

CORNELL Chronicle

Volume 25 Number 2 September 2, 1993

CAMPUS SAFETY

When Cornell Police asked if there were ways to improve the Blue Light safety system, they learned that many students think those phones are only for drastic situations such as accidents or assaults.

VET CENTENNIAL

The College of Veterinary Medicine will observe its centennial throughout the 1993-94 academic year, beginning with a kick-off celebration on Saturday.

3

9

Alumnus Belnick is named CU's chief legal officer

President Frank H.T. Rhodes announced Monday that Mark A. Belnick, a senior partner at the New York City law firm of Paul, Weiss, Rifkind, Wharton & Garrison, has been named university counsel and secretary of the corporation.

Belnick, a litigation specialist who also has a distinguished record of public service, is a 1968 graduate of Cornell and an alumnus of Columbia Law School.

Rhodes said the Executive Committee of Cornell's Board of Trustees had unanimously approved Belnick's appointment, effective in November.

"I am delighted with Mark Belnick's decision to return to his alma mater and become a senior member of Cornell's administration," said Rhodes.

"Mark has had an extraordinarily distinguished legal career, both in private practice and in public service. He will bring

added experience and strength to one of the most important positions in the university administration, serving not only as the chief legal officer of the university but also as a key member of our policy-making team.

"I know that Mark, his wife, Randy, and their children will be tremendous assets for both the campus and the Ithaca community."

"I am thrilled to have the opportunity to serve Cornell," Belnick said, adding: "It is for me a joyous homecoming. I look forward enthusiastically to



Belnick

working with President Rhodes, the Board of Trustees, and the entire university community on behalf of this truly great institution."

Among his many public service activities, Belnick served in 1987 as special counsel and principal deputy to the chief counsel of the U.S. Senate Iran-Contra Committee. In this capacity, he was a principal author of the Congressional Committees' Joint Report on the Iran-Contra Affair and served as the committees' chief liaison with the White House Counsel, the State Department and the government of Israel.

Belnick is a member of the Cornell University Council and the Advisory Council of the College of Arts and Sciences. He has previously served as major gifts chair of the Cornell Class of 1968 25th Reunion Campaign and as an alumnus-in-residence in the College of Arts and Sciences.

As a Cornell undergraduate, he served on the editorial board of the *Cornell Daily Sun* and on the executive board of Cornell Student Government, as chairman of the Cornell Student Government Association, and was elected to the Quill & Dagger honorary society. At Columbia, he was a Harlan Fiske Stone Scholar.

Philanthropic endeavors

His many philanthropic endeavors have included service as president of the Jewish Community Center of Harrison, membership on the boards of directors of the Friends of Hassenfeld Children's Center at NYU Medical Center and the Children's Blood Foundation, the International Board of Overseers for the Seminary of Judaic Studies, and the National Young Leadership Cabinet of the United Jewish Appeal (UJA).

He was the 1988 Human Relations Award recipient of the Westchester Division of the American Jewish Committee.

His professional memberships include current service on the Litigation Committee of the Association of the Bar of the City of New York and past service on the Association's subcommittees on Grand Jury Reform Legislation, Foreign Intelligence, Securities Regulation, and Legal Education and Admission to the Bar.

He is a member of the New York State Bar and the District of Columbia Bar, and has been admitted to practice before the United States Supreme Court and many federal courts of appeals and district courts.

The Belnicks live in Harrison, N.Y., with their three children, Kelly, Cory and Jake.

Roughin' it



Nancy Rosen

Who are these people, and why are they smiling in the midst of a week without running water, real beds or even toilet paper? They are freshmen who put themselves to the test before arriving on campus. To share their adventure, turn to Pages 6 and 7.

Top geologists honor retiring Professor Oliver

By Larry Bernard

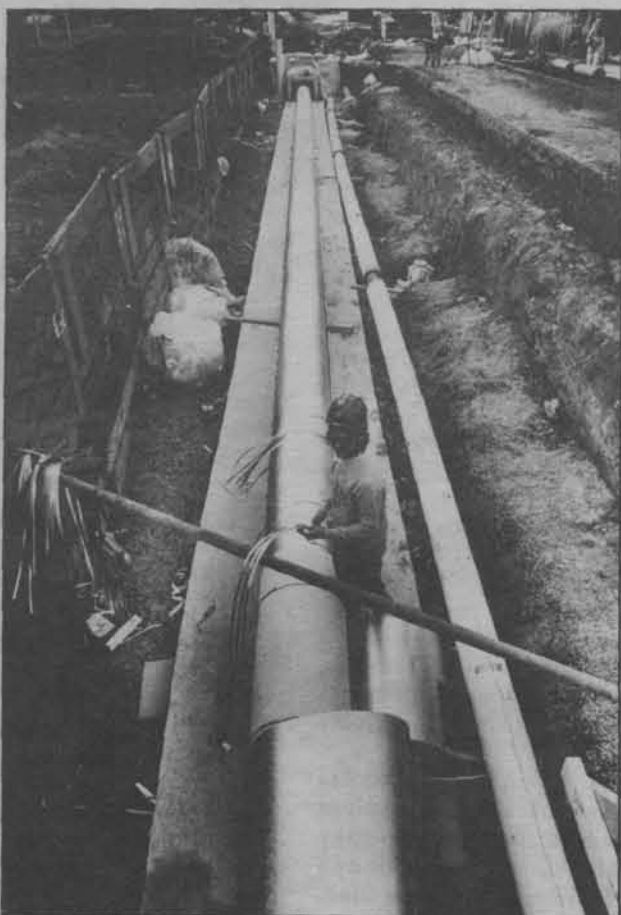
A panel of distinguished geologists — a former president of the nation's premiere scientific institution, a university professor who was a presidential adviser on science and technology, and a university president — gathered Saturday to honor Cornell geophysicist Jack E. Oliver and to reflect on where the field of earth science has been and where it is going.

The lectures, by Frank Press, former president of the National Academy of Sciences; Charles L. Drake, professor of earth sciences at Dartmouth College; and Frank H.T. Rhodes,

president of Cornell and professor of geological sciences, were in honor of Oliver's retirement. Oliver, professor emeritus of geological sciences whose contributions to the field span five decades and who helped devise the theory of tectonic plates, listened from the front row of the Statler Auditorium.

Press, a geologist who served two terms heading the NAS and now is senior fellow at the Carnegie Institution in Washington, D.C., and a Cornell A.D. White Professor-at-Large this semester, described "Growing Up in the Golden Age of Science."

Continued on page 8



Sharron Bennett/University Photography

Tim Johnston works on insulating the steam line being constructed underneath East Avenue.

\$2.9 million project will bring steam heat to central campus

By Sean Jamieson

The construction site that used to be East Avenue is going to be an obstacle for at least another two weeks. But it's nothing like the inconvenience the campus might experience if the project had not been undertaken this year, says project manager Jerry Zygmuntowicz.

At the bottom of the hole, workers laid a new pipe that will bring steam to heat many central campus buildings. The new line replaces a smaller, decaying pipe installed 70 years ago.

"We've been fortunate the last five years. We've been on borrowed time," Zygmuntowicz said. "We're lucky we haven't had a major failure."

The \$2.9 million project, which began in June after Commencement and Reunion weekends, should be completed in October. East Avenue, however, is scheduled to reopen in mid-September.

The new pipeline is part of an ongoing effort by the university's utilities department to ensure that the heating system is reliable and redundant, Zygmuntowicz said.

Some 165 campus buildings get heat and hot water from steam produced at the university's heating plant at Route 366 and Hoy Road, near Schoellkopf Field. Steam from the plant travels through an interconnected 25-mile system of underground pipes that requires frequent routine maintenance and occasional replacement, Zygmuntowicz explained.

Continued on page 2

Seeing is believing



Peter Morenus/University Photography

U.S. Rep. Maurice Hinchey (left), Democratic congressman from New York's 26th District, manipulates a simulation of the brain and skull of a patient at Brigham and Women's Hospital in Boston using an IBM Power Visualization System in the Theory Center. The data, derived from magnetic resonance imaging of the patient, allowed Bruce Land (right), visualization specialist, to construct a 3-D computer image that can be examined from any angle for the patient's doctors in Boston. The federal government recently made a \$13 million grant to the Theory Center toward a new IBM parallel processing supercomputer, leveraged by a New York grant of \$12 million last year. Hinchey visited Cornell Monday to meet with university officials and to hear about high-performance computing. Earlier in the day, he met with President Frank H.T. Rhodes, Henrik N. Dullea, vice president for university relations, and Stephen P. Johnson, director of government affairs.

NOTABLES

Walter F. Lamboy, research associate at the Agricultural Experiment Station in Geneva, is the recipient of the Third Annual Richard and Minnie Windler Award. This award is given by the Association of Southeastern Biologists to honor the author of the best paper in systematic botany published in the previous year's volume of *Castanea*, the quarterly publication of the Southeastern Appalachian Botanical Society. Lamboy has been affiliated with the Geneva Experiment Station since 1991 and is assigned to the U.S. Department of Agriculture's Plant Genetics Resources Unit.

The American Society for Enology and Viticulture has awarded **Muhammad Lodhi**, doctoral candidate in the Department of Plant Breeding, a \$3,500 scholarship. The Society's Eastern Section has also honored him with the 1993 Eastern Wine Industry Student Scholarship. These awards are given in recognition of

Lodhi's academic achievements and the importance of his research, which utilizes genetic information to produce better quality, disease-resistant grapes.

Kirsten Lundeborg, a recent graduate from the College of Human Ecology, has been nominated to the Northeast Association of Student Employment Administrators for consideration as Student Employee of the Year. Lundeborg was chosen to participate in the regional competition from among a pool of student employees who were nominated by their on-campus employers. Lundeborg worked for psychology Professor James Maas; her duties included coordinating the undergraduate TAs for an introductory psychology class and assisting in the production of a nationwide television special. She also wrote a large portion of the study guide that accompanies the text used in Psychology 101.

Pipeline *continued from page 1*

The constant addition of new buildings on campus put a strain on the old line, and it was subject to tremendous expansion and contraction as the 400-to-500-degree steam passed through. The 800 feet of new pipe laid along East Avenue will expand up to 40 inches at times, Zygmuntowicz said.

While the engineers had to figure out where to install fittings to allow for that expansion, university planners had to prepare for a different kind of expansion. Their job was to estimate how many more buildings and people will be added to the campus over the life of the steam line.

"None of us has a crystal ball for what the campus will look like in 50 years," said Zygmuntowicz, who earned his degree in mechanical engineering here in 1990. "But we have to do some modeling."

The old pipeline, which runs under the sidewalk on the west side of East Avenue, is 8 inches in diameter. The new pipe is 12 inches, big enough to handle new buildings and to carry an extra load in case there's a break in the system some day.

Planning for the East Avenue project has been under way for about a year and involved coordination among a number of university departments. Utilities is responsible for construction and maintenance of the line, Zygmuntowicz said, while the Department of Facilities Engineering handles the design work. Transportation Services is responsible for the

BRIEFS

■ **ESL:** A non-credit course will be offered for visiting academicians who seek improvement in any basic English-language skills, particularly speaking and listening comprehension. All language-learning activities will be oriented toward what will be most useful to the scholars during their stay here. Practice in speaking and pronunciation will include formal presentations and individual help with pronunciation problems. The 10-week course meets twice a week on Monday and Thursday evenings from either 5 to 7 p.m. or 7 to 9 p.m., Sept. 20 through Dec. 2. The program fee is \$450. Registration must be submitted by Sept. 16. For more information, contact Donna Colunio, School of Continuing Education and Summer Sessions, B20 Day Hall, 255-7259.

■ **English classes:** Registration for free English classes sponsored by the Cornell Campus Club will take place on Thursday, Sept. 2, from 7:30 to 9 p.m. in Anabel Taylor Hall's One World Room. There is a \$10 registration fee. Classes begin Sept. 7. For further information call Ann Marie Dullea at 277-2488 or Joan McMinn at 277-0013.

■ **Breakfast with Rhodes:** There are a limited number of openings available for students to have breakfast with President Frank H.T. Rhodes. Those interested are invited to call his office at 255-5201 to make a reservation. The breakfasts are held from 7:30 to 8:30 a.m. in the Elmhurst Room of Willard Straight Hall. Reservations are made on a first-come, first-served basis. Those with reservations will be reminded by mail a few days in advance.

■ **Bus route:** Tompkins County engineers have lowered the weight rating of the Forest Home bridge in order to add a sidewalk. Bus route 31 is changing its routing, now traveling via Jessup Road, Thurston Avenue, East Avenue and Tower Road. The bus will continue to serve the Ithaca Commons. New route information is available on the bus and at the Transportation Office, 116 Maple Ave.

■ **Trustee meeting:** The Executive Committee of Board of Trustees will meet in open session on Sept. 9 from 2 to about 3 p.m. at the Cornell Club in New York City, 6 E. 44th St. Besides a report from President Frank H.T. Rhodes, there will be a tribute to the late Robert G. Engel, who was a trustee for 22 years; a report on last year's results in the capital campaign; and discussion of current plans for the statutory colleges' budget submission for the next fiscal year. Tickets can be obtained at the Information and Referral Center in the Day Hall lobby on campus. A limited number of tickets will be available for the public, one per person, on a first-come, first-served basis.

logistics of rerouting traffic while Environmental Health and Safety (the new department that combines Life Safety and Environmental Health) and the university police were consulted on safety issues.

Altered bus routes

While East Avenue is torn up for the installation of a new steam line, most buses that serve the campus are being rerouted to Garden Avenue, according to Marc Whitney, manager of transit operations for CU Transit.

The main Central Campus stops, which used to be located on East Avenue near Sage and Statler Halls, are now on Garden between Barton and Teagle Halls.

CU Transit route 81 is an exception, Whitney said. Its main stop is now on Tower Road in front of Uris Hall.

The buses will move back to East Avenue as soon as it reopens. That's currently scheduled for mid-September.

CU Transit also made changes to routes 82, 83 and 84 as of the start of the semester, Whitney said, so riders should pick up new schedules on the buses or at the Information and Referral Center in Day Hall.

And stand by for more changes. Tower Road is scheduled to close later this fall when the Ives Hall renovation begins, meaning more reroutings.

Employee ethics talks begin Sept. 27

By Sam Segal

A seminar on ethics-based decision-making will be held Sept. 27 for Cornell department chairs and directors, administrative managers, and others who sign off on the spending of Cornell money.

The seminar, titled "Integrity, the Keystone for University Stewardship," was conceived by Fred Rogers, vice president for finance and treasurer, and developed by Director of Internal Audit Mike Dickinson and John Hartnett, director of the Statutory Business Office.

There will be identical morning and afternoon sessions in the Statler Ballroom, and Hartnett said that he hopes to draw up to 200 people to each. He says full administrative teams are welcome, not only from academic or administrative departments but from all units—including specialized centers—that handle transactions committing money or other resources.

The seminar will be led by Michael Josephson, a former law professor who heads the California-based Josephson Institute of Ethics. He has run conferences at other universities and has designed ethical programs for the California Senate, Florida Bar Association, some Fortune 500 companies and the Internal Revenue Service.

Josephson does not come with an ethics rule book, Rogers says. Rather, he stimulates thought and discussion leading to the understanding that all employees are responsible for the ethical climate created at their institution.

"I have no doubts about the integrity of our employees," Rogers said, adding:

"This is not about embezzlement or fraud. It's about those gray areas where employees may be pressured, for example, to approve a reimbursement or a relationship when they are unsure of its appropriateness. The seminar should help clarify our responsibilities to support employees in their work as stewards of Cornell resources."

Those who want to enroll should call Rhonda Campbell at 255-4425 by Sept. 13.

MEMORIALS

A memorial service for Associate Professor of Music **Donald R.M. Paterson**, 59, who died May 7 in New Hampton, N.H., after a short illness, will be held in Sage Chapel on Saturday, Sept. 4, at 11 a.m.

Paterson retired as university organist and Sage Chapel choirmaster in January, after teaching at Cornell for 29 years. He was a founding member of the Organ Historical Society and a recipient of its Distinguished Service Award.

The Rev. Richard Murphy will preside at the service. Among speakers will be Cornell President Frank H.T. Rhodes, Ingrid Olsen-Tjensvold, Alice Damp and Karl Schoellkopf. Organists will be George Damp and William Cowdery. The Sage Chapel Choir and Alumni Choir will sing.

A memorial celebration for **John Condry**, a 27-year member of the faculty who died on June 27, will be held on Friday, Sept. 10, at 3 p.m. in Anabel Taylor Hall; a reception will follow. Condry was a professor of human development and family studies in the College of Human Ecology and a national expert on the psychology of television and television's effects on children.

The Condry family has asked that gifts in his memory be directed to the Center for Research on the Effects of Television (CRETV), Department of Psychology at Ithaca College. CRETV is a research center that Condry co-founded and co-directed.

A memorial service for **Frederick B. Agard**, professor emeritus of modern languages and linguistics who died on May 11, will be held on Saturday, Sept. 11, at 11:30 a.m. in Sage Chapel. A reception will follow in the Founders Room of Anabel Taylor Hall.

CORNELL Chronicle

Henrik N. Dullea, Vice President for University Relations

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

Published 40 times a year, Cornell Chronicle is distributed free of charge to Cornell University faculty, students and staff by the University News Service. Mail subscriptions, \$20 for six months; \$38 per year. Make checks payable to Cornell Chronicle and send to Village Green, 840 Hanshaw Road, Ithaca, N.Y. 14850. Telephone (607) 255-4206. Second-Class Postage Rates paid at Ithaca, N.Y.

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

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

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

Campus police focus on crime prevention, safety

By Linda Grace-Kobas

Last semester, when Cornell Police held a series of public meetings on campus to see if there were ways to make the Blue Light safety system work better, they learned that many students think the Blue Light phones are for use only in drastic situations such as accidents or assaults.

"An emergency to us is if you're mis-oriented, lost, or if your car breaks down," said Crime Prevention Officer George Sutfin, who presents many of the safety seminars for students here. So in an effort to help people on campus know that the Blue Light phones are for use whenever a person needs a helping hand, the department is developing new signage for the 240 phones that emphasizes *information* as well as *emergency*.

That type of effort to increase awareness of the unit's role in crime prevention and meeting the safety needs of the campus community is being extended in many other areas as well, as new and returning students, faculty and staff get settled on campus, said Chief James W. Cunningham. Over the summer, the department's name was changed from "Public Safety" to "Cornell Police." The department's primary mission is to create as safe an environment as possible for the campus community, Cunningham emphasized.

The key to safeguarding that community is knowing it well, from both sides of law enforcement, he said.

"We emphasize a four-year degree for our officers," said Accreditation Officer Lt. Randall (Randy) Hausner. "We try to ensure that each person we hire has had to sit in a classroom and experience the same things students have, so they have a greater sensitivity in dealing with them."

The department is constantly re-examining its activities to be sure that they adjust to the safety needs of the campus, Hausner said.

Last year, the 42 sworn officers participated in 7,753 hours of additional training in areas such as hate/bias crimes, sex crimes,

sexual harassment, victim witness, child abuse, enhancing race relations, diversity in the workplace, as well as in basic criminal investigations. They also undergo special preparation and coordination with other campus units for big events like Dragon Day, commencement and orientation. A bicycle patrol has been instituted, in which Cornell officers co-presented a course with the Ithaca Police Department and Ithaca College that brought officers from other law enforcement agencies from around the state here last month.

"The Cornell Police work very hard at being very well educated," Marjorie Hodges, the campus judicial administrator, said. Her office works closely with them in investigating and prosecuting complaints alleging violations of the Campus Code of Conduct. In many cases, a person not charged with a criminal offense may be charged under the Campus Code of Conduct, or vice versa. Or, they may face both criminal and campus charges.

One of the department's strengths, Hodges said, is that the officers "are highly qualified in assisting victims of crime." They undergo special training and work very closely with Gannett Health Center and the Dean of Students Office to help victims cope in the aftermath of a crime or accident.

The officers also work with the Public Safety Committee, whose membership represents a cross-section of the campus, including students, to look at safety issues on campus.

But the best way to handle crimes is to prevent them in the first place, which is why the Cornell Police place so much emphasis on teaching crime prevention and personal safety techniques. Over the past few weeks, Sutfin has participated in 26 safety programs, including eight during registration, one on computer security at CIT Sales and several with international students. To him, there is no such thing as a "dumb" question about safety.

"A lot of students come here from very protected environments, and aren't aware of many safety issues," he said. "Many others come from cities where crime rates are really



Chris Hildreth/University Photography

Officer Karen Smith smiles as Darrin Mile '95 locates his roommate by telephone. The officer helped the student locate his roommate, who had been "missing" for several days.

bad, and think they can let down their guard here. We try to teach them all to use common sense."

The Crime Prevention Section will present crime prevention programs and services to any interested Cornell group or organization that contacts it. Among the programs are a general public safety orientation, crime prevention overview, personal security, rape prevention, alcohol awareness, bicycle safety and registration program, winter driving techniques, cash handling, Operation I.D. and key registration, and Project Child Finder.

The Crime Prevention Section will also send officers to do lighting surveys, burglar alarm surveys and make recommendations for improving security in various areas.

Safety on college campuses is an issue receiving much attention at the national level. In New York, legislation was passed in 1991 that mandates that incoming students be informed about risks of sexual assault and the programs, regulations and procedures on campuses for managing such risks. The Federal Crime Awareness and Campus Security Act of 1990 mandates that universities report crime rates and security policies to students, faculty and employees. Bias crimes are reportable under the Federal Hate Crime Statistics Act of 1990 and the New York Bias Incident Reporting system. And the Higher Education Amendments of 1992 imposed new requirements for preventing, reporting and investigating sex offenses that occur on campus.

Cornell has collected and reported its crime statistics under the Uniform Crime Reports to the FBI since 1974, and has started reporting its bias/hate crimes under the new statutes. Hausner is in charge of this activity, and recognizes the importance of keeping the community informed about safety issues, as well as the importance of knowing the community itself.

"Our students come here with a lot of preconceived ideas, one of which is the role of police in their lives," he said. "In the years I've been here, I've seen the pendulum swing both ways. Students entering college now saw the Rodney King beating tapes while they were in high school, just as students in the 1960s saw the violence at the Democratic national convention. Some may bring that image of police here with them," he added.

"Our job is to get closer to the students, let them see us, talk to us and know what we can do. We need their input."

Programs keep campus informed

Increasing crime prevention awareness on campus is one of the most important priorities for officers in his department, Chief James Cunningham emphasized.

In addition to workshops for students that teach basic personal security techniques, including rape prevention measures, Operation I.D. and key and bicycle registration, Cornell Police issue "crime alerts" to notify people on campus of particular crime risks. The department works with the Dean of Students office and Residence Life personnel to circulate information that can include flyers and presentations by officers.

Two of the most pressing safety issues investigators are currently focusing on are the "hooded intruder" investigation and the number of thefts on campus.

"We have an active investigation under way in the hooded intruder case," said Cunningham, referring to the culprit who over the past 20 months has entered the rooms of sleeping female students in several campus residence halls, in some cases fondling them. All witnesses have said that the intruder covered his face when he entered their rooms. Cornell investigators are consulting with other law enforcement agencies as the investigation continues.

"In each of the 22 reports we have received on hooded intruder incidents, the intruder entered an unlocked room," Cunningham said. "We have an active safety awareness program under way to remind students that they should always keep their rooms locked, not only to thwart intruders but to safeguard their belongings from theft."

"Students can help safeguard their own safety by taking responsibility for ensuring that outside doors of their residence halls or apartment buildings are kept locked, and immediately reporting any suspicious persons to the police," he said. Senior Investigator Scott Hamilton added that in some cases victims waited several days after an incident before contacting officers.

"Working together, the Cornell Police and students can help to make the campus as safe as possible," Cunningham said.

—Linda Grace-Kobas



Chris Hildreth/University Photography

Officer Karen Smith chats with Andrea Aronoff '95 (center) and Liz Tukman '94 in Collogetown. The two College of Human Ecology students were participating in a trust-building exercise that had Tukman blindfolded while Aronoff escorted her. Smith was checking to make sure that they were all right.

12 universities seek reversal of nuclear reactor licensing fee

By Larry Bernard

Cornell has been joined by 11 other universities and colleges in asking the Nuclear Regulatory Commission (NRC) to reverse its decision to charge annual license fees for reactors operated by educational institutions.

The NRC said in June that it would impose the fees, and in August issued bills for \$62,100 per reactor to research and educational facilities nationwide, which formerly were exempt from licensing fees. The news that Cornell would have to pay \$124,200 "was a bit of a shock because we did not know it was coming," said David D. Clark, professor of nuclear science and engineering and director of the

Ward Laboratory of Nuclear Engineering, which operates two reactors.

A dozen universities, led by Cornell, on July 30 petitioned the NRC to reconsider the decision that took away the exemption. The NRC has not ruled on the request.

In a July 16 letter to the NRC, Norman Scott, vice president for research and advanced studies at Cornell, called on the agency to continue its long-standing policy of exempting license fees for non-profit educational institutions.

"By training scientists and engineers in all fields of nuclear science, and by providing non-proprietary research, nuclear science and engineering programs at institu-

tions of higher learning benefit all licensees of the NRC, as well as government and the public at large," Scott wrote. "Any fee policy which would call for annual licensing fees on university reactors imposes a burden on these institutions which they are completely unable to recoup."

He concluded that while removing the exemption may help the federal budget in the short term, "in the long run it will deeply harm the advancement of nuclear science and engineering, many industries, the NRC itself and the vital national interest."

Cornell has a 500-kilowatt TRIGA reactor and a 100-watt zero power reactor, operating for 30 years for undergraduate and

graduate teaching and for research. One area in which Cornell has led among U.S. universities is in the development of a "cold neutron" beam, a new kind of probe for studying materials. Cornell is the only university to have such a facility; the only other such beam is at the National Institute of Standards and Technology in Maryland.

Other Cornell projects include using radiography to map layers of pigments on paintings from sketch to final version; radiography to study water distribution between the soil and roots of plants; archaeological studies of pottery shards and metallic artifacts; and material quality studies for semiconductor device fabrication.

New mussel is traced to Ukraine

By William Holder

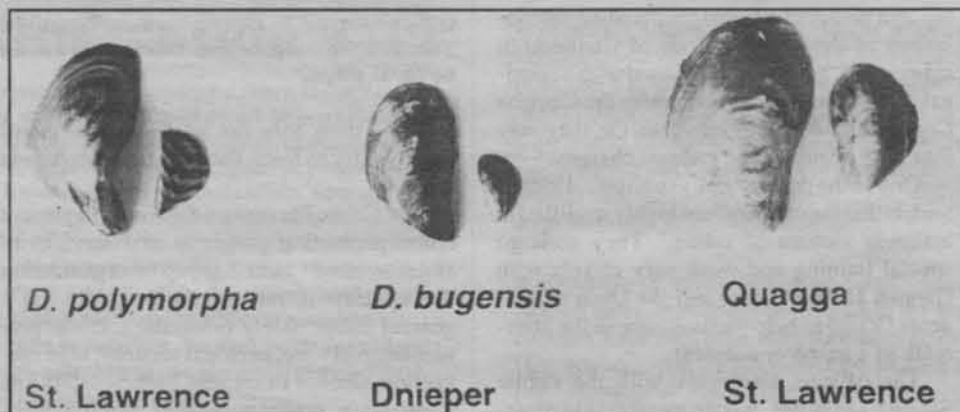
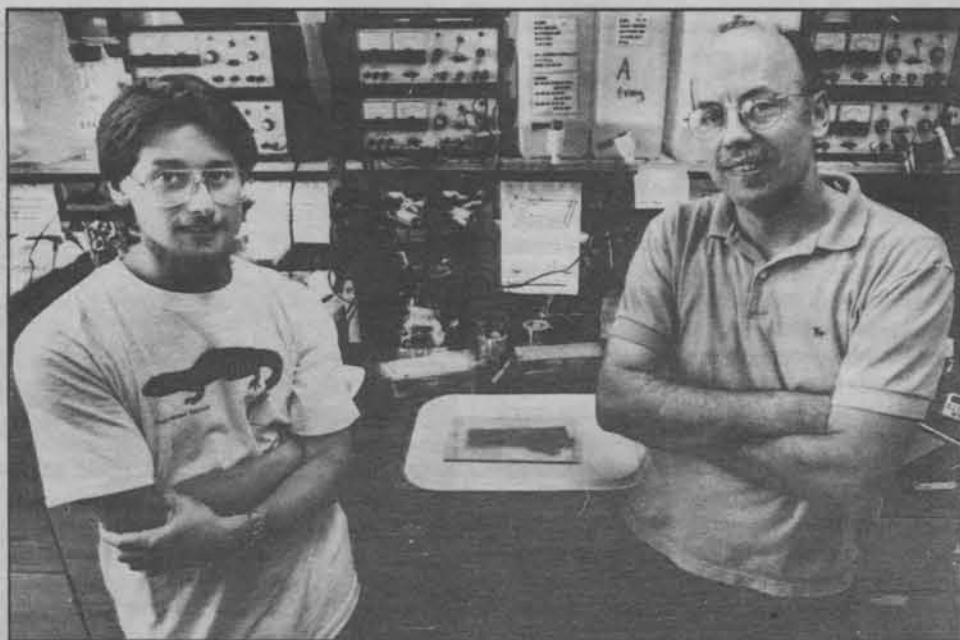
Serendipity has enabled a Cornell scientist to identify a species of mussel introduced to the Great Lakes as an unwanted import from Ukraine.

So far as known, the quagga mussel – a close relative of the pesky zebra mussel – resides outside the Great Lakes only in the Bug and Dnieper rivers, which drain from Ukraine to the Black Sea, according to Bernie May, director of Cornell's Laboratory for Ecological and Evolutionary Genetics.

May and his colleague, J. Ellen Marsden of the Illinois Natural History Survey, were first to detect in August 1991 a new species similar to the zebra mussel. The quagga differs slightly from the zebra mussel in the shape of its shell and in protein variability. Named for an extinct species of zebra with striping on its head and shoulders, the quagga should not be confused with the quahog, an edible clam.

May, who teaches undergraduate courses on the detection of genomic variation, and Cornell graduate student Adrian Spidle stumbled on to the identity of the quagga when they were asked to run tests on tissues that another researcher had collected from supposed zebra mussels gathered in Ukraine. Since the shells had been discarded, the Cornell researchers had no reason to believe the mussels were anything other than zebras. But routine tests on protein variability, which provide a kind of biological fingerprint, revealed an exact match with quaggas taken from Lake Ontario. To confirm their identification, Spidle contacted scientists in Ukraine and obtained additional mussel samples from the Dnieper River.

"We had no doubt that we had pinned down the correct identification," May said. "We're fairly sure the quagga is not found elsewhere in the former Soviet Union since scientists



Graduate student Adrian Spidle (left) and Bernie May, director of Cornell's Laboratory for Ecological and Evolutionary Genetics, have identified a species of mussel introduced to the Great Lakes as an unwanted import from Ukraine. The quagga mussel, also known as *Dreissena bugensis* (at center and right, above) differs slightly from the zebra mussel (at left) in the shape of its shell and in protein variability.

Photographs by Peter Morenus/University Photography

there have looked pretty hard. The quagga mussel can now correctly be called *Dreissena bugensis*."

The good news for many waterways in the United States is that the quagga is less tolerant of warm water than the zebra mussel, the researchers say. This means that the quagga is less likely to migrate southward or infest waters where temperatures rise above 25 degrees Celsius (77 degrees Fahrenheit). Working with Edward Mills, a senior research associate at Cornell's Biological Field Station, the team has found that zebra mussels predominate in surface and shallow water in Lake Ontario and Lake Erie, while the mix changes to predominantly quagga mussels as depth increases.

Still unknown, May pointed out, is the extent to which the quagga will penetrate northern waters such as Lake Superior. In Lake Ontario the populations of quagga and zebra mussels are roughly even. Quaggas also are present in the St. Lawrence River down to Quebec City in Canada.

The zebra mussel (*D. polymorpha*), named for its striped shell, has proved to be a serious pest by clogging industrial water pipes and machinery and has greatly diminished the phytoplankton population of Lake Erie since its discovery in 1986. Zebra mussels have migrated from their point of origin in Lake St. Clair to New Orleans, but have not thrived in Lake Superior.

Prenatal intervention found to be cost-effective

By Susan Lang

In addition to providing significant gains in health and well-being, nurse home visitation programs to low-income pregnant women and new mothers can pay for themselves, even when the investment in the intervention program is substantial, a new Cornell University/University of Rochester cost-benefit analysis of a model program in Elmira shows.

The home visits pay for themselves because they result in fewer additional pregnancies for the mother during the child's first four years, fewer cases of child abuse and neglect, less dependence on welfare programs, and fewer emergency room visits, the study found.

"The encouraging finding is that this program's demonstrated significant benefits for families and society – benefits that one might be willing to pay something for – appear to be achievable for those groups most at risk, with no net increase in government spending," says Charles Henderson, senior research associate in the College of Human Ecology.

Henderson, in collaboration with David Olds (Cornell Ph.D., 1977), associate professor of pediatrics at the University of Rochester Medical School, examined through a statistical analysis the governmental expenditures and savings in the Prenatal/Early Infancy Project, a widely emulated nurse home visitation program carried out in Elmira. One-hundred-sixteen first-time mothers who were pregnant in 1978 to 1980 and received the program services were compared to a control group of 184 mothers.

The study is published in a recent issue of *Medical Care* (Vol. 31, No. 2, pp. 155-174).

Nurse visits

In the original randomized trial, based at the University of Rochester and also carried out by the researchers, nurses visited the women every two weeks during pregnancy and through the children's second year of life. They discussed nutrition, prenatal care, developmental stages and needs of children, and other health, behavioral, and psychosocial conditions that could affect maternal and child well-being.

The cost-benefit analysis examined, through the children's fourth year of life, factors such as visits to emergency rooms; the timing and number of subsequent children; use of social programs such as Aid to Families with Dependent Children (AFDC), food stamps and Medicaid; intervention by child protective services; and the tax revenues received by government from women who returned to or began work.

Henderson and Olds calculated that, by the time the children were 4, the government had spent \$3,313 less per family in the low-income groups for those who were enrolled in the home visitation program than for their control-group counterparts. When the average cost per family of the program was subtracted from those savings, the net dividend realized by the government was \$180 per family.

Eighty-two percent of the savings was from reduced AFDC (56 percent) and food stamp (26 percent) payments; 11 percent was saved in Medicaid costs; 5 percent represented increased tax revenues; and 3 percent of the savings came from fewer child abuse and neglect cases.

Family planning

The researchers found that about one-third of these savings were the result of fewer subsequent pregnancies in the nurse-visited women, due to increased family planning education.

Because the Elmira sample was primarily rural and white, the researchers are currently replicating the study with more than 1,100 urban and primarily African-American families in Memphis, Tenn. They are just beginning a similar study in Denver to determine whether using paraprofessionals yields as great a benefit as using nurses, and a follow-up study with the original children, now in their teen-age years, to determine the intervention's long-lasting benefits.

CORNELL
Research

Process uses plants to clean sewage water

By William Holder

A new sewage treatment process developed at Cornell that uses hydroponically grown plants to clean the water performs up to 10 times better than current municipal waste water treatment systems, researchers said.

A four-year pilot test of a system to recover energy and biomass from sewage showed that it could cut or eliminate the burdensome waste water treatment expense to cities, the researchers added.

William Jewell, professor of agricultural and biological engineering, said he is confident the system could handle waste water treatment for any municipality and even has suggested that New York City's waste water could be piped to an area upstate where it could be used to create a "water park."

He and his colleagues are documenting their study with a two-volume, 900-page report being published by the Gas Research Institute in Chicago, which funded the \$1 million project along with Walt Disney Imagineering and the New York State Energy Research and Development Authority.

The researchers' system relies on two steps: removal of toxics and suspended solids from waste water using an anaerobic microbial film that produces methane gas and removal of excess nutrients using hydroponically grown greenhouse plants.

"I don't envision energy and biomass recovery systems looking like typical public works facilities," said Jewell, who teaches two courses on treatment and disposal of agricultural wastes. "Waste water treatment systems of the future will look more like parks, with extensive plantings and wetland areas."

Data gathered during the pilot program (1986 to 1991) at the Ithaca municipal waste water treatment facility show that a resource recovery system could generate \$100,000 of methane gas for every 10,000 people in the treatment area. Virtually any kind of plant can be grown on the nutrient-rich stream in the second-stage of treatment.

Hydroponic cattails contained three to four times the nutrient value of wild varieties, while irises grew four times as tall as wild varieties and remained green throughout the winter, Jewell reported.

His co-authors are research associates Robert J. Cummings, Timothy Nock, Earl E. Hicks and Thomas E. White.

"The total system was shown to be capable of producing among the highest quality water ever observed with natural, biological, microbial and plant-based systems," they wrote.

The "swimming pool quality water" had one-tenth the level of nitrogen and phosphorus commonly found in effluent from waste water treatment facilities and natural wetland treatment processes. This high-quality water required no further treatment before discharge, unlike other plant-based systems.

In addition, the system produced only 40 percent of the sludge created by a conventional biological treatment plant. Because disposing of sludge is a significant expense, "this benefit by itself makes the system economically attractive."

The pilot system handled up to 10,000 gallons per day of waste water diverted from the incoming stream to the Ithaca plant, subjecting the system to a grueling real-world test that achieved stability year after year, the researchers said.



William Jewell, professor of agricultural and biological engineering, stands at the Ithaca municipal waste water treatment facility with a plant grown on the nutrient-rich stream in the second-stage of sewage treatment.

Ring around Jupiter ejects interplanetary dust

By Larry Bernard

Dust jet streams emanating from Jupiter come from a ring around the planet, not from one of its moons or from the planet itself, according to Cornell astronomers who developed a model to explain data taken by the Ulysses spacecraft.

When Ulysses flew past Jupiter in February 1992, it found that very fine particles were emanating from the planet very quickly. But the streams—six of them, at least—last only a day and came every 27 or 28 days.

"This was very curious," said Joseph A. Burns, professor of astronomy and of theoretical and applied mechanics. "It's not just that these dust jets were coming very fast, but they were coming periodically. That had to mean something."

To explain this phenomenon, never before seen in the solar system, Burns and Douglas P. Hamilton, a doctoral student in applied and engineering physics, studied the forces affecting dust and found that only particles of a certain size were "eligible" to escape Jupiter's gravity, and that those particles probably came from a ring around Jupiter. They reported their model on Aug. 19 in the journal *Nature*.

According to the researchers' model, particles are accelerated away from Jupiter by electromagnetic forces. "If the particles are too big, their motions are dominated by gravity and the particles stayed near Jupiter. If they are too small, they behave like ions and are trapped in the planet's magnetosphere," Hamilton said.

But if the particles are the appropriate size and have the expected electric charge, "they

are accelerated away from the planet," said Burns, who this fall will teach a course in applied mathematics to undergraduate engineering students.

By using the sizes and speeds of the particles as measured by Ulysses, the scientists could tell where they came from—in this case, a ring of dust and planetary debris called the gossamer ring, about 2 planetary radii from Jupiter—where bits and pieces of material collide and, when worn down to the right size, are thrown out in these ultrafast jets.

After the dust escapes Jupiter, its motion is dominated by the solar wind's magnetic field. The periodic nature of the jets appears to stem from periodicities in the solar wind, which in turn are due to the sun's rotation. The solar rotation period of about 28 days agrees well with the spacing between dust streams, the

researchers note.

"The motion of the particles in the solar wind is like that of a ship on the ocean. The ship moves forward steadily, but these waves keep coming periodically forcing the ship up and down," Hamilton said.

This new model indicates that volcanic eruptions on one of Jupiter's moons, Io, are not likely to be responsible for the dust jets, as other scientists previously suggested. Said Burns, "At first sight, this is just bizarre. Electromagnetic forces usually are ignored. But these detections show they are important near Jupiter. All the data are consistent with these dust jets originating in the gossamer ring."

A dust detector designed at the Max Planck Institute in Germany made the studies possible.

Navy anti-submarine network lends an ear to counting whales

By Roger Segelken

Marine mammal researchers from Cornell are eavesdropping on whales throughout the North Atlantic Ocean and are taking steps toward a more accurate census, thanks to a network of listening devices once reserved for detecting enemy submarines—the U.S. Navy's Integrated Undersea Surveillance System.

"The results have been nothing short of incredible," Christopher W. Clark, director of the Bioacoustics Research Program, said in a July 25 report to the Animal Behavior Society's annual meeting in Davis, Calif.

Vocally active

"We recorded more than 35,000 whale detections during the first three months of the study. We're finding that blue and finback whales are vocally active throughout the year—not just in the winter and spring—and that their infrasonic sounds are detectable over hundreds of miles," Clark said.

The Navy-sponsored experiment, Whales '93, began last November.

Clark, an electrical engineer-zoologist in the Laboratory of Ornithology, pioneered a sound-based technique for counting bowhead whales as they migrate under Arctic ice.

The technique found twice as many of the endangered whales as had ever been counted visually.

Then, in November, the Navy called on Clark to head the marine mammals section of Whales '93. The Integrated Undersea Surveillance System is also being used for recording ocean floor earthquakes and volcanoes, directed by Clyde Nishimura, a geophysicist at the Naval Research Laboratory in Washington, D.C.

"Before Whales '93, land stations were recording fewer than 10 seismic events a month in the North Atlantic," said the Navy's project manager, Cmdr. J. Dale Liechty.

"We recorded more than 45,000 seismic events in the first six months, and tens of thousands of whale contacts."

With the end of the Cold War, Liechty explained, using the undersea network to hunt

whales and earthquakes as well as submarines "maintains the skills of our operators and prevents degradation of the equipment. We are developing a data set so that we know where the whales are and we don't bother them with our exercises."

The surveillance system involves networked arrays of "passive" underwater microphones—they produce no sound like sonar, but only listen. For security reasons, the Navy will not divulge other details.

Once the system's operators learned to listen for more than man-made noises, they got an earful: The low-frequency calls of blue whales, when speeded up more than 10 times to make them audible to human hearing, sound like bird chirps.

Equally distinctive are the speeded-up calls of minke whales, a clicking that reminds listeners of a subway train and earned them the nickname "the A Train."

Besides audio signals, the surveillance system also produces sonogram images and computerized data for further analysis.

Pinpointing locations

The anti-submarine network is particularly adept at pinpointing the locations of sounds.

"We were able to track one blue whale for 43 days," Clark reported. "We are now able to describe the acoustic repertoires, seasonal distributions and migrations for blue, finback and minke whales throughout the entire North Atlantic Ocean. Whales have the sound-producing mechanism to 'illuminate' an ocean."

The swords-to-plowshares research was widely reported in the news media, including the Cable News Network, National Public Radio, *New York Times*, *Boston Globe* and *Science* magazine.



Sharon Bennett/University Photography

Christopher W. Clark, director of the Bioacoustics Research Program, is eavesdropping on whales throughout the North Atlantic Ocean, using military technology. More than 35,000 whale detections were recorded during the first three months of Whales '93.

Cornell study explores 'acceptable' sexual behavior among children

By Susan Lang

As children get older, some sexual behaviors are considered increasingly "unacceptable" by professionals who work with children, according to a Cornell study. Male professionals, however, view more behaviors as acceptable for 8-year-olds, possibly because boys engage more frequently in sexual behavior at this age.

In a related survey, at least 20 to 40 percent of college students recalled engaging in sexual behavior as children, such as showing genitals or fondling other parts of the body (legs, back or stomach). By age 13, most had had at least one sexual experience with another child.

In general, professionals who work with children say sexual behaviors are acceptable among 4-year-olds. Fewer professionals say that these behaviors are acceptable for 8-year-olds, and even fewer say that they are acceptable for 12-year-olds, says Jeffrey Haugaard,

assistant professor of human development and family studies in the College of Human Ecology.

While much attention has been paid to the issue of coercive sexual activity of children, little has focused on the types of non-coercive sexual behaviors between children, and which behaviors should be encouraged, tolerated, discouraged or forbidden.

This research provides some initial benchmarks on what kinds of uncoerced sexual behaviors between children may be considered "normal" by parents and professionals who work with children, and which behaviors are inappropriate and unacceptable and may be a source of concern.

Haugaard presented the findings to the Children's World Learning Centers' conference, "Child-to-Child Sexual Behavior Within Early Childhood Settings," in April in Denver.

The study is based on 350 questionnaire responses from pediatricians, elementary

While much attention has been paid to the issue of coercive sexual activity of children, little has focused on the types of non-coercive sexual behaviors between children, and which behaviors should be encouraged, tolerated, discouraged or forbidden.

schoolteachers, 4-H club leaders, psychotherapists and authors of scholarly articles on sexual abuse, and on a separate questionnaire completed by 664 undergraduate students.

While male and female professionals agree

on what are acceptable sexual behaviors among 4-year-olds and 12-year-olds, significantly more men than women view some sexual behaviors as acceptable between 8-year-olds: 67 percent of male but 52 percent of female professionals viewed showing genitals acceptable; 15 percent of males and only 6 percent of females viewed genital fondling as acceptable for this age group.

In other findings: More than two-thirds of professionals felt that behaviors among 4-year-olds, such as undressing together, showing genitals and fondling others' non-genital areas, were acceptable because they were viewed as exploratory. Almost 40 percent of the undergraduates recalled showing their genitals to other children when they were age 6 or younger.

Five percent of professionals thought that fondling others' genitals was appropriate for 8-year-olds; more than 10 percent of the students remembered doing so at that age.

CORNELL
Research

Freshmen find friends in outdoor adventure

By Nancy Rosen

For the past three summers the Cornell Tradition has sent its freshman Fellows up the river, through the woods and into the mountains on Wilderness Reflections Orientation Trips.

This summer, the Tradition subsidized four of 20 trips sponsored by Wilderness Reflections, a student-run organization that offers incoming students a supplementary orientation experience prior to Cornell's formal orientation on campus.

Participants meet other freshmen and get to pedal, pack, canoe or climb their way through the backcountry areas of the Catskills, Adirondacks, White Mountains, Black Forest, Finger Lakes region or Maine.

"We feel very strongly about the importance of giving Tradition Fellows the chance to meet other Fellows before they get to Cornell," said Janiece Bacon Oblak, director of the Cornell Tradition.

"These trips provide an opportunity for freshmen to establish new relations without the pressure of getting registered. Moreover, they can enjoy the challenges of nature, thrive and enjoy their outdoor experience," she added.

The Cornell Tradition was founded in 1982 by an anonymous gift of \$7 million to recognize and reward outstanding undergraduates who demonstrate significant work experience, community service and scholarly achievement. Students who meet these standards can receive up to \$2,500 for academic year fellowships and summer fellowships up to \$1,960.

The Tradition trips and all rental equipment were free for Fellows. Students could choose from among a four-day backpacking trip to the Black Forest of Pennsylvania, two six-day backpacking trips to the Adirondacks and a six-day canoeing trip to the Adirondacks.

"I had met students at Cornell who told me they met their best friends on Wilderness Reflections trips. I had known I wanted to go on a WR trip for a long time and had the Tradition not paid, I wouldn't have had the chance," said Robin Pinsker, a freshman Fellow who went on the canoe trip.

This year the program sponsored the most trips since the program's inception in 1972. There were 230 participants, with 60 people on a waiting list. Chris Quinn, director, attributes the program's popularity to the increasing interest in outdoor education as a whole.

"One of the things that makes this program unique is that it is a student-run organization. Instead of mass trips with hired guides, each remains unique and special," Quinn said.

"Right now we're pretty much at capacity. There really isn't much room to expand in a program like this—you would lose some of the flavor," he added.

Wilderness Reflections tries to keep the back-to-nature flavor by stressing minimum impact, which dictates that while camping, people should minimize their ways of travel or any human action in the wilderness, so that anyone who visits afterward wouldn't know they were there previously, Quinn said.

The guides, all of whom have extensive outdoor experience, encouraged their trippers to respect the wildlife and carry out all of their refuse when they left campsites.



With visions of their peppermint candy rewards dancing in their heads, campers begin a 1.5-mile trek through the Adirondacks to the next body of water to be conquered.

Leaves make good toilet paper, but we can't

To chronicle the process of how a group of naive freshmen were transformed into hardy Cornellians, an asphalt-loving junior from Brooklyn tagged along on the Orientation Wilderness Reflections Program. Freshmen Ben, Ralf, Robyn, Cory, Sue, Kate, Heather and Angela were led through the rivers and lakes of the Adirondacks by guides Brian, a.k.a. Puck (nicknamed after Shakespeare's sprite), and Lisa, both seniors. The journalist feared she would be eaten by mosquitos and brainwashed into liking gorp while being forced to carry a heavy backpack.

This is her story.



The author, up the road without a canoe.

By Nancy Rosen

"Oh what fools these mortals be."

A Midsummer Night's

Day 1

Kate, who spent her summer as a lifeguard, was my canoe partner for the day. We redefined the distance between two points as a zigzag, and attributed our poor navigational abilities to a lack of rhythm. We decided to pass away the hours singing TV theme songs.

Our group originally was given tents to sleep in. Luckily Puck came to the rescue and demanded tarps. Pretty soon we're all in danger of inflatable air mattresses, he said. I shuddered at the thought.

We made stir-fry for dinner and Lisa instructed me on how to clean dishes. Her secret: combine dirt with water, and voila, a sponge! I vowed her not to let *Good Housekeeping* or my mother hear about this.

Day 2

My first night in the wilderness. Bugs the size of 747s did maneuvers by my ears. I fell asleep for several hours until I heard an animal scamper outside the tent. I heard my prayers to leave.

We drink water straight from the river after we destroy all the critters with an iodine pill. I hope it will destroy the most-feared microorganism *Giardia*, which causes the worst case of gastronomic upset.

After the iodine pill does its magic, the water still contains particles functionally named swimmies, sinkies and floaties. To make water had all three, so I just added loganberry drink mix until I could drink them.

Sue and Cory and I barely made it through our canoe carry, a task that involves carrying a 60-pound backpack on your shoulders and over your head. We collapsed at the end but we got a treat — sour piece of hard candy is not going to make me lug a canoe over my head again.

We had burritos for dinner. Strangely enough, they tasted earthy.

Day 3

In the interest of preserving nature, we packed out, all our garbage. To further decrease our impact, we promised not to use toilet paper. Let's face it, good, our guides told us. Unfortunately, we have camped in a place where we can't use toilet paper.

Sue said she wished that she was back in civilization. We both felt ashamed at missing our beds, our showers, and our refrigerators. Our trippers are faring better with nature. Ralf told Angela not to touch a large rock for fear of destroying some little buggy's home. An engineering student, built homes for insects out of mushrooms, twigs and bark. Sue has discovered that the combination of leftover from boiling pasta and powdered cocoa tastes like Duncan Hines late cake.

Lisa Mills

College will be cake



Letting the water carry the canoes was a lot more fun.

The cast of characters

The student participants on Cornell Tradition's Wilderness Reflections canoeing trip and their hometowns are:

Catherine Cable, Deposit, N.Y.; Susan Crisfield, Youngstown, N.Y.; Ralf Leidner, Patchogue, N.Y.; Angela Moore, Anchorage, Alaska; Lisa Mills, Darien, Conn.; Brian "Puck" Penney, Goffstown, N.H.; Robyn Pinsker, Dunwoody, Ga.; Corrina Sturdevant, Lisle, N.Y.; Benjamin Sugam, Belle Mead, N.J.; and Heather Ziegler, Lansdale, Pa.

Photographs by
Nancy Rosen

ed in a pine forest

I began to feel real kinship with my camping companions. Many of them said they were nervous to begin college, but I reassured them that after this trip, college would be cake.

Day 4

Ralf and Heather, armed with river map and compass, guided us to a campsite on Forked Lake. Puck told us about dead lakes, areas of the water where wildlife died because of acid rain. The lakes we traveled were victims; I recall having seen only two minnows so far.

I almost cried at a second canoe carry because we had polished off the sourballs that morning. I fell over backward with my pack on, but I persevered and received a peppermint candy at our destination. (Ignore the previous note undermining the value of candy.)

We chatted over a crackling campfire about old boyfriends and girlfriends and high school activities. It was a mellow, foggy evening as we heartily enjoyed potato soup and dined on the epitome of campfire cuisine — s'mores!

Day 5

After five nights under the tarp, I suggested that we go to the Adirondack Holiday Inn and pack out the towels and soap.

I was pleased to discover that gorp is not bioengineered food for nature lovers. It's a wonderful combination of granola, M&Ms and raisins. Ben went a little crazy in the canoe after the gorp was passed to him containing only a few granola crumbs.

At last I feel comfortable with my surroundings and am encouraged by my fellow trippers, who refer to me as the "wilderness authority." Even the most rugged of my companions have expressed the need for civilization (read: indoor plumbing). Armed with a small shovel, we make our way through the woods. Angela called this task a "trowel movement."

Day 6

We arrived at a park near Trumansburg to meet students on the other trips at what Wilderness Reflections calls "Camp-o-Rama." Our group mingled with other trippers and watched as one group ran into Cayuga Lake wearing only rain ponchos.

It was difficult for us to believe that a whole week had passed. We reminisced underneath the stars and discussed our impending showers, registration fears and plans for meeting up again on campus after our journey was over.

Puck and Lisa asked if we would do a trip like this again. Everyone agreed that the trip made the transition from home to school much easier. Tomorrow they would be ready to meet several thousand other Cornellians.

Epilogue: While waiting for the bus to take us to Camp-o-Rama, a man and his wife from Binghamton approached us and related that they first camped out in these mountains in 1926. "Hike when you can and go back 20 years later to reminisce," said the wife.

In about 20 years, I'll be ready.



The breakfast of champions: bagels, Grape-nuts and powdered milk.



Dinner the way mom used to make it? Vegetable stir-fry over an open flame.

'Professors in film' discuss issues with freshmen

Bernal says Greek culture had its origins in Africa

Editor's note: This year's freshman orientation included the showing of five films that involve Cornell professors, with the professors on hand to discuss the films' themes. These stories cover two of those talks, by Professors Martin Bernal and Joan Jacobs Brumberg.

By Ericka Taylor

The second movie in the orientation series "Cornell Professors in Film" may well have had the most controversial subject. The film *Black Athena* explored both sides of the debate around Professor of Government Martin Bernal's book of the same title.

In his book, Bernal argues that much of Greek culture originated from Africa. He claims that, though arrogant, the ancient Greeks were aware of this truth and gave Africa appropriate historical credit. Bernal further claims that, during the last 200 years, scholars, initially working from racist motivations, created a myth denying the African and Asian origins of Greek culture.

The ancient model of Greek history didn't

fit the world view of the 19th century, Bernal says. Europe and the United States were in the midst of the slave trade, so it would not have been practical to acknowledge that the ancestors of the slaves helped establish Western civilization. It was better instead, he suggests, to insist that Greek culture was primarily Indo-European, or Aryan.

Bernal says that he wrote the book to set the record straight and to remove any validity from the idea "always implicit and sometimes explicit, that democracy is at home only in Europe."

The film explores the vast array of reactions to the book, favorable and not.

Bernal is accused of being so overzealous in his work with etymology that he "makes the language fit whatever conclusion he wants." He is also accused of trying to make a guilt-induced attempt to "give blacks their day of glory" where there is none.

Some credit him with having done thorough research and creating a necessary dialogue. There are those who agree that Homer acknowledged the African foundations of Greek culture. Others support his contention



Peter Morenus/University Photography

Professor Martin Bernal (center) talks with Richard Hershkowitz (left), director of Cornell Cinema, and graduate student Thaveeporn Vasavakul at last week's showing of "Black Athena" as part of freshman orientation.

that Herodotus wrote that the names of nearly all the Greek gods came from Egypt, and he was known as the father of history.

But then, of course, there are those who point out that Herodotus was also known as

the father of lies.

Most of the scholars in the film, regardless of their stance about the information, said that there is probably no way that Bernal's theory can ever be proved or disproved.

Many dieting women do not need to lose weight, Brumberg says

By Ericka Taylor

At any given time, almost one out of every two American women is on a diet. Is this a trend guaranteed to increase the health of half the population?

According to Katherine Gilday's documentary, *The Famine Within*, it is instead indicative of women's obsession with body image and has frightening implications.

Cornell Professor Joan Jacobs Brumberg is featured as an expert witness in the film, which was shown as part of Cornell's orientation experience, "Cornell Professors In Film." Brumberg introduced the film and answered questions from the audience afterward.

For many dieting women, losing weight is

neither necessary or practical. A large-scale survey of young women revealed that 75 percent considered themselves overweight while, in reality, 45 percent were underweight.

This is not surprising when considering that most women measure themselves by an unrealistic standard — that of models. The average woman stands five-foot, three-inches tall and weighs 144 pounds. The average model is usually between five-foot, 10-inches and six feet tall and weighs between 115 and 120 pounds.

Frighteningly, the struggle for the ideal body is no longer confined to women.

A California study of 9- to 11-year-old girls revealed that half of the 9-year-olds and 80 percent of the others had already been on at

least one diet.

The film explores anorexia nervosa, an eating disorder in which a person is unable to control the urge to lose weight.

Anorexia is just a "point on the spectrum" of severe emotional and physical problems caused by striving for the perfect body, according to Brumberg, professor of human development and family studies and of women's studies, who was featured as an expert witness in the film. It also has a 15 percent death rate, one of the highest among psychological disorders.

Brumberg commented that feminist gains haven't improved the issue. Although women have made considerable gains in education and are now "fulfilling themselves in the

workplace, that doesn't dilute the emphasis on the body."

Now the situation is even more dangerous, she says, because the "most recent variation is the most demanding — the toned, fit, muscled body." The problem with using fitness as a weight control device is that women are adding physical strain to an already improperly nourished body.

Brumberg was asked to speak in the film after the producer read her book *Fasting Girls*. It is the only historical account of the origin of anorexia nervosa and traces the disorder back to Britain, France and the United States in the 1870s. Affluence and class structure was significant in the spread of the disease then, as well.

Professor Oliver *continued from page 1*

Addressing criticisms against institutional science, Press said that the economic strength of the nation depends on its leadership in science and technology.

"The sole advantage of the United States may well be the scientific strength that arose from the golden age of science," he said. "This criticism, coming from what I call the counter-culture, is that scientists have little to do with America's economic growth, that scientists form a self-conflicted constituency more interested in themselves."

He said he disdains such talk. "For our country to look away from the golden age of science . . . would be a mistake of historic proportion," Press said.

During that golden era, after World War II, universities expanded and flourished. "The U.S. rapidly assumed world leadership in science. It cannot be said that science did not deliver." For example, geological science, in trying to profile the Earth's crust under the sea, led to the ability to detect nuclear explosions and pioneered offshore oil explorations, he said.

Drake, the Dartmouth geologist and former member of the President's Council of Advisors on Science and Technology, talked on "Earth Science in the Nineties: Models, Magritte, Mindsets, Media, Money, Manpower, Malthus and Metamorphosis."

He described how models do not always reflect reality and science needs to make that clear to the public. Using allusions to the art of Renee Magritte, Drake showed how even scientists may "pay more attention to image than reality."

"The media have different needs than we do," he said, citing as an example in 1976 the story that we're heading toward glaciation, but now stories say we're experiencing global warming.

Drake also described how prediction models are not always good enough for public

policy. Flooding of the Colorado and Mississippi rivers illustrate that, he said, but predictions of weather, earthquakes and offshore oil potential all use probabilities so that the "statistics give the impression of reality."

He added, "The future doesn't look all that terrible to me."

Rhodes, in a talk titled "Universities: Trashing a National Treasure," outlined how universities can change and respond to the notion that higher education is not doing its job. The nation's research universities must change the way they educate and serve to respond to recent criticism of higher education in books and in public policy, he said.

"We need to respond to these criticisms with thought. Our response so far has been silence, or a muted response," Rhodes said, outlining what he saw as four principles to guide universities through a difficult time: Quality, cohesion-integration, service and cost.

"Quality really is Job One," Rhodes said. "But we're a fragmented community, a proliferation of individual groups on campus. We need an intellectual coherence. And we've forgotten the fact that we're a service community, a service to our students. And we have to watch costs."

"We need to develop a clear, shared mission. Define what it is we do, our values and

goals," he said. "We have to recapture the curriculum from individual professors who have claimed it for themselves. We need to eliminate boundaries. We've got to get back to service for our students, and we need to get a grip with costs."

To do so, Rhodes recommended that universities adopt three affirmations: "Scholarship is a public trust; service is a societal obligation; and teaching is a moral obligation."

The lectures were followed by an open house at the Department of Geological Sciences in Snee Hall.

Oliver, 69, has been at Cornell since 1971. Former chair of the geology department, he was elected to the National Academy of Sciences in 1984. His research focused principally on seismic wave propagation, the physical properties of the Earth's crust and the deep structure of the Earth beneath the tectonic plates. He used earthquake-induced surface waves to study the Earth and helped devise the theory of plate tectonics. More recently, he has been involved with using seismic waves to explore deep structures of the Earth's crust.

Oliver earned an undergraduate degree in 1947, a master's in 1950 and a doctorate in geophysics in 1953, all from Columbia University. He was on the faculty there until 1971, when he came to Cornell to head its newly reorganized geological sciences program. He helped found the Consortium for Continental Reflection Profiling (COCORP) at Cornell, a National Science Foundation-sponsored research project to profile the Earth that inspired similar programs all over the world. Oliver also founded the Institute for the Study of the Continents (INSTOC) at Cornell.

He was a member of the U.S. delegation at international discussions in Geneva on the nuclear test ban treaty in 1958 and 1959, and is past president of the Seismological Society of America and Geological Society of America.



Peter Morenus/University Photography

Cornell geophysicist Jack E. Oliver (second from left) was honored Saturday during a symposium at which three distinguished geologists spoke. They were Frank Press (left), former president of the National Academy of Sciences; Charles L. Drake (second from right), professor of earth sciences at Dartmouth College; and President Frank H.T. Rhodes, professor of geological sciences.

Historian to hold Sept. 6 teach-in on Roe vs. Wade

By Linda Grace-Kobas

Reviving a type of forum popular in the late 1960s, a Cornell historian hopes to engage students of the 1990s in a "confrontation of ideas with ideas" during a Labor Day teach-in on Monday, Sept. 6, from 1 to 6 p.m. in Barton Hall.

The topic of the teach-in will be the landmark case *Roe vs. Wade*, an issue that can generate passionate debate on nuances even among people who generally agree whether a woman should have the right to choose to have an abortion.

"A teach-in tends to focus discussion and arguments in a reasonably short time, so you get a whole range of opinions," said Paul Hyams, associate professor of history and director of the Law and Society Program, which is an undergraduate concentration in the College of Arts and Sciences.

"*Roe vs. Wade* highlights many relevant contemporary issues that inform American law and society. While we cannot resolve all the questions, the teach-in is an attempt to present points of view from all around the spectrum on a wide range of aspects of a very difficult case and passion-inspiring question."

The 10 invited speakers hold a variety of views on *Roe vs. Wade*, and most are from Cornell. Hyams emphasized the wealth of expertise that will be represented at the teach-in.

"One of the reasons I chose the teach-in form is that it makes use of all the resources of the university," he said. "Cornell possesses a vast number of remarkable faculty. The opportunity to bring them together across disciplinary boundaries was one of Cornell's great attractions for me."

Hyams, who came to Cornell from Oxford four years ago, is a medieval European historian who teaches undergraduate courses on conflict resolution and marriage and sexuality before 1500. He is working on a book about violence and blood feuds titled *Rancor and Reconciliation: Violence and Its Motivations in Medieval England*.

Another aspect of the debate that Hyams hopes students will focus on is the way American society has tried to resolve the issues surrounding *Roe vs. Wade*.

"One of the proper questions pertinent to the Law and Society Program is how this country puts into the courts questions that in other countries would be handled through the political process," he explained.

The Sept. 6 teach-in will be, as were its predecessors in the '60s, an informal affair in which speakers present their arguments, interspersed with discussion and debate from the audience. People can come and go, and come again, as their interest is engaged. The 1 p.m. discussions will be preceded by a lunch, to which participants are invited.

Kathryn Abrams, Cornell professor of law who co-organized the conference, and Hyams will moderate sessions of the teach-in. Making presentations will be Richard Baer, Cornell professor of natural resources; Daryl Bem, Cornell professor of psychology; Zillah Eisenstein, chair of the Department of Politics at Ithaca College; Margaret Farrell, associate professor of the Benjamin Cardozo Law School in New York City; Peter Nathanielsz, Cornell professor of veterinary physiology; Jeremy Rabkin, Cornell associate professor of government; and Gary Simson, Cornell professor of law.



Dr. James Law (seated at right), Cornell's first professor of veterinary medicine, teaches an early anatomy class in about 1898. The Auzoux model horse, which Andrew Dickson White brought back from Europe in 1868, could be disassembled into 97 pieces.

Vet centennial celebration begins Saturday

By Elizabeth Fontana

The College of Veterinary Medicine will observe its centennial throughout the 1993-94 academic year, beginning with a kick-off celebration on Saturday.

Veterinary medicine had been taught for 26 years at Cornell by the time New York Gov. Roswell P. Flower signed the law that established the college on March 21, 1894. It was the first state-supported college at Cornell.

Ezra Cornell's concern for the health of his own livestock so influenced his vision of a "an institution where any person can find instruction in any study" that he insisted on including a veterinarian among the original faculty.

The story of his shouting, "Don't forget the horse doctor!" when President Andrew Dickson White left to recruit faculty in Europe has become a favorite part of university lore.

The "horse doctor" was Dr. James Law, who arrived from Scotland in time for the fall 1868 start of classes. Law taught veterinary medicine and surgery to students who were working toward degrees in agriculture and biological sciences, as well as to those pursuing veterinary degrees. Cornell was the first American university to accord veterinary medicine equal rank with other sciences.

The first D.V.M. degree in the country was awarded by Cornell in 1876 to Daniel Elmer Salmon, who is now best

remembered for identifying the infectious pathogen that bears his name. The course of study included four years to earn a bachelor of veterinary science (B.V.S.) and an additional two years for a doctor of veterinary medicine.

That and subsequent history of the college will be recalled in the premiere showing of a video being produced for the Sept. 4 kick-off celebration. Archival photos, film footage and personal recollections of alumni and faculty are being assembled for the video, funded in part by the college's Alumni Association.

The college will continue to mark its anniversary with a three-day celebration March 20-22. The program will include the 1994 Cornell Annual Conference for Veterinarians with the formal centennial celebration. Continuing education programs at the conference will include two-and-a-half days of workshops by nationally known experts.

Most of the continuing education workshop presenters will be alumni, former residents, interns or faculty members. The centennial component of the program will include a special three-day luncheon series and a plenary session on "The Practice of Veterinary Medicine in the 21st Century."

Evenings will be reserved for social events with the Gala Anniversary Ball on Monday, March 21, as the highlight.

Information on the centennial celebration is available by calling 253-3747.

Law School professor sworn in as FBI general counsel

By Carole Stone

Law School Associate Professor Howard Shapiro was sworn in on Monday, Aug. 30, to the office of general counsel for the Federal Bureau of Investigation.

As general counsel, Shapiro will advise the bureau's new director named by President Clinton, Judge Louis Freeh, on legal matters such as ordering undercover activities and electronic surveillance, agency hiring and promotion practices, forfeitures and other legal and law enforcement matters.

The details of the job have not been worked out yet, Shapiro said, because the position of general counsel is a new one, created by Freeh, who takes over as director of the nation's top law enforcement agency on Sept. 1.

While the FBI's legal counsel division and its 75 attorney-agents will continue to handle day-to-day legal matters, such as representing the bureau in law suits and responding to Freedom of Information Act requests, the general counsel will work closely with Freeh to develop guidelines and standards for the bureau.

Shapiro, 33, was a federal prosecutor for six years and now teaches criminal law and evidence at the Law School.

He plans to remain in Ithaca until December or January, working for the bureau part time while teaching at the Law School. Then he will move to Washington, D.C., most likely on a two-year leave-of-absence from

the university.

Standing before Law School colleagues and a group of FBI agents from the Albany field office on Aug. 30 as he was sworn in,

Shapiro said, "Everyone who is here is fortunate enough to have one exciting and challenging job, and I am now particularly fortunate to have two."



Peter Morenus/University Photography
Law School Associate Professor Howard Shapiro (left), the new general counsel to the Federal Bureau of Investigation, takes the oath of office from John O'Connor, special agent in charge of the FBI's Albany field office.

Shapiro's oath of office was administered by John O'Connor, special agent in charge of the FBI's Albany field office—one of 56 field offices around the country.

"The school is pleased that Professor Shapiro's skill and knowledge have been recognized by Judge Freeh," said Law School Dean Russell Osgood.

"Howard brings tremendous dedication to the public interest and justice in the broadest sense of the word. He is a tenacious worker and a fair person."

Shapiro graduated from Yale Law School in 1985.

After clerking for Federal Judge Pierre Leval, Southern District of New York, from 1985 to 1987, he became an assistant U.S. attorney in the Southern District of New York, Criminal Division, from 1987 to 1992, where he worked on a wide range of cases and also met Freeh, who also worked in the Southern District.

Shapiro and Freeh also worked together for 14 months in 1990 and 1991 as special prosecutors investigating and successfully prosecuting the man responsible for a series of mail bombs that killed both a federal judge in Alabama and a civil rights lawyer in Georgia.

Shapiro came to Cornell last January and said of his semester here, "I enjoyed it immensely, and I was not looking to leave. But when he asked, it would have been foolish to pass up on it."

Taking a look back at Cornell's summer of 1993

Federal panel reviews plan for B factory

Cornell's proposal to build a so-called B factory for high-energy physics is about \$100 million less expensive than a competing proposal from Stanford, and that should be a significant factor in deciding where to build it, Karl Berkelman, director of Cornell's Laboratory of Nuclear Studies, told a federal panel here in July.

"It's clear that both Cornell and SLAC [Stanford Linear Accelerator Center] could build a B factory. Cost is an important factor in the choice of which B factory to build, and there is a real difference in cost," said Berkelman, professor of physics and nuclear studies.

Cornell and Stanford are vying for a particle accelerator, to be funded through the U.S. Department of Energy, that would produce large numbers of B mesons — fundamental particles of matter — to study the origins of the universe. A joint committee of the DOE and National Science Foundation, examining the technical merits of each proposal, was on campus for five days to hear Cornell's proposal; the committee was at Stanford the previous week.

The comprehensive technical review, submitted July 8 to the respective federal agencies, produced no recommendation but analyzed the proposals' capabilities, feasibility and completeness of the collider design, detector design, flexibility, and the ability to do the research, development and construction on schedule and within budget, as well as overall costs and value to the nation's science programs. Congress and the administration will choose the site, if the project is funded.

President Clinton's 1994 budget recommends \$36 million to the DOE for the project, but with the provision that the technical re-



Michael G. Billing, senior research support specialist in nuclear studies, leads members of a federal panel reviewing Cornell's proposal for a B factory on a tour of the Cornell Electron-positron Storage Ring last week.

view be completed before funds are allocated.

Cornell proposes to upgrade the Cornell Electron-positron Storage Ring, CESR, in the Wilson Laboratory. CESR is a particle collider 50 feet under the campus, with a ring that accelerates particles to collision so that the decays of the particles they produce can be studied. The upgrade to a B factory, CESR-B, would add a second ring, with one high-energy and one low-energy. The detector, called CLEO, also would be upgraded.

Cornell's proposal of about \$125 million is about \$100 million less than Stanford's, Berkelman said. Annual operating costs would be lower as well. The difference in cost is due primarily to the detector and ring size. While both proposals require addition of an accelerator ring, Cornell already has a detector in place, and the ring circumference is smaller than Stanford's, so it costs less to build.

On the committee's first day here (June 28), President Frank H.T. Rhodes told mem-

bers of the virtues of Cornell. "We have a university research budget of \$285 to \$300 million, and we're always in the top half-dozen in the country. We have a solid track record of research support."

He added that Cornell provides an "educational linkage" as well as one of the nation's leading producers of high-energy physicists, and he cited the interdisciplinary nature of research here.

Norman R. Scott, vice president for research and advanced studies, described the seven national research centers at Cornell and told the panel that Cornell does more than 20 percent of the academic research in New York.

The remainder of the presentation focused on technical issues. Maury Tigner, professor of physics and nuclear studies and project manager for the upgraded facility, detailed the project for the committee, describing the technology, the resources and labor.

—From the July 8 issue

Med students will train in Ithaca

Up to 20 students a year from the Medical College may come from New York City to Tompkins Community Hospital (TCH) for primary and ambulatory care training that is increasingly hard to get at major, urban teaching hospitals.

The new elective program, which started in August, was announced at a June 10 news conference by President Frank H.T. Rhodes and TCH President and CEO Bonnie H. Howell.

Rhodes said that the program reflects "Cornell's commitment to more vital interaction between the Medical College and the Ithaca campus and community."

The affiliation "will combine the best of both worlds for our physicians — both teaching and caring for patients," Howell added.

Medical College Dean Dr. Robert Michels said, "The Medical College welcomes this new affiliation and is especially pleased that it further strengthens the ties between Cornell's Ithaca and New York City programs. We look forward to the enrichment of our clinical and academic programs on both campuses."

Under the arrangement, TCH's new medical director will also hold an academic appointment at the Medical College and, as Rhodes and Howell noted, communication will be opened beyond the limits of the immediate program.

—From the June 24 issue

First Clark Professors are named

Ramona Heck of the College of Human Ecology and Theresa Welbourne of the School of Industrial and Labor Relations have been named the first J. Thomas Clark Professors of Entrepreneurship and Personal Enterprise.

A special Clark award has also been announced for history Professor Stuart Blumin of the College of Arts and Sciences.

The Clark Professorships are a key element of the Entrepreneurship and Personal Enterprise (EPE) Program, a cross-college effort to make Cornell a national leader in small-business and entrepreneurship education.

The professorships support faculty in developing or revising courses, developing outreach programs for small businesses, or conducting applied research — all with a small-business or entrepreneurial focus.

Heck, an associate professor in the Department of Consumer Economics and Housing, titled her two-year project "A Study of Families in Business Over Time." It involves examining the people and financial-success factors in family businesses, as well as the development of two new undergraduate courses based on the research.

Welbourne, assistant professor of industrial and labor relations, called her project "Human Resource Strategies for Small and Medium-sized Firms."

Over three years, she will develop undergraduate and graduate courses addressing the personnel decisions that start-up businesses face. She also will generate research on how important that decision-making is to the success of new businesses.

Blumin will receive funding this summer and next to help him develop, then evaluate, a new, two-semester course on "Capitalism and Society in the United States." The fall segment will be called "Developing America and the Ethos of Entrepreneurialism, 1607-1877"; the spring segment, "The Corporate Reconstruction of American Society, 1840-2000."

Clark said he was "delighted with the choices" and thinks the efforts "will move Cornell's Entrepreneurship and Personal Enterprise Program forward in an important way — linking various colleges and schools together to provide a truly distinctive interdisciplinary experience for students interested in achieving entrepreneurial success."

—From the July 8 issue

First three Weiss Fellows are announced

Three professors have been named the university's first Stephen H. Weiss Presidential Fellows in a new program that rewards distinguished undergraduate teaching.

President Frank H.T. Rhodes announced the new Weiss Fellows as Richard D. Aplin, professor of agricultural economics; James B. Maas, professor of psychology; and Mary J. Sansalone, associate professor of civil and environmental engineering, at a meeting of the Board of Trustees on May 29. (Sansalone was selected as the national Professor of the Year last fall by the Council for Advancement and Support of Education.)

As Weiss Fellows, named for the chairman

of the Board of Trustees, the three will receive \$25,000 each over the next five years to be used for any university-related purpose, and they will retain the Weiss Fellow designation as long as they remain at Cornell.

The three were among six outstanding professors selected by a committee that evaluated nominations of top teachers from juniors and seniors across the campus, as well as nominations from other faculty and academic staff. Rhodes selected the three winners.

"Selecting just three Weiss Fellows was a formidable task, given the many strong candidates that came to our attention," Rhodes said. "Significantly, those most qualified to serve

as Weiss Fellows on the basis of their teaching also had strong records in research and public service. By their achievements and their example, they confirm that excellence in teaching extends and enhances excellence in other spheres. I am delighted that, through the generosity of Steve Weiss, we are able to provide them with the recognition and the rewards they so richly deserve."

The Weiss Fellowships, supported by a \$2 million commitment from Stephen H. Weiss, honor "the faculty who are the most effective, inspiring and distinguished teachers of undergraduate students."

—From the June 10 issue

VP promoted; Graduate School dean selected

Craft to head facilities, services

Harold D. Craft Jr., a 22-year Cornell employee, has been elected by the Board of Trustees to the new position of vice president for facilities and campus services.

The title, effective July 1, absorbs two positions — the one he himself has held since 1985, associate vice president for facilities and business operations, and that of the recently retired Paul Griffen, who since 1987 had been associate vice president for facilities planning and construction.

Griffen's units of Construction, Campus Planning, Contracts Management, Architectural Services, Statutory Facilities and Transportation Services will be added to those reporting to Craft; and, as President Frank H.T. Rhodes told the trustees' Executive Committee on June 24, the merger and reorganization should reduce costs

while also improving quality of service.

Units already reporting to Craft were Utilities, Facilities Engineering, Maintenance and Service Operations, Maintenance Management, Care of Buildings, Care of Grounds, Environmental Health, Public and Life Safety, Materials Management and Campus Services, and the Campus Store.

Craft received a bachelor's degree in electrical engineering from Cornell in 1961 and a master's degree in the same field from New York University and returned to Cornell, where in 1970 he received a Ph.D. in radio astronomy, astrophysics and communications theory.

—From the July 8 issue

Cohen looks to redefine deanship

Walter Cohen, a professor of comparative literature who joined the faculty in 1980, has been elected to a five-year term as dean of the Graduate School, beginning Aug. 1.

Cohen's election was endorsed by the Graduate Faculty and approved June 24 by the Board of Trustees, following a three-month internal search for a successor to Alison P.

Casarett, who is winding up 14 years as dean.

The search was chaired by Provost Malden C. Nesheim, and Cohen's recommendation was presented to the trustees by President Frank H.T. Rhodes.

Cohen says his overarching goal is to "preserve and enhance the intellectual vitality" of student and faculty life associated with study in the 89 graduate fields. He sees more effective democratic processes as a principal means to accomplish that.

"I'm strongly committed to graduate students' involvement in shaping the policies that govern their lives," he says. He adds that he wants the newly approved Graduate Student Assembly, which may seat its first members next spring, to be an effective body.

As to faculty, he favors "increasing their role in setting policies for graduate education" and says he will begin talks this summer on how to strengthen the role of the Graduate School's General Committee.

—From the July 8 issue



Cohen



Craft

CALENDAR

from page 12

religion

Sage Chapel

John A. Taylor, Unitarian/Universalist University Chaplain, will give the sermon Sept. 5 at 11 a.m. Music by the Sage Chapel choir, under the direction of Thomas Sokol, and William Cowdery, Sage Chapel organist. Sage is a non-sectarian chapel that fosters dialogue and exploration with and among the major faith traditions.

African-American

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

Catholic

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

Christian Science

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

Episcopal (Anglican)

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

Friends (Quakers)

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

Jewish

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

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

Korean Church

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

Muslim

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

Protestant Cooperative Ministry

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

Sri Satya Sai Baba

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

Zen Buddhist

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

seminars

Agricultural & Biological Engineering

"Low-Input Sustainable Agriculture Using Ecological Management Practices," David Pimentel, entomology, Sept. 8, 4 p.m., 400 Riley-Robb Hall.

Astronomy and Space Sciences

"The Origin of the Earth's Petroleum," Thomas Gold, astronomy, Sept. 2, 4:30 p.m., 105 Space Sciences.

"Winds and IR Emission in Late-Type Stars," Moshe Elitzur, University of Kentucky, Sept. 9, 4:30 p.m., 105 Space Sciences.

Biochemistry, Molecular & Cell Biology

"DNA Precursor Gene Control in Mice and Yeast," Gary Merrill, Oregon State University, Sept. 3, 4 p.m., large seminar room, Biotechnology Building.

Chemical Engineering

"Engineering of Bacterial Surfaces: Development of Bacterial Mimics of the Immune System and Other Biotechnology Applications," George Georgiou, University of Texas at Austin, Sept. 7, 3:45 p.m., 165 Olin Hall.

City & Regional Planning

"Environmental Issues and Planning," Richard Booth, Sept. 3, 12:15 p.m., 115 Tjaden Hall.

Ecology & Systematics

"Evolution in a Temporally Fluctuating Environment: The Role of Prolonged Dormancy," Nelson Hairston Jr., ecology & systematics, Sept. 8, 4 p.m., A106 Corson Hall.

Dan Dorfman Dance kicks off Cornell dance series

If you think all dancers are lithe and slender, you may be surprised by Dan Dorfman, an athlete-turned-dancer whose company, Dan Dorfman Dance, will perform on Friday, Sept. 3, at 8 p.m. in the proscenium theater at Cornell's Center for Theater Arts in College town.

Dorfman is built like a football player. He used to play the game in high school, along with baseball, and earned high school letters for the sports.

His choreography combines risky athletic movements and more delicate gestures, and it has been described as witty and dramatic. "There is a marriage with the floor in Dorfman's choreography, not a conflict or a battle, but a love affair," according to Sybil Shearer, writing in *Ballet Review*.

Dan Dorfman Dance's Sept. 3 performance will open with "Out of Season or Eating Pizza While Watching Raging Bull," an evolving solo on which the company's "Out of Season (The Athletes Project)" is based.

"The Athletes Project" is a series of collaborations with non-dancers, especially athletes, that highlights the movement language shared by athletes and dancers.

Athletes and other students and members of the Cornell community are invited to a Dorfman movement clinic today, Sept. 2, that will include demonstrations of how movement in dance can aid stress management, agility, coordination and injury reduction.

The clinic will be held from 5 to 6 p.m. in the ballet studio, Room 320, Center for Theater Arts. Participants must preregister by calling 254-2700.

The company's Sept. 3 performance also will include "Loop," created and performed by guest artist Dan Froot; "The Partial Truth," about the cycles of life and death; "Kilter"; "Sleep Story"; and "Horn," Dorfman's celebrated duet with Froot, described as a daffy and poignant metaphor on partnership, both its joys and its tensions.

Dorfman, who was born and raised in the Chicago area, took his first dance class during his junior year in college. When he graduated from Washington University in St. Louis with a degree in accounting, he worked for a year in retail sales, then entered the master's degree program at Connecticut College and earned an M.F.A. in dance.

For the next seven years he danced with a number of independent choreographers, and in 1985 he started his own contemporary dance company in New York City.

Dan Dorfman Dance is now an eight-dancer company with guest artist Froot. The troupe has performed extensively in the United States and made its international debut in Glasgow in 1990.

This Cornell Dance Series event is presented by the Department of Theater Arts with support from the New York State Council on the Arts. Tickets are \$8 and \$10. For more information, call the box office at 254-ARTS.

Cornell Cinema to offer mini-course on cinema history

Cornell Cinema will offer a mini-course this year on the history of cinema that looks at such topics as film techniques, directors, national cinemas and genres.

The course will be given on Monday nights, with a 7 p.m. screening followed by an hour-long discussion led by Cornell Cinema staff members Richard Herskowitz and Tony Stocks, with practitioners from the film industry and local independent producers as guests.

The syllabus for the fall includes *History of Cinematography* in September, *History of Film Sound* in October and *History of Film Editing* in November.

Cornell students can join the course by joining Cornell Cinema Film Club and then paying a \$35 monthly fee, which includes admission to the films. Members of the wider community can sign up through Tompkins County BOCES, where the fee for each monthlong course is \$40.

September's showings will feature the hit documentary, *Visions of Light*, as well as classic films shot by Nestor Almendros and James Wong Howe. Cinematographer Johanna Heer will visit on Sunday, Sept. 26, to discuss her

work on Percy Adlon's *Sugarbaby* and to discuss her feature documentary on German director G.W. Pabst, *The Other Eye*.

Cinema Off-Center

Cornell Cinema will launch a second new series this fall, in conjunction with the Department of Theatre Arts: *Cinema Off-Center*, devoted to the most adventurous film and video art of the present, past and future.

Cinema Off-Center, which is the successor to Cornell Cinema's Expanding Cinema, will screen on Tuesday nights at 7:30 p.m. in the Center for Theatre Arts Film Forum. Works by Laurie Anderson, Karen Finley, Dancenoise, Michael Clark and the Woosler Group will be among the showings this fall.

Hong Kong action films

Hong Kong action films, some of the most breathtaking action movies being made today, will be featured on Wednesday nights in September, back-to-back with Hollywood-produced action films, including the Bruce Lee films *Dragon* and *Enter the Dragon*.

The *Cinema of Blazing Passions* festival,

which is on a nationwide tour, features some of the best action films of the '80s and the '90s — films that revitalized old genres with supernatural special effects, such as ghost stories; period martial arts flicks and the development of a new genre of urban "brotherhood" or "hero" thrillers, inaugurated by John Woo's 1986 *A Better Tomorrow*.

Animation weekends

Weekends in September will feature the wide world of animation from Walt Disney's *Pinocchio* and *Beauty and the Beast* to *Disney in Wonderland*, The Brothers Quay and Japanese anime (*Macross II*).

The series will include the Ithaca premiere of Maurizio Nichetti's *Volere Volare*, in which the director/star of *The Icicle Thief* experiences the trauma of involuntary transformation into cartoon form.

The three shows of *Disney in Wonderland* will be accompanied by pianist Philip Carli, who bowled over Ithaca audiences this summer with his accompaniment of *Seventh Heaven*. Carli, who is based in Rochester, is both a musicologist and a film historian.

Neurobiology & Behavior

"Passive Electrolocation: How the Electrical World Redefines the Localization Algorithm," Carl Hopkins, neurobiology & behavior, Sept. 2, 12:30 p.m., A106 Corson Hall.

Plant Biology

"The Structure of Plasmodesmata of C3 and C4 Plants in Relation to Phloem Loading," C.E.J. Botha, Rhodes University, Germantown, South Africa, Sept. 3, 11:15 a.m., 404 Plant Science Building.

Plant Pathology

"Programmed Parasexual Atrocities in Rhizosphere Bacteria," Steve Winans, microbiology, Sept. 8, 12:20 p.m., 404 Plant Science Building.

Psychology

"Does Psi Exist? Replicable Evidence for an Anomalous Process of Information Transfer," Daryl Bem, psychology, Sept. 3, 3:30 p.m., 202 Uris Hall.

Rural Sociology

"A History of Land Use and Human Impacts in New York State," Mike Richmond, natural resources, Sept. 7, 12:20 p.m., 304 Fernow Hall.

Science & Technology Studies

"What's Significant About the Environmentalist Critique of Science?" Steven Yearley, Sept. 6, 4:30 p.m., 609 Clark Hall.

Soil, Crop & Atmospheric Sciences

"Nutritional Limitations of Subsoil," Robin Graham, University of Adelaide, Sept. 7, 3:30 p.m., 135 Emerson Hall.

Lieberwitz, associate professor of industrial and labor relations, ACSW chairwoman, at 255-3289.

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.

Bowling Leagues

Ladies, men and mixed bowling leagues are forming at Helen Newman Lanes. Most leagues bowl short seasons (26, 28, 30 weeks). Call 255-4200 for information.

Cornell Campus Club

The Cornell Campus Club will hold its annual fall tea on Thursday, Sept. 9, from 1 to 3 p.m. at the Sheraton Inn & Conference Center Ballroom. All women connected with Cornell, including employees, wives of employees, women graduate students and wives of graduate students, are invited to attend. Babysitting is available at \$2 per child (minimum age is 3 months); reservations for babysitting must be made by Friday, Sept. 3. For information, call Pat Clark, 257-0407, or Katie Forker, 257-0015.

Folk Guitar Lessons

The Willard Straight Hall Program Board once again will present Phil Shapiro's group folk guitar lessons. There are eight one-hour lessons on Monday evenings, starting Sept. 6, in the North Room of Willard Straight Hall. The beginner class is at 7 p.m., and the intermediate class is at 8 p.m. Registration is at the first lesson; just come and bring a guitar. The course costs \$40, payable at the first lesson. For information, call Phil at 844-4535.

Mann Library Computer Classes

Mann Library is offering free computer classes open to the entire Cornell community. No registration is required, but attendance is limited. Call 255-5406 for information.

Tai Chi Chuan

Tai Chi Chuan, Chinese martial art done for health and self-defense, and Tai Chi Chi Gung exercises will be taught by Kati Hanna. The class meets twice a week, Mondays and Thursdays, at 5 p.m. in the Edwards Room of Anabel Taylor Hall starting Sept. 13. A fee will be charged; register at the first class. Call Kati at 272-3972 for information.

Book signings at Campus Store

The Book Department at the Campus Store will be holding several author signings during the fall term. The schedule:

- Joyce Elbrecht and Lydia Fakundiny will sign their book *The Restorationist, Text One: A Collaborative Fiction By Jael B. Juba* on Sept. 2 at the A.D. White House. They will read from their work beginning at 4:30 p.m.; the signing and a reception will follow.

- Terry Garrison and David Levitsky will sign *Fed Up* on Sept. 9 from 3:30 to 5 p.m. at the Campus Store.

- A.R. Ammons will sign *Garbage* on Sept. 16 from 3 to 4:30 p.m. at the store.

- James McConkey will read from *Stories from My Life with the other Animals* and from *Court of Memory* on Sept. 29 beginning at 4:30 p.m. in the A.D. White House. A reception and book signing will follow.

- Jose Barreiro will sign *Indian Chronicles* on Oct. 1 from 3 to 5 p.m. at the store.

- Jeanne Mackin will sign the *Cornell Book of Herbs* on Nov. 5 from 3 to 5 p.m. at the store.

- Peter Katzenstein, Isaac Kramnick and Walter LaFeber will sign *The Best of Cornell on Audiotape* on Nov. 6 from 10:30 a.m. to noon at the store.

Cinema board seeks member

The Cornell Cinema Advisory Board has one opening for a staff representative.

Anyone who would like to be a member of the board, which meets monthly to discuss programming and policies, is invited to pick up an applications at 104 Willard Straight Hall, or call 255-3522. Board members receive two complimentary passes for all showings.

miscellaneous

ACSW Meetings

The Advisory Committee on the Status of Women regularly holds brown bag luncheons open to the entire community on the fourth Tuesday of each month. For more information, contact Risa

CALENDAR

September 2 through September 9

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. Admission is free, unless stated otherwise. No partner needed. For further information, call 277-3638.

Sept. 5: Line, circle and couple dances taught from 7:30 to 8:30 p.m.; request dancing, from 8:30 to 10:30 p.m., North Room, Willard Straight Hall.

Cornell Jitterbug Club

Beginning swing and jitterbug classes will be taught by Bill Borgida and Cindy Overstreet. The classes are open to all ages, no partner is needed and a fee will be charged. Call Bill at 273-0126 for information.

• Six-week beginning jitterbug series starts Sept. 15 at 7:15 p.m. in the Edwards Room, Anabel Taylor Hall.

• Six-week West Coast swing class begins Sept. 29 at 8:30 p.m. in the Edwards Room, Anabel Taylor Hall.

• Four-week accelerated beginner series starts Sept. 30 (call for more information).

Communications Workers leader to speak at Labor Day program

Morton Bahr, president of the 600,000-member Communications Workers of America (CWA), will be this year's featured guest speaker at the Labor Day convocation held by the School of Industrial and Labor Relations.

Bahr will deliver his lecture, entitled "The Clinton Administration and Labor — Seizing the Opportunity for Change," on Monday, Sept. 6, at 11:15 a.m. in Room 110 of Ives Hall.

The CWA is the largest telecommunications union in the world, representing workers across the United States and Canada. Bahr, a key union leader in the telecommunications industry, was elected the third president of the CWA in 1985 and has since led the union through remarkable breakthroughs at the collective bargaining table.

"Morton Bahr is a thoughtful, innovative leader seeking to redefine the collective bargaining relationship," said Robert Smith, acting dean of the ILR School. "His foresight will help shape a new era in labor-management relations, and we are delighted that he has agreed to share his Labor Day with us at the ILR School and Cornell generally," Smith added.

Under Bahr's direction, the CWA secured a family benefits package in 1989 that is credited

Department of Theatre Arts

Dan Dorfman Dance, Sept. 3, 8 p.m., Proscenium Theatre, Center for Theatre Arts, \$8 and \$10.

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. and Wednesdays to 8 p.m. Admission is free. Telephone: 255-6464.

• "Jack Squier: Sculpture Retrospective, 1953-1993," through Oct. 17. Squier, a professor in Cornell's art department, has created an impressive portfolio of work over the past four decades in a variety of media. This exhibition will present a selection of sculptures, providing the viewer with an in-depth look at this acclaimed artist's development and accomplishments.

• "Our Century on Paper," an exhibition of 20th century drawings from the museum's permanent collection, will be on view Sept. 3 through Dec. 12. Works by some of the most influential and progressive modern artists, such as Matisse, Picasso and Milton Avery, will be featured, as well as pieces from more contemporary artists, such as Willem de Kooning, Jacob Lawrence and Mark Tobey.

• Wednesday tours: As part of the "Art After Five" program, the museum will offer a free tour of "Our Century on Paper" on Sept. 8.

• Weekend Walk-In Tours: Every Saturday and Sunday during the academic year from 1 to 2 p.m., the museum offers a free tour of either a special exhibition or an aspect of the permanent collection.

• Workshop: "Explore the Treasures of the Print Collection," each Wednesday from Sept. 8 through Oct. 6, 5:30 to 6:30 p.m. Each class will be devoted to discussing prints in a separate medium: intaglio, lithography, relief (woodcut), screenprint, and unusual and combination techniques. A fee of \$75 for museum members and \$85 for non-members will be charged. Enrollment is limited to 15.

Willard Straight Hall Gallery

"The Jews of Russia, 1881-1917," a photographic exhibit, is on view in the Gallery and International Room in Willard Straight Hall.

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, 9/2

"Man Bites Dog" (1992) b&w, directed by Remy Belvaux, with Benoit Poelvoorde, Andre Bonzel and Remy Belvaux, 7:50 p.m.

"Beauty and the Beast" (1991), directed by

Gary Trousdale and Kirk Wise, with the voices of Robby Benson and Angela Lansbury, 10 p.m.

Friday, 9/3

"Beauty and the Beast," 7:25 p.m. and midnight, Uris.

"Just Another Girl on the IRT" (1992), directed by Leslie Harris, with Ariyan Johnson, Kevin Thigpen and Jerard Washington, 7:30 p.m.

"Dragon: The Bruce Lee Story" (1993), directed by Rob Cohen, with Jason Scott Lee, Lauren Holly and Robert Wagner, 9:20 p.m., Uris.

"Once Upon a Time in China III" (1993), directed by Tsui Hark, with Jet Li, Rosamund Kwan and Max Mok, 9:45 p.m.

Saturday, 9/4

"Man Bites Dog," 7:30 p.m.

"Pinocchio" (1940), directed by Ben Sharpsteen and Hamilton Luske, 7:50 p.m., Uris.

"Visions of Light: The Art of Cinematography" (1992), directed by Arnold Glassman, Todd McCarthy and Stuart Samuels, 9:40 p.m.

"Beauty and the Beast," 10 p.m., Uris.

"Dragon: The Bruce Lee Story," midnight, Uris.

Sunday, 9/5

"Beauty and the Beast," 4:30 p.m.

"The Ballad of Gregorio Cortez" (1983), directed by Robert Young, with Edward James Olmos, Tom Bower and Barry Corbin, presented by Pentangle, 7:30 p.m., Uris, free.

"Pinocchio," 8 p.m.

Monday, 9/6

"Visions of Light: The Art of Cinematography," 7 p.m.

"Pinocchio," 9:30 p.m.

Tuesday, 9/7

"Ibu Mertua Ku," Southeast Asia Film Series, 4:30 p.m., Kahin Center, 640 Stewart Ave., free.

"White Homeland Commando" (1992), directed by Elizabeth LeCompte and the Wooster Group, with Willem Defoe and Ron Vawter, shown with "Carmen," directed by Laurie Anderson, with Africa Gonzalez and Jose Gomez Ortega, 7:30 p.m., CTA Film Forum, \$2.

"Dragon: The Bruce Lee Story," 7:25 p.m.

"Just Another Girl on the IRT," 10 p.m.

Wednesday, 9/8

"Swordsmen II" (1992), directed by Ching Siu-tung, with Jet Li, Brigitte Lin and Rosamund Kwan, 7:35 p.m.

"Enter the Dragon" (1973), directed by Robert Clouse, with Bruce Lee, John Saxon and Jim Kelly, 10 p.m.

Thursday, 9/9

"The Story of Qiu Ju" (1992), directed by Zhang Yimou, with Gong Li, Lei Laoshen and Liu Peiqi, 7:45 p.m.

"Benny and Joon" (1993), directed by Jeremiah Chechik, with Johnny Depp, Mary Stuart Masterson and Aidan Quinn, 10 p.m.

graduate bulletin

• **Late Registration:** Bring student ID card to the Registrar's Office, 222 Day Hall.

• **Course Enrollment:** Forms are available in graduate field offices and at Sage Graduate Center. Return completed form in person by Friday, Sept. 17, to the Graduate School. Students who

completed pre-course enrollment forms last spring do not need to file course enrollment forms.

• **Graduate Faculty Meeting:** Friday, Sept. 10, 4 p.m., General Committee Room, Sage Graduate Center. This meeting is solely for the purpose of voting on August degrees.

• **Fulbright Grants for Study Abroad:** Applications are available for the 1994-95 academic year. Contact R. Brashear, Sage Graduate Center, 255-3912. Applicants must be U.S. citizens; applications are due mid-September.

• **Teaching Assistant Workshops:** Saturday, Sept. 11; registration forms are at graduate field offices or Office of Instructional Support, 14 East Ave., Sage Hall, phone 255-8427. No charge to students.

• **1994 Summer Support:** Dec. 15 is the deadline for U.S. citizens and permanent residents filing documents with the Graduate Fellowship Office for 1994 summer awards. They include: 1993-94 Free Application for Federal Student Aid (FAFSA), 1992 Federal Income Tax Form, Financial Aid Transcript from institutions attended previously, and Selective Service Compliance form.

• **Conference Travel Grants:** Applications are due at the Graduate Fellowship Office, Sage Graduate Center, by Oct. 1 for November conferences. Applications are available at graduate field offices; registered graduate students invited to present papers or posters are eligible.

lectures

Africana Studies

"Global Democratization: A Caribbean Perspective," Trevor Munroe, University of the West Indies, Sept. 7, 4:30 p.m., Hoyt Fuller Room, 310 Triphammer Road.

International Legal Studies Program

"Privatization in Eastern Europe and Latin America — Lessons and Comparisons," Vivek Talvadkar, International Finance Corp., Sept. 3, 12:45 p.m., G85 Myron Taylor Hall.

Law School

Stevens Lecture: "Religion and Race Under the Constitution: Similarities and Differences," Jesse Choper, University of California at Berkeley School of Law, Sept. 8, 4 p.m., MacDonald Moot Court Room, Myron Taylor Hall.

Materials Science & Engineering

Johnson Memorial Lecture: "A 'Standard Model' for Solids," Marvin Cohen, University of California at Berkeley, Sept. 2, 4:30 p.m., 140 Bard Hall.

University Lectures

"Is There Anti-Semitism in the Gospels?" Rene Girard, Stanford University, Sept. 8, 4:30 p.m., Hollis Cornell Auditorium, Goldwin Smith Hall, co-sponsored by the Religious Studies Program.

music

Department of Music

The Haydn Baryton Trio, the only ensemble in the United States specializing in the performance on period instruments for baryton, viola and violoncello by Joseph Haydn, will present five of the 126 works known as the *Baryton Trios* on Sunday, Sept. 5, at 4 p.m. in Barnes Hall. These are Haydn's least-known, although his most-numerous and most-intimate works. The baryton is a combination of two instruments: a viola da gamba with a broadened neck, behind which is a harp with metal strings to be plucked by the thumb of the left hand. John Hsu, performing on the instrument, is one of the very few baryton players in the world; the violist is David Miller; and the violoncellist, Loretta O'Sullivan. The concert is free and open to the public.

Cornell Folk Song Club

Folksingers Steve Gillette and Cindy Mangsen will appear in concert Sept. 4 at 8 p.m. in Kaufmann Auditorium, Goldwin Smith Hall. Gillette is probably best known as co-author of "The Ballad of Darcy Farrow," popularized by John Denver and now a sort of "folk standard." Mangsen is well-known to folk audiences as a singer of traditional songs. Advance tickets for the concert are \$6 and are available at Borealis Books, Rebo Records and the Commons Coffeehouse in Anabel Taylor Hall. For information, call 273-2132 or 272-3471.

Bound for Glory

• Sept. 5: Cormac McCarthy, a songwriter who tells stories with his songs, will perform three live sets in the Commons Coffeehouse in Anabel Taylor Hall. Sets are at 8:30, 9:30 and 10:30 p.m. Admission is free, and children are welcome. Bound for Glory can be heard Sundays from 8 to 11 p.m. on WVBR-FM, 93.5.

Continued on page 11



Bahr

Workplace of the Future.

In addition to leading the CWA, Bahr is a vice president of the AFL-CIO and a member of the Labor Advisory Committee on Trade Negotiations for the U.S. Trade Representative.

A graduate of Empire State College, he is an adjunct professor at the Harriman School for Labor-Management Policy at Stony Brook College.

Bahr was the Alice B. Grant Labor Leader in Residence at the ILR School in 1992-93.

with being among the most innovative in American industry and negotiated with AT&T to establish the first nationwide-managed health care system. In 1992, CWA negotiated a contract with AT&T for a new program for employee empowerment called The

Law School lecture on religion, race

The U.S. Constitution's protection of religious freedom and its protection of the rights of citizens of various races will be the subject of the Robert S. Stevens Lecture in the Law School on Wednesday, Sept. 8.

Jesse H. Choper, the Earl Warren Professor of Public Law in the School of Law at the University of California, Berkeley, will deliver a lecture titled "Religion and Race Under the Constitution: Similarities and Differences" in the MacDonald Moot Court Room, Myron Taylor Hall at 4 p.m.

The criteria that the Supreme Court uses to consider government action that adversely affect people because of their religion varies from the criteria it uses with regard to race, Choper has observed.

He will focus his talk mainly on the religion clauses of the Constitution and secondarily on the equal-protection clause of the 14th Amendment.

Choper, who teaches constitutional law and corporation law, is the co-author of two widely used casebooks in these fields. His also is the author of *Judicial Review and the National Political Process: A Functional Reconsideration of the Role of the Supreme Court*. He is a frequent guest lecturer on college campuses.