Grant University: Beyond 2000: The

Clientele for Plant Pathologists," Peter Ten Eyck, apple grower, Cornell trustee, Oct. 26, 12:20 p.m., 404 Plant Science Building.

## South Asia Program

"Economic Liberalization in Nepal," Bishwambher Pyakuryal, Tribhuvan University, Oct. 24, 12:15 p.m., G08 Uris Hall.

## Science & Technology Studies

"Landscape and Landscapes," Robert Kohler, University of Pennsylvania, Oct. 24, 4:30 p.m., 609 Clark Hall.

## Stability, Transition & Turbulence

TBA, Zwi Rusak, Rensselaer Polytech Institute, Oct. 25, 12:30 p.m., 178 Theory Center.

## Toxicology

"Effect of Treatment of Toxicity of Hydrocarbon Contaminated Soils," Joseph Kreitinger, Oct. 21, 12:20 p.m., 135 Emerson Hall.

## Textiles & Apparel

"Spin Finishes for Nylon," Debra Hild, Monsanto, Oct. 20, 12:20 p.m., 317 Martha Van Rensselaer Hall.

"Modification of Mechanical Properties of Kevlar Fiber by Polymer Infiltration," Ashish Mathur, Oct. 27, 12:20 p.m., 317 Martha Van Rensselaer Hall.

## Urban Studies and Planning

"Cracking the Vault: The Community Reinvestment Act and the Syracuse Experience," Anne Peterson, Covenant Housing Program, Oct. 21, 12:20 p.m., 115 Tjaden Hall.

# symposiums

## Comparative Literature

"Creolization, Nationalisms, Feminisms: A Symposium on Caribbean Women Writers," Oct. 21, 10 a.m.-5 p.m., A.D. White House. Participants: Maryse Conde, Society for the Humanities; Nara Araujo-Carruana, University of Havana; Carole Boyce Davies, SUNY Binghamton; Elizabeth Paravisini-Gebert, Vassar; Ivette Romero-Cesareo, Vassar; Helen Pyne Timothy, University of West Indies; Shalini Puri, University of Pittsburgh; Natalie Melas, Cornell; and Anne Adams, Cornell.

## Plant Pathology

"Whetzel-Westcott-Dimock Symposium in Mycology," Oct. 21, 1:30-5:30 p.m. The purpose of the symposium is to honor the long, distinguished career of Professor Richard Korf, mycologist, who retired from the Department of Plant Pathology in 1992. The symposium will consist of talks by four prominent mycologists: Donald Pfister, Harvard University; Meredith Blackwell, Louisiana State University; Pierre de Wit, University of Wageningen and Korf. Free. For information call 255-7844.

# theater

## Theatre Arts Department

The Theatre Arts Department presents "The Glass Menagerie" on the following dates: Oct. 20, 21, 22, 23, 26, 27, 28, 29 at 8 p.m.; Oct. 23, 29, 30

at 2 p.m., in the Class of '56 Flexible Theatre. Tickets are \$6 and \$8. Celebrating its 50th anniversary, Tennessee Williams' *The Glass Menagerie* is a "memory play" about a family and regret.

# miscellany

## 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.

## Wellness Program

"Expo '94," Oct. 20-21, 9 a.m.-4 p.m.; Oct. 22, 9 a.m.-noon, Alberding Field House. Questions answered by professional benefits and health care consultants. A variety of seminars on retirement - TIAA/CREF; managed care; cooking; massage; retirement - fidelity; Trager techniques; long-term care; foot reflexology & accupressure; and more. Vendors and exhibitors. Free. For more information call 255-5133.

## Writing Workshop

Free tutorial instruction in writing is offered through the Writing Workshop Walk-in Service as follows:

- 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, Student Lounge: Sunday through Thursday, 8 to 11 p.m.
- 320 Noyes Center: Sunday through Thursday, 8 to 11 p.m.

# sports

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

**Men's Cross Country (2-1)**  
Oct. 21, Reif Invitational

**Women's Cross Country (2-0)**  
Oct. 21, Reif Invitational

**Field Hockey (5-5-1)**  
Oct. 22, DARTMOUTH, 10 a.m.  
Oct. 26, SYRACUSE, 7:30 p.m.

**Ltwt. Football (1-2)**  
Oct. 22, DARTMOUTH, 1 p.m.

**Football (5-0)**  
Oct. 21, at Army, 7:30 p.m.

**Men's Soccer (1-8-1)**  
Oct. 22, at Dartmouth, 2:30 p.m.

**Women's Soccer (6-2-2)**  
Oct. 22, at Dartmouth, noon.

**Women's Tennis (2-0)**  
Oct. 21-23, ECAC Champs. at Penn. State

**Women's Volleyball (5-11)**  
Oct. 25, at Colgate, 7 p.m.



"Intolerance," the famous 1916 film directed by D.W. Griffith, to be shown as part of the Fall Arts Festival.

# CALENDAR

October 20  
through  
October 27

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.

## dance

### Cornell International Folkdancers

All events are open to the Cornell community and general public and are free unless otherwise noted. Beginners are welcome; partners are not necessary. For information, call 387-6547.

Oct. 23: 7:30 p.m., dance instruction, Tele-springar (Scandinavian); 8:30 p.m., open dancing and requests, North Room, Willard Straight Hall.

### Israeli Folkdancing

Thursdays, 8 p.m., Edwards Room, Anabel Taylor Hall; instruction and request dancing, beginners welcome; free and open; info 255-4227.

### East Asia Program

Yamabushi Kagura of Mt. Hayachine, a Japanese dance troupe, will perform Oct. 24 at 8 p.m. in Statler Auditorium, Statler Hall. Tickets are available at Lincoln Hall ticket office, 140 Uris Hall; and New Alexandrian Bookstore, 110 N. Cayuga St., Ithaca. \$8 in advance; \$10 at the door and \$6 students/seniors. Call 255-6222 for information.

## exhibits

### Johnson Art Museum

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

- "William H. Johnson: Homecoming," Oct. 21-Jan. 8. Forty paintings by Johnson, one of the most important African-American painters of the 20th century, that capture the history, folklore, imagination, rhythm and spirit of Afro-America. Organized by the National Museum of American Art.

- "A Revolution in Color: Chiaroscuro Woodcuts From the Permanent Collection, 1500-1800," through Oct. 23.

- "The Mexican Muralists and Prints From the Collection of Reba and Dave Williams," through Oct. 30.

- "Mexican Influence: Works on Paper From the Johnson Collection," through Oct. 30.

- "Cultural Signs in Contemporary Native American Art," through Oct. 30.

- "Arts of New Guinea, New Ireland and Oceania," through Oct. 30.

- 12 O'Clock Sharp, Thursday Noontime Gallery Talks: Oct. 20, a tour of the "Mexican Prints" exhibition.

- Vitaly Komar and Alexander Melamid, considered the foremost Russian emigre artists working today, will hold a town meeting on Oct. 26 at 7 p.m. in Hollis Cornell Auditorium of Goldwin Smith Hall; and also on Oct. 27 at 7:15 p.m. in St. John's

Episcopal Church, on Cayuga Street. In visiting Ithaca, the artists will rely on the results of a poll of 200 residents in the town of Ithaca and on the dialogue that develops from these two town hall meetings, to create a painting.

### Anthropology Department

"Voices From the Past: A Slave Cabin Excavation, Cumberland Island, Georgia," featuring materials gathered by Professor Robert Ascher, is on view in McGraw 215 through Dec. 21.

### Plantations

"Herbs: Discover the Pleasures," an exhibit highlighting the Robison York State Herb Garden at Cornell Plantations and the diverse use of herbs, is on view in the lobby of Mann Library through Nov. 15.

## films

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

### Thursday, 10/20

"The Eye of Vichy (L'Oeil de Vichy)" (1993), directed by Claude Chabrol, 4:30 p.m., free.

"White" (1993), directed by Krzysztof Kieslowski, with Zbigniew Zamachowski, Julie Delpy and Janusz Gajos, 7:30 p.m.

"The Shadow" (1994), directed by Russel Mulcahy, with Alec Baldwin, Penelope Ann Miller and John Lone, 9:45 p.m.

### Friday, 10/21

"Widows' Peak" (1994), directed by John Irvin, with Mia Farrow, Joan Plowright and Natasha Richardson, 7:15 p.m., Uris.

"Francois Truffaut: Stolen Portraits" (1993), directed by Serge Toubiana and Michel Pascal, with Fanny Ardant, Gerard Depardieu and Marcel Ophuls, 7:30 p.m.

"The Shadow," 9:35 p.m., Uris.

"White," 9:45 p.m.

"An American Werewolf in London" (1981), directed by John Landis, with David Naughton, Griffin Dunne and David Schofield, midnight, Uris.

### Saturday, 10/22

"Intolerance" (1916), directed by D.W. Griffith, with Lillian Gish and Mae Marsh, 7 p.m.

"The Shadow," 7:15 p.m., Uris.

"Widows' Peak," 9:35 p.m., Uris.

"The Bride with White Hair" (1993), directed by Ronnie Yu, with Leslie Cheung, Brigitte Lin and Elaine Lui, midnight, Uris.

### Sunday, 10/23

"Francois Truffaut: Stolen Portraits," 4:30 p.m.

"Le Grande Bonheur" (1993), directed by Herve Le Roux, 7:30 p.m., Uris.

"The Shadow," 8 p.m.

### Monday 10/24

"Jules and Jim" (1962), directed by Francois Truffaut, with Jeanne Moreau, Oskar Werner and Henri Serri, 7 p.m.

"Francois Truffaut: Stolen Portraits," 9:20 p.m.

### Tuesday, 10/25

"Dand-da-yi," Southeast Asia Film Series, 4:30 p.m., Kahin Center, 640 Stewart Ave., free.

"White," 7:20 p.m.

Set in Motion: "Artists on Artists," 7:30 p.m., CTA Film Forum, \$2.

Widows' Peak," 9:30 p.m.

### Wednesday, 10/26

"Gorilla Bathes at Noon" (1993), directed by Dusan Makavejev, with Svetozar Cvetkovic, Anita Mancio and Alexandra Rohmig, 7:30 p.m.

"Once a Cop" (1993), directed by Stanley Tong, with Michelle Khan and Yu Rong-Guang, 9:30 p.m.

### Thursday, 10/27

"The Joy Luck Club" (1993), directed by Wayne Wang, with Kleu Chinh, Ming-Na Wen and Tamlyn Tomita, 7:30 p.m.

"Wolf" (1994), directed by Mike Nichols, with Jack Nicholson, Michelle Pfeiffer and James Spader, 10:30 p.m.

## graduate bulletin

Dissertation seminar will be held in the Morison Seminar Room, Corson/Mudd Hall, 2 p.m., Oct. 25, for doctoral dissertations. The thesis adviser will discuss preparing and filing dissertations; students, faculty and typists are encouraged to attend.

Pre-enrollment, Spring '95: Graduate student course pre-enrollment is Oct. 19 through Nov. 2, Sage Hall. Forms are available at graduate field offices and Sage Graduate Center.



David Lynch-Benjamin/University Photography  
Brenda Thomas as Amanda and Sarah Stern as Laura in Tennessee Williams' "The Glass Menagerie," playing Oct. 20-30 in the Flexible Theatre at the Center for Theatre Arts.

## lectures

### Africana Studies & Research Center

"Professional Challenges in Contemporary Nigeria: A Librarian's Experiences," Thomas Weissinger, Africana Studies & Research Center, Oct. 26, noon., 310 Triphammer Road.

### Architecture

Gwendolyn Wright will be giving this year's Preston H. Thomas Memorial Lecture Series on "Pragmatic Visions: Modernism and the American City." The series will be held the week of Oct. 24-28 at 5:30 p.m. in 200 Baker Lab. "Celebrating Contingencies," Oct. 24; "Frank Lloyd Wright: Nature's Geometry," Oct. 25; "Kahn and Stonorov: Methodical Communities," Oct. 26; "Wurster and Demars: Experiments with the Ordinary," Oct. 27; and "Revisions and Realities Today," Oct. 28.

### Chemistry

Gerhard Wegner of the Max Planck-Institut für Polymerforschung will present the Baker Lectures at 11:15 a.m. in 119 Baker: "The Structure of Electronically Conducting Polymers," Oct. 20; "Polymers as Semiconductors," Oct. 25; and "Ionic Conductivity in Polymer Systems," Oct. 27.

### Classics

Townsend Lecture: "Representation and Historical Reality in Ammianus Marcellinus: The Vocabulary of Prejudice," Timothy D. Barnes, University of Toronto, Oct. 25, 4:30 p.m., 156 Goldwin Smith Hall.

### East Asia Program

"Cutting the Fringes: Pubic Hair at the Margins of Japanese Censorship Laws," Ann Ellison, Duke University, Oct. 21, 3:30 p.m., 215 McGraw Hall.

### European Studies

"The Relationship Between Banking and Commerce: From the Warnings of Luigi Einaudi in 1918 to the Current Debate," Giorgio Szego, Oct. 25, 4:30 p.m., A.D. White House.

### Jewish Studies Program

"Greek Jewry During the Holocaust," Yitzchak Kerem, Aristotle University, Oct. 20, 4:30 p.m., 230 Rockefeller Hall.

### Johnson Museum

"Georges Lurcy Lecture on French Art: Resuscitating Bouguereau," Robert Rosenblum, New York University, Oct. 22, 2 p.m., Schwartz Auditorium, Rockefeller Hall.

### Johnson School

"How to Start a Biotechnology Business With Only \$250 Million," Roger Salquist, Calgene Inc., Oct. 24, 4 p.m., conference room, Biotechnology Building.

### Music Department

"Editing for the New Complete Debussy Edition," Roy Howat, pianist, Oct. 24, 4:15 p.m., 102 Lincoln Hall.

### Professors at Large

"What's Good for the Environment is Increasingly Good for the Economy," Norman Myers, environmental and development consultant, Oct. 27, 7 p.m., location to be determined.

### Russian Literature

"Music of the Silver Age," Elena Sorokina, Moscow State Conservatory, Oct. 24, 4:30 p.m., 140 Goldwin Smith Hall. Lecture in Russian.

### Society for Humanities

"Vicissitudes of the Beautiful Surface: Cultural Identity in Germany, Kant to Thomas Mann," Harold Mah, Queens University, Kingston, Ontario, Oct. 26, 4:30 p.m., Guerlac Room, A.D. White House.

"Renewals of Psychoanalysis: The Shell and the Kernel by Abraham and Torok," Nicholas Rand, University of Wisconsin, Oct. 27, 4:30 p.m., 156 Goldwin Smith Hall.

### Southeast Asia Program

"Subversion as Foreign Policy: Eisenhower's Indonesia Debacle," George McT. Kahin, international studies, Oct. 20, 12:15 p.m., Kahin Center, 640 Stewart Ave.

"Sufism and the State in the Sultanate of Buton," Michael Feener, graduate student, Oct. 27, 12:15 p.m., Kahin Center, 640 Stewart Ave.

### Trustee-Council Weekend

Janet Reno, U.S. attorney general, Oct. 20, 5 p.m., Barton Hall. Tickets are free but are required because of limited seating. Available at the Information and Referral Center in Day Hall, Willard Straight Hall ticket office, Robert Purcell Community Center on North Campus, Noyes Community

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