CORNELL Chronicle

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Volume 35 Number 17 December 11, 2003

CU law professor Stewart Schwab named dean of the Law School

By Linda Myers

Schwab

Stewart J. Schwab, professor of law at Cornell Law School and a specialist in labor and employment law, and tort and contract law, has been named the new Allan R. Tessler Dean of the Law School, President Jeffrey S. Lehman announced Dec. 5.

"Stewart Schwab is a nationally recognized scholar who has the respect and admiration of his colleagues on the Cornell faculty," said Lehman. "I am confident that, with his strong leadership, the Law School will make ever greater contributions to our understanding of the law and legal institutions and will continue to prepare our students for lives of accomplished service within a rapidly changing profession."

Schwab, who is 49, earned an M.A. in labor economics and industrial organization (1978), a J.D. (*magna cum laude,* 1980) and a Ph.D. in economics (1981) from the University of Michigan, then clerked for the Hon. J. Dickson Phillips of the U.S. Court of Appeals for the Fourth Circuit and for U.S. Supreme Court Associate Justice Sandra Day O'Connor before joining the Law School faculty in 1983.

Cornell Provost Biddy Martin, who chaired the search committee, said: "Stewart brings to the position 20 years of teaching and scholarship in areas that have enormous significance and breadth. He is one of our most productive and distinguished legal scholars and is widely respected by his colleagues. I look forward to working with him." She added, "We were fortunate to have a superb set of candidates, including three from within Cornell among our five finalists, and making the final choice was challenging."

"I am delighted but humbled at being chosen," said Schwab. "I look forward to working with my colleagues to make Cornell Law School and the larger university an even stronger place than it is today."

Schwab has examined issues in labor and employment law through empirical analysis, as well as from comparative and law and economics perspectives. He is the co-author, with Samuel Estreicher, of *Foundations of Labor and Employment Law* (Foundation Press, 2000). Among his casebook publications are *Employment Law: Cases and Materials* (Matthew Bender & Com-

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Building a home for CU's West Campus residential house plan

The Alice H. Cook House community, Page 7

By Franklin Crawford

Work continues apace on the West Campus Residential Initiative (WCRI) and preparations for phase two of the five-part project are likewise in motion. Cornell has committed $200 million to the project: $177,000 for facilities and $23 million for programming.

Construction unfolded swiftly following the WCRI groundbreaking in April 2003, and anyone familiar with the site can't help but be struck by the dramatic transformations.

"We've been following a very aggressive construction schedule and we're on track," said Jean Reese, WCRI program project leader. "Fortunately many of us on the West Campus project team worked on North Campus and we've been able to apply the many lessons learned in the planning and design of the houses."

Rising at the corner of Stewart and University avenues is the raw visage of Alice H. Cook House, gateway complex and programmatic template for the university's new residential house system. An unprecedented venture in residential programming for Cornell, the house is named for Cook, a noted professor in the School of Industrial and Labor Relations and the university's first ombudsman.

Slated to open in August 2004, Cook House is the first of five houses being built as part of Cornell's West Campus Residential Initiative for sophomores, juniors and seniors. Each house will have its own dining hall, common rooms and library. The entire residential system, including a community center, is scheduled for completion in 2010.

Cook House will be home to about 360 upper-level undergraduates, primarily sophomores; six graduate resident fellows; three undergraduate student assistants; 30 to 35 house fellows who are Cornell faculty and senior staff administrators; and an assistant dean. For three years it will very much be home to faculty member Ross Brann and his family.

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Robert Barker/University Photography

Above, a rooftop view of the corner of University and Stewart avenues shows construction of the first component of the West Campus house system, the Alice H. Cook House, scheduled to be open for fall 2004. At right is an artist's drawing of a West Campus house library, one of which will be in each new house.

CU planning students devise Olympic village concepts for New York City

By Linda Myers

New York City is vying with about six others to host the Olympics in 2012. Should it win, it will need to construct housing and other facilities for about 16,000 athletes and coaches accessible to the Olympic playing fields scattered throughout New York City.

The site it plans to use is located at the southern end of western Queens on 39 acres of brownfields – once a manufacturing hub – where Newtown Creek flows into the East River waterfront, across from midtown Manhattan. This fall, for their main project in Professor Roger Trancik's five-credit urban

'The site for Olympic village presents a unique opportunity to design and build, from scratch, an innovative new neighborhood of the 21st century.'

– Professor Roger Trancik

systems studio course – Designing Cities in the Electronic Age – 15 Cornell landscape architecture and city and regional planning seniors and graduate students, working in seven teams, took on the Olympic village as an exercise in planning and design. Their designs need to include support facilities for the games and must be flexible enough to convert easily into permanent living and working spaces once the Olympics is over.

"The site for Olympic village presents a unique opportunity to design and build, from scratch, an innovative new neighborhood of the 21st century," said Trancik, a professor of city and regional planning and landscape architecture. "Earlier this year, New York's Olympics committee commissioned a professional firm to prepare a schematic plan for the Olympic village as a 'springboard' for an international design competition. This preliminary plan and program of uses was the point of departure for the students' work in the studio."

Trancik and his students went to the city early this fall to document the site and meet with Olympics committee 2012 planning staff, representatives from New York City's planning department and community, city, state and Port Authority leaders involved in the Queenswest development project. "It was a great field trip. We met all the major players," said Alex Hart, a joint M.L.A.-

Continued on page 6

Obituary

John Philip Windmuller, the Martin P. Catherwood Professor Emeritus of Industrial and Labor Relations (ILR), died Dec. 2 at Kendal at Ithaca following a long illness.

Windmuller was considered by peers to be the world's leading expert on international and comparative labor relations and is listed in *Who's Who in America*.

"John was a true scholar, with an encyclopedic knowledge. He knew more about international labor organizations and federations than anyone I ever met," said David Lipsky, professor and former dean of the ILR School. "He also was a man of integrity and decency."

Throughout his academic career, Windmuller was actively engaged in research. He took a special interest in the operation of labor organizations, employers associations and collective bargaining systems. He wrote and edited numerous books, among them *Collective Bargaining in Industrial Market Economies: A Reappraisal* (International Labor Office, Geneva, Switzerland, 1987), and held senior staff positions at the International Labor Organization. He published widely in scholarly journals and served on the editorial boards of the Cornell University Press and several journals. He was awarded a silver medal from the government of the Netherlands in 1970 for his book *Labor Relations in the Netherlands*.

Born in Dortmund, Germany, in 1923, he left the country on a children's transport to the Netherlands in December 1938 after having been held for four days by the Gestapo. Embarking at Cherbourg, he was a passenger on the ill-fated *St. Louis* in 1939. The German ship, whose passengers were escaping the Nazis, was turned away by Cuba and the United States and forced to return to Europe. Windmuller eventually entered the United States in 1942, served in the U.S. Army from 1943 to 1946 and was active in postwar relief work for children in Europe.

He earned a B.A. from the University of Illinois in 1948 and a Ph.D. in industrial and labor relations from Cornell in 1951, the same year he was appointed to the ILR School faculty. He contributed to the development of international programs and activities in the ILR School and served as director of international activities from 1961 to 1964. He was associate dean from 1975 to 1977. In 1983 he became the first holder of the Catherwood chair. Named professor emeritus in 1987, he continued to teach for a few years after retirement.

Windmuller is survived by Ruth, his wife of 56 years; a daughter, Betsey Roberts, of Los Angeles; a son, Thomas, of Geneva, Switzerland; and a grandson, Jonathan, also of Geneva. A memorial service at Kendal will take place at a later date. In lieu of flowers, donations may be made to the National Parkinson Foundation, 1501 NW 9th Ave., Bob Hope Road, Miami, FL 33136, or the John P. and Ruth H. Windmuller Endowment Fund, Catherwood Library.

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Frank DiMeo/University Photography

Three members of the winning Food Science 101 Rolling Stones team prepare cups of the ice cream for judging, Dec. 1, in Stocking Hall. They are, from left, Courtney Dougherty, Elizabeth Ashley Watkins and Meaza Solomon, all sophomores in the School of Hotel Administration.

Lovin' spoonful: Rolling Stones team makes the tastiest ice cream in class

By Blaine P. Friedlander Jr.

You *can* get satisfaction. At the final-project presentations for Cornell's Food Science 101 class Dec. 1, the ice cream called Rolling Stones satisfied judges' palates enough to earn a spot next semester on the campus dining hall and Cornell Dairy Bar menus, said Joseph Hotchkiss, Cornell professor of food science, who directs the class.

Since 1995, Hotchkiss has been teaching students in the class how to work together in teams to create complicated foods, like ice cream. One of the ice cream flavors created in the class in the fall of 1998, Sticky Bunz, continues to be a favorite at the Cornell Dairy Bar.

This year's class winner, Rolling Stones, is a vanilla based ice cream with a caramel and marshmallow swirl, interspersed with chunks of malt balls. Its rich taste is no surprise, since the flavor features 17 percent fat and 60 percent overrun (air), an important component in any premium ice cream. Air keeps the ice cream from tasting like butter. The team named the ice cream for its malt ball chunks, not for the British rock band.

Freshman Alex Huff, a member of the Rolling Stones team, explained that his family is in the ice cream business in Sydney, N.Y., and he consulted with his grandfather on test flavors. Together Huff and his grandfather made small batches on the weekends during the development phase. "If there is one thing my grandfather taught me, it is that you can never have too many ingredients in ice cream," Huff said.

One of the judges, Delmar Crim, senior executive chef with Cornell Dining, enjoyed the Rolling Stones flavor, particularly the marshmallow and caramel swirl. "I like my ice cream sweet," he said after the judging.

Running a close second place to Rolling Stones was the student-developed Starry Eyed Surprise, which contains chunks of white-chocolate chips in a chocolate base with a fudge swirl and Graham cracker morsels. It is 14 percent fat and 50 percent overrun. "There were a lot of things in Starry Eyed Surprise and the students zeroed in on a good combination," said Richard Anderson, general manager of Cornell Dining operations, another judge.

The third flavor presented this year was Nutty Apple Lovin', with the autumnal flavors of apples, maple, cinnamon and walnuts.

The members of the winning Rolling Stones team, besides Huff, are undergraduates: Eryn Abrams, Stephan Asprinio, Kathryn Augelli, Michael Coyle, Brian Cuccio, Hernan Donoso, Courtney Dougherty, Elaine Fan, Stacy Ann Forrester, Nicholas Grennan, Monica Hui, Kari Kacera, Robinson Ko, Xue Cheng Liu, Marlene Moskowitz, Margaret Ratner, Andrew Riesenberg, Allison Ross, Jennifer Rowe, Meaza Solomon, Elizabeth Ashley Watkins and Johnny Wong.

Briefs

■ **Trustees meet in NYC:** The Executive Committee of the Cornell Board of Trustees will hold a brief open session when it meets today, Dec. 11, at 2 p.m. in the Fall Creek Room of the Cornell Club of New York, 6 E. 44th St., New York City. The short public session at the beginning of the meeting will include a report from Cornell President Jeffrey Lehman and a report of the Buildings and Properties Committee. The Buildings and Properties Committee also will meet today at 9:30 a.m. in the Fall Creek Room. The committee will discuss the status of ongoing projects in a brief open session at the start of the meeting.

■ **Expanded holiday hours at Olin:** In response to users' requests, Olin Library will be open two days this year during the university's holiday break and for longer hours during the January winter session. Over the holiday break (Dec. 25-Jan. 1), Olin Library will be open Monday, Dec. 29, and Tuesday, Dec. 30, from 10 a.m. to 4 p.m. On Friday, Jan. 2, it will be open 8 a.m. to 6 p.m. and on Saturday, Jan. 3, from noon to 6 p.m. During winter session (Jan. 5-25), Olin will be open Monday through Friday, 8 a.m.-9 p.m. and Saturdays, 10 a.m.-6 p.m. See <http://campusgw.library.cornell.edu/about/libhours.html> for a complete listing of hours for all campus libraries.

■ **Statler scholarship:** Daniel Skodol, a student in the Master of Management in Hospitality program at the School of Hotel Administration, was awarded a Statler Foundation Scholarship of Excellence. Presented at a ceremony at Niagara University this fall, the national scholarship is awarded to outstanding students planning to pursue careers in the hospitality industry. Skodol will receive up to $20,000 to cover tuition, fees, books and room and board for the academic year 2003-04. From Great Neck, N.Y., he holds a B.A. in economics from Yale University. In addition to his Hotel School studies, he serves on the Hotel School's Academic Integrity Hearing Board, and he is social chairman and a board member of the Hotel Graduate Student Organization. The Statler Foundation was created from the estate of hotelier Ellsworth M. Statler following his death in 1928. Its purpose is to support research work and train workers for the benefit of the hotel industry.

Notables

Kay Walkingstick, professor of art, has won the 2003 Distinguished Artist Award from the Eiteljorg Museum of American Indians and Western Art in Indianapolis. The most prestigious award for visual art made by indigenous people of the United States, the award comes with an unrestricted biennial prize of $20,000. Walkingstick, a Cherokee, has been a faculty member in the Department of Art in Cornell's College of Architecture, Art and Planning since 1992. Her paintings and drawings are suffused with vibrant color and often involve the pairing of images drawn from nature with abstract symbols derived from Native American sources, reflecting both her heritage and her engagement with contemporary mainstream art, said Buzz Spector, chair of the art department. As part of the award, Walkingstick's work is on exhibit at Eiteljorg Museum through Feb. 1, 2004. Her art is discussed in a scholarly essay in the exhibition's catalog, which is available through <http://www.WhiteRiverTrader.com> or by calling (800) 878-7978. The museum also will purchase some of her work for its permanent collection.

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Charles Lee, professor of accounting and finance and director of the Johnson Graduate School of Management's Parker Center for Investment Research, has been awarded the 2003 Moskowitz Prize for the nation's best quantitative study of socially responsible investing. Lee's winning paper, "Corruption and International Valuation: Does Virtue Pay?" investigates the relationship between corruption – specifically the misuse of public office for private gains – and international corporate values. His findings show that firms from more-corrupt countries trade at significantly lower market multiples, with economic consequences for shareholder value. The Moskowitz Award comes with a $2,500 cash prize and is awarded annually by the Social Investment Forum, a nonprofit organization in Washington, D.C., that promotes socially responsible investing. The recipient of numerous honors for teaching and research, Lee is the Henrietta Johnson Louis Professor of Management. On the Cornell faculty since 1996, Lee has research interests that encompass security valuation, financial statement analysis, behavioral finance and market microstructure. Much of his work has explored the effect of human cognitive constraints on market participants and the information efficiency of stock markets.

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Lisa M. Shaffer has been appointed director of graduate programs at the School of Hotel Administration, effective Aug. 11, 2003. She administers of the school's AACSB-accredited Master of Management and Hospitality (MMH) program as well as the doctoral program and oversees student services and career management for graduate students in conjunction with the school's Career Services Office. Shaffer comes to the Hotel School from Indiana University-South Bend, where she was the acting dean of enrollment management. She holds both an M.A. and a Ph.D. in political science from Purdue University and a B.A. in political science from Indiana University-South Bend. She brings nine years of administrative experience to her new position. "Lisa is both a strategic thinker and an excellent implementer, and she understands the importance of quality research and will play a key role as we continue to refine our MMH and Ph.D. programs," said Leo M. Renaghan, associate dean for academic affairs at the Hotel School. The Hotel School was the first institution of its kind to offer a two-year, full-time graduate management program in hospitality.

Chronicle schedule

This is the final edition of the *Cornell Chronicle* for 2003. Publication will resume Jan. 15, 2004. Have a happy and safe holiday season.

New intercampus center focuses on making research benefit older adults

By Susan Lang

Pillemer

How can communication between physicians and their elderly patients be improved? How can community-service agencies better help families with depressed older relatives? How can psychotherapy and physical therapy be united to help older adults suffering simultaneously from back pain and depression? A new intercampus center at Cornell will address these kinds of problems through innovative applied research projects.

The Cornell Institute for Translational Research on Aging (CITRA) is being funded with $1.9 million from the National Institute of Aging (NIA), one of four Edward R. Roybal Centers funded nationwide this year. A collaboration of the fields of social science, clinical research and mental health, the institute embraces social scientists from Cornell's Ithaca campus, research clinicians in geriatric medicine at the Division of Geriatrics and Gerontology at the Weill Medical College of Cornell in Manhattan and researchers at the Psychiatric Division of the Cornell Institute for Geriatric Psychiatry in Westchester County, N.Y.

"CITRA creates a unique link among faculty members interested in aging at three of Cornell's campuses in New York state," said Karl Pillemer, the principal investigator of the new grant and director of CITRA. "These research collaborators will be informed by human service agencies in New York City to ensure that our efforts are relevant to real-world problems. We will test the interventions in New York City, one of the most ethnically and economically diverse living laboratories we could hope for." Pillemer is a professor of human development at Cornell who for the past 10 years has directed the Cornell Gerontology Research Institute.

Pillemer notes that CITRA will focus on social support and depression; extreme social isolation, self-neglect and health outcomes; family relationships as sources of support and stress; practitioner-patient communication to promote improved health outcomes; measurements of social integration and isolation; and social integration and isolation in minority populations.

"There are hundreds of studies that show the association of social support of older people with mortality, recovery from specific illnesses, mood and quality of life," said Elaine Wethington, Cornell professor of human development and a CITRA co-director. "The new center will apply these research findings to actual problems older people experience."

Co-directing CITRA with Pillemer and Wethington are Dr. Mark Lachs, associate professor of medicine, co-chief of the Division of Geriatrics and Gerontology at Weill Cornell and director of Cornell's Center for Aging Research and Clinical Care; and Martha Bruce, associate research professor of sociology in psychiatry at Weill Cornell's Westchester Division.

"The new collaboration is particularly exciting because Dr. Lachs and our other colleagues at Weill Cornell have built programs with deep and substantive community links to social service agencies that serve disenfranchised older people in New York City," said Pillemer. A major partner in CITRA is Council of Senior Centers and Services, the professional organization for New York's senior service providers.

"In addition, the Division of Geriatrics and Gerontology's ambulatory geriatric medicine practice shares space with a not-for-profit social service agency that last year provided support to more than 9,000 older adults, 85 percent of whom live below

Continued on page 4

Renewed NSF funding provides fellowships for nonlinear-systems grads

By Bill Steele

The National Science Foundation (NSF) has renewed funding for the Cornell IGERT Program in Nonlinear Systems. The award of $3,338,800 will provide two-year graduate fellowships of $27,500 a year for 30 students, over five years, beginning with 12 new students next fall. The funds also will provide computer services and general support. This is an extension of a previous five-year program launched in 1998.

IGERT is NSF's Integrative Graduate Education and Research Traineeship program, to train a diverse group of scientists and engineers for a broad spectrum of career options. Over 100 programs at doctorate-granting institutions are involved, including a second IGERT program at Cornell in Biogeochemistry and Environmental Biocomplexity.

Students will pursue doctorates in a variety of disciplines tied together by shared mathematical methods for the analysis of nonlinear systems. Nonlinear systems are those in which the parts interact so that the behavior of the whole system is more than the sum of its parts. An example is the combined effects of multiple AIDS drugs: Simultaneous treatment with several drugs is far more effective than would be thought from the results observed with individual drugs.

Nonlinear problems appear in fields ranging from physics, mechanical engineering and computer science to the life sciences, sociology and finance. Interest has grown rapidly over the past few decades, partly because computers have made it possible to create simulations of them by constantly recalculating the various parts of the system. Mathematical ingenuity is still required to avoid endless recalculation.

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Bringing down the lab

Robert Barker/University Photography

Meredith Metzler, foreground left, a Cornell Nanoscale Facility (CNF) employee, takes a sledgehammer to the southwest exterior of the old Lester B. Knight Laboratory as the move of the facility into Duffield Hall is concluded. With the CNF lab and office relocation complete, on Nov. 10 the walls of the old Knight Lab began coming down to make way for the final phase of the Duffield Hall project: an atrium that will connect the new high-tech building with Upson Hall on the south and with an atrium stretching to Phillips Hall and Campus Road on the north. The occasion was commemorated with inscribed hammers handed out to the CNF staff, who responded with sound whacks at the 22-year-old walls.

United Way helps crucial local agencies, like Family and Children's Service

By Susan Lang

A 57-year-old man needed input on how to provide care for his elderly parents. An 83-year-old woman caring for her 91-year-old husband needed respite from her caregiving responsibilities. A young man who had discovered his mother's murdered body needed help coping with the tragedy. An 11-year-old girl who had been sexually assaulted needed counseling.

These cases are the kinds of cases that the staff of Family and Children's Service of Ithaca encounter on a daily basis. Each year, this nonprofit human service agency serves more than 3,000 individuals in the greater Ithaca community, including hundreds of Cornell families and students. The agency, which just celebrated its 116th birthday, not only provides mental health services on a sliding-fee scale but also offers home health care, employee assistance, adoption counseling, and crime victims and youth services programs.

Last year, for example, F&CS's staff of 96 provided 21,621 hours of mental health counseling to more than 1,500 clients, of whom nearly 450 were children. It served 280 seniors and ill shut-ins with almost 9,000 visits and 16,836 hours of direct service with home health aides, personal care aides, respite aides and care-giver counseling through its Home Care Program, which allows individuals to remain independent for as long as possible.

In addition, F&CS's Employee Assistance Program (EAP), an early intervention system designed to strengthen and preserve workplace quality and productivity, provided more than 2,000 hours of service. F&CS contracts employee assistance services to 63 local businesses and organizations – that represents assistance to more than 17,000 employees, or about 18 percent of Tompkins County's workforce and their family members. Cornell employees, for example, are entitled to eight free EAP sessions.

"This kind of service, which helps individuals from the community from all walks of life and all socioeconomic levels, just wouldn't be possible without the support of the United Way," said James G. Johnston, president and CEO of F&CS. He noted that last year, for example, United Way provided almost 7 percent of F&CS's revenue.

"F&CS staff are such a committed group of people, that we are not only a 'pacesetter' organization for United Way, but we have a 54 percent participation rate [in the campaign]," noted Johnston. "Our staff contributes to the United Way because it's the right thing to do. Their generosity really inspires me."

"As an Ithaca resident for over 30 years and as a Cornell employee for most of them, I thought I had a fairly good idea about what F&CS does and its various relationships with other entities, especially its Cornell connections," said Gerry Thomas, a retired senior extension associate at Cornell and a member of the F&CS board of directors along with local psychotherapist Carolyn Chauncey Neuman '64, a member of the Cornell Board of Trustees. "However, it wasn't until I joined the [United Way] board earlier this year," said Thomas, "that I realized how little I really did know about this outstanding not-for-profit community resource. The scope of its services to our community, from mental health counseling and helping special needs and troubled youths to providing home care for the ill and elderly and caregiving counseling is truly astounding. Its sliding-fee-scale and the generosity of area foundations, such as the support from the United Way, help ensure that even the most financially strapped can get the help they need."

Thanks to the prompt generosity of the Cornell community, the Cornell United Way campaign stands at 79 percent of its goal of $585,000, as of Dec. 9. Staff and retirees are encouraged to turn in their pledge cards as soon as possible. For donations to be made via payroll deduction, pledge cards must be in by Dec. 31.

UW pledge cards

Cornell United Way campaign pledges can be paid through payroll deduction, in a check, or with a credit card. If you haven't already turned in your pledge card via campus mail, you can send it directly to the University Business Service Center (UBSC) at 341 Pine Tree Road. If your pledge card has been misplaced, a new one can be obtained by contacting Cathy Jenner at 255-8671 or <clj8@cornell.edu>. You also can download a pledge card from UBSC's Web site at <www.ubsc.cornell.edu/unitedway.cfm>.

Even if you are unable to make a contribution this year, campus campaign coordinators ask that you still return your United Way pledge card by Dec. 31.

Diversity management and change

DIVERSITY DIGEST

By Barbara Eshelman

Two years ago Cornell Cooperative Extension, a leader in Cornell's outreach efforts, joined a national diversity project called Change Agent States for Diversity (CASD). Using a collaborative approach, the CASD project emphasizes diversity management and organizational change strategies, development of successful models and identification of best practices to be applied throughout the land-grant university system of which Cornell is a member. The CASD framework for change used in the Cornell Cooperative Extension system includes four strategies that could be applied in a variety of settings throughout the university.

1. Leadership Development: Diversity management requires leaders who can take bold action for systemic change. Cornell and Penn State University Cooperative Extension directors and faculty met recently to develop strategies to create inclusive organizations. Leaders in each system have also attended "Opening Doors: A Personal and Professional Journey," a program of the Cornell Migrant Program Diversity Project. "Opening Doors" is a three-day retreat that addresses personal attitude change as part of multicultural organizational development. Jane Mt. Pleasant, director of Cornell's American Indian Program and professor of crop and soil sciences, says of her experience in "Opening Doors," "This workshop greatly expanded my understanding of how differences in race, gender, class and age are reflected in personal, professional and institutional power relationships." For information about attending an "Opening Doors" retreat, visit the Web site at <www.cce.cornell.edu/diversity/workshops.htm>.

2. Assessments: In order to achieve our vision for the future, it must be grounded in a solid sense of where we are today. In 2002, Cornell Cooperative Extension conducted a diversity climate assessment survey of all extension staff on the Cornell campus and in county extension offices throughout the state. The purpose of the assessment was to learn about the perceptions and experiences of our employees, to identify strengths and challenges for strategic planning and to benchmark progress for inclusiveness in our organization. Cornell Cooperative Extension Director Helene Dillard stated in the diversity climate assessment report to the system, "It is my personal goal to facilitate and support systemwide movement toward creating a climate for diversity within Cornell Cooperative Extension that meets the needs of New York state residents, including underrepresented and minority groups." The complete Cornell Cooperative Extension climate assessment report is online at <www.cce.cornell.edu/diversity/climateassessment.htm>.

3. Diversity Catalyst Team: Cornell Cooperative Extension supports a Diversity Catalyst Team (DCT) consisting of individuals with various roles and backgrounds in the system to work with the director in leading and managing the organization's diversity change effort. The DCT has organized its work in three areas: profile improvement, skill development and understanding differences. The most recent effort of the DCT was a skill development workshop on building team and supervisory relationships utilizing four Cornell Cooperative Extension distance-learning sites across the state.

4. Diversity coordinator: In addition to the Diversity Catalyst Team, Cornell Cooperative Extension has designated a statewide coordinator for its diversity management and change efforts. Linda Couchon, diversity specialist for Cornell Cooperative Extension of Chemung County, has managed Cornell Cooperative Extension's diversity program part time for the past three years. The diversity coordinator position is key to the progress Cornell Cooperative Extension is making. For a variety of online resources, see the Cornell Cooperative Extension diversity Web site created and managed by the diversity coordinator: <www.cce.cornell.edu/diversity.htm>.

Inclusiveness is one of Cornell's staff "skills for success." Cornell Cooperative Extension is utilizing specific change strategies to help staff individually, and as a system, become more inclusive. These cooperative extension system strategies enable Cornell to more effectively fulfill its outreach mission, and they can be utilized throughout the university.

Eshelman is Cornell Cooperative Extension human resource manager and Diversity Catalyst Team member. The Diversity Digest is one of the services provided by the university's Diversity Council. For information about the council, this column, the council's newsletter or about diversity initiatives at Cornell, contact co-chairs Robert L. Harris Jr., vice provost for diversity and faculty development, at 255-5358 or <rlh10@cornell.edu>, or Lynette Chappell-Williams, director of the Office of Workforce Diversity, Equity and Life Quality, at 255-3976 or <lc75@cornell.edu>.

In the beginning

CORNELL COMPUTING CENTER
CPC TIME SHEET

WEEKS OF 12/14/53 12/21

DATE	FROM	TO	CUSTOMER	PROBLEM	BY
12/15	8:00			POWER ON	RCZ
12/17	10:30	3:30	IBM - HALLOWELL SMITH	CHECK OUT	"
12/18	11:00	1:30	SERVICE CALL		"
12/18	1:30	4:30	SERVICE	CTR 2B DOWN	"
12/18	5:00		MACHINE DOWN	SHORT	"
	10:30	12:00	PARRATT	TEST PROGRAM	DAH
	1:00	5:00	CCC	TEST BOARD 1	
12/23	8:15	8:45	CCC	IBM TEST 4 B#1	DAH
	8:45	12:00	PARRATT	JOB# 3	DAH

Courtesy of John W. Rudan

The time sheet, shown above, reveals that the first digital computer at Cornell, an IBM Card Programmed Calculator (CPC), was first powered up for customer use 50 years ago on Dec. 15, 1953. The inaugural customer was Professor Lyman G. Parratt from the Department of Physics. At that time, the CPC was located on the third floor of Rand Hall. The machine was programmed with a combination of punched cards and wiring a main control board, so that making changes was a daunting procedure. More information about the CPC can be found on the "Oral Histories – Cornell Computing and Information Technology" Web site – <http://www.cit.cornell.edu/computer/history/> – in the personal history by Richard C. Lesser, first director of the Cornell Computing Center. More personal stories and oral histories about the early days of student, research and business-systems computing at Cornell also are at that site. "The History of Computing at Cornell University" is being written by John W. Rudan, director emeritus of Cornell's Office of Information Technologies, and more articles about that history will appear in next semester's *Cornell Chronicle*.

Fellowships *continued from page 3*

Over 40 Cornell faculty members are affiliated with the IGERT program, which has four focus areas:

- the dynamics of complex networks like the World Wide Web,
- studies of animal and machine locomotion and manipulation,
- nonlinear models of gene regulation and cell signaling, and
- pattern formation in biological systems such as the electrical activity of the human heart.

Applications are open to Cornell students but are restricted to U.S. citizens or permanent residents. Applications are available online at <http://cam.cornell.edu/igert_web_page/>. Direct inquiries to John Guckenheimer, professor of mathematics, at <gucken@cam.cornell.edu>.

CITRA *continued from page 3*

the poverty line," noted Lachs. "Further, our Weill Cornell House Call Program serves many homebound patients. The new center speaks to NIA's recognition of the track record of outstanding research in aging on both campuses and how multidisciplinary collaboration has the potential to help many older people."

"This is one of the most exciting Cornell medical school-Ithaca collaborations under way," said Lisa Staiano-Coico, Cornell vice provost for medical affairs and executive director of the Tri-Institutional Research Program (TIRP). TIRP encompasses Cornell, with its Ithaca campus and Weill Cornell Medical College in Manhattan, and Rockefeller University and Memorial Sloan-Kettering Cancer Center, both in New York City.

CIT bolsters university e-mail services through a series of improvements

By Beth Goelzer Lyons and Leslie Intemann

"Temporary inconvenience for permanent improvement," said Rick MacDonald, director of Cornell Information Technology's (CIT) Systems and Operations division. "That's what CIT's upgrade of the university e-mail system was for the entire Cornell community."

At the beginning of December, CIT began the final stages of upgrading the e-mail system to the most flexible, most secure system the university has ever had. The new hardware offers better performance and greater reliability and makes it possible to offer superior e-mail management tools to the community.

One service, PureMessage, blocks viruses from ever being delivered and tags spam messages so they're easy to spot and delete. Two improvements have just been made. One is that all mail originating at Cornell is now protected from being flagged as spam. Another is that PureMessage can more deftly detect viruses now that it is owned by Sophos, a leader in the anti-virus and anti-spam industry.

Two other services, WebMail and uPortal.Cornell's e-mail channel, let people access their e-mail from anywhere, using only a Web browser such as Netscape or Internet Explorer. WebMail provides more features – such as the new spellchecker – and is easier to use than CIT's previous web-based mail client. People who already use uPortal.Cornell will find its e-mail channel a convenient way to quickly see their mail. It's also a nice substitute for people who enjoyed the simplicity and speed of CIT's old Travelers Mail.

For people who have their own computers, Eudora is still a good way to access mail. It offers all of the bells and whistles of a full-featured e-mail client and is an ideal way to store mail locally.

The security of the e-mail system is another big change. No longer can NetID passwords be sent without protection of some kind. To maximize security without impinging on people's ability to access their e-mail from anywhere, the e-mail system works with Kerberos (software installed on individual computers), CUWebLogin (a web-based tool), and TLS/SSL, a security tool built into almost every e-mail client there is, including Microsoft Outlook and Netscape Communicator.

"Although the original e-mail system seemed to work well for the general Cornell community, its hardware was too old and not powerful enough to adequately meet the demands of handling over a million e-mail messages a day," said Jim Howell, CIT's manager of messaging services. "It also couldn't handle the new services that the community wanted, especially a better way for people to get mail when they were traveling."

The new system is vastly superior. It's more responsive and significantly more robust. The new system did have some growing pains as the campus transitioned to it, with the most severe happening, unfortunately, at the start of the fall semester as hardware issues bumped against a worldwide e-mail virus epidemic that flooded the system with three times the normal amount of mail. This was followed by a series of software problems, resolved through configuration changes and a fix from PureMessage.

"It was disconcerting to see the numbers of staff working so hard – as if they were playing Whack-a-Mole – fixing one thing and immediately getting hit with another. It was disheartening to see the staff working day and night and just not getting that final result," said MacDonald.

Unfortunately, e-mail is complicated, and a small number of migration issues are still being worked out. But most problems – mail delays, not being able to send mail, and postoffice failures – now have been resolved. The new postoffices were reconfigured to make them 300 percent faster. WebMail suffered from its own success and outstripped CIT's wildest expectations. Its hardware is now two to three times faster and other changes have made it much healthier and more responsive.

"We put WebMail on new hardware and upgraded the software in mid-November," said Lee Brink, senior CIT consultant and WebMail manager. "With 8,000 unique users a month and 35,000 visits a day, it's performing well."

"The e-mail system as a whole is now stable and responsive and there have been no performance issues since the beginning of November," said MacDonald. "With the system stabilized, our people are starting to breathe again. We appreciate the patience and understanding of the campus through this much-needed change."

CU group to assess 'ecoagriculture' practices for U.S. development agency

By Blaine P. Friedlander Jr.

An international group of agricultural scientists is studying how to feed the world while conserving natural ecosystems. In a first step, the Sustainable Agriculture and Natural Resources Management program of the United States Agency for International Development (USAID) has chosen Cornell's College of Agriculture and Life Sciences to study how to unite agricultural and environmental land management worldwide.

Louise Buck, Cornell senior extension associate in natural resources, will lead the "ecoagriculture" assessment team.

Buck

"Around the world there has been too much competition between agriculture and natural resources," said Buck. "This is bringing together the state of the art in natural science and social science research, all for managing agricultural land systems and conserving biodiversity. We are looking for synergies."

The Cornell assessment group includes: Norman Uphoff, director of the Cornell International Institute for Food, Agriculture and Development (CIIFAD); Thomas Gavin, Cornell associate professor of natural resources; David R. Lee, Cornell professor of applied economics and management; Diji Chandrasekharan Behr, postdoctoral fellow in natural resources; and Fred Werner, a researcher in natural resources.

The final report, when prepared, will be presented at the International Conference of Ecoagriculture Innovators, scheduled to convene at the World Agroforestry Center in Nairobi, Kenya, in September 2004.

Ecoagriculture is defined as sustainable agriculture and associated management of natural resources that enhance farm productivity, encourage sustainable production, improve rural livelihood and maintain biodiversity conservation. It operates on a regional and farm scale.

"Ecoagriculture is a very interesting concept, bringing together the concerns of both agriculturalists and environmentalists," said Uphoff.

Buck says that the effects of agriculture on biodiversity are well-known in many regions of the world, but the impact of biodiversity on agriculture is not well-understood.

"By taking such a comprehensive approach and casting a wide net, the assessment can demonstrate what information exists and whether it is available for different audiences," she said.

Upstate/Downstate

Chemical biologists train in 'crown jewel' program of two-city collaboration

This is part of the fall series about collaborations between Cornell's Ithaca and Weill Cornell Medical College campuses.

By Kate Becker

When the first-year graduate students in a training program in chemical biology stepped onto the Cornell campus for the first time in 2001, they didn't have the comfort of talking with veterans who had been through it all before.

That's because these eight students were the inaugural class of the Tri-Institutional Training Program in Chemical Biology (TPCB), an innovative collaboration between Cornell in Ithaca and Weill Cornell Medical College, Rockefeller University and the Memorial Sloan-Kettering Cancer Center in New York City.

A branch of the institutions' multifaceted Tri-Institutional Research Program (TIRP), the TPCB aims to stimulate research at the interface between chemistry and biology. Founded with an anonymous $80 million gift in 2000, the TIRP also operates research programs in computational biology and cancer and developmental biology. A new graduate training program in computational biology, modeled on the TPCB, welcomed its first class this fall

Bruce Ganem, professor of chemistry and chemical biology at Cornell and head of the Ithaca arm of the TPCB, describes the training program in chemical biology as TIRP's "crown jewel."

That 2001 inaugural, he said, was "intrepid." The first year was "a huge experiment," said Ganem. "We were troubleshooting as we went."

Students and faculty, for example, had to master New York-to-Ithaca videoconferencing and learn to cut through multi-institutional red tape.

Two years later, those first students are comfortably ensconced in laboratories in New York and Ithaca, and this year's entering class is enjoying a much smoother ride.

Like previous classes, the nine students in the entering class of 2003 spent the summer doing laboratory rotations in New York City. There, they were immersed in medical research and got their fill of urban life before traveling to Cornell's Ithaca campus for a fall semester loaded with graduate-level chemistry courses.

Timothy A. Ryan/Weill Cornell Medical Center

Harold E. Varmus, right, president and CEO of the Memorial Sloan-Kettering Cancer Center, leads a Tri-Institutional Training Program in Chemical Biology class at Weill Cornell Medical College in New York City.

TPCB students typically enter the program with impressive chemistry credentials (most studied chemistry as undergraduates, and all were admitted to the training program through Cornell's Department of Chemistry and Chemical Biology). However, their backgrounds in biology are "a mixed bag," said Timothy Ryan, TPCB director and professor of biochemistry at Weill Cornell Medical College.

To put everyone on even footing, the TPCB faculty designed a class called Advanced Biomedical Sciences, held in New York City in the fall of the second year. The class consists of lectures by TPCB faculty and luminaries such as Memorial Sloan-Kettering Cancer Center president and Nobel laureate Harold Varmus.

"Being young, TPCB has been extraordinarily flexible," said third-year student Jane Xingjuan Chao. "The class was relatively informal, and we were able to have a lot of inspiring discussions with professors and to give suggestions about the class, too."

At the end of the course, said Ryan, students "know what the cutting-edge questions are," and are prepared to begin research at one of the four TIRP institutions. A graduating student receives a degree from the institution at which his or her thesis research is completed.

The research projects chosen by the 2001 entering class, the first to do research full time, illustrates the power of the TPCB to connect researchers who might otherwise never collaborate, said Ryan. He described third-year student Heather King as a "poster child" for this brand of academic matchmaking. King's interest in the circadian rhythm – the internal clock responsible for everything from blood pressure regulation to jet lag – brought together two prominent researchers who had never before collaborated.

One of them, Rockefeller University Professor Mike Young, studies the genetics of the circadian rhythm. Brian Crane, professor of chemistry and chemical biology at Cornell, studies its molecular basis.

"The student was the one who forged the link," said Ryan.

CU researchers: Timing of an IQ test can have life or death consequences

By Susan Lang

The year in which IQ is tested can make the difference between life and death for a death row inmate. It also can determine the eligibility of children for special services, adults' Social Security benefits and recruits' suitability for certain military careers, according to a new study by Cornell researchers.

That's because IQ scores tend to rise 5 to 25 points in a single generation. This so-called "Flynn effect" is corrected by toughening up the test every 15 to 20 years to reset the mean score to 100. A score from a test taken at the end of one cycle can vary widely from a score derived from a test taken at the beginning of the next cycle, when the test is more difficult, says Stephen J. Ceci, professor of human development at Cornell.

Ceci and his current and former graduate students, Tomoe Kanaya and Matthew Scullin, found, for example, that the number of children recommended for special services for mild mental retardation tripled during the first five years of a new test compared with the final five years of an old test, despite the fact that there were no real changes in underlying intelligence

"Our findings imply that some borderline death row inmates or capital-murder defendants who were not classified as mentally retarded in childhood because they took an older version of an IQ test might have qualified as retarded if they had taken a more recent test," Ceci said. "That's the difference between being sentenced to life imprisonment versus lethal injection."

The study is published in the October issue of *American Psychologist* (Vol. 58, No. 10), a journal of the American Psychological Association; its co-authors are Kanaya, a fourth-year graduate student in human development, who is first author, and Scullin, Cornell Ph.D. '01 and now an assistant professor of psychology at West Virginia University, who is second author.

The researchers analyzed IQ data from almost 9,000 school psychologist special education assessments in nine school districts across the country to document how the resetting of the IQ test influences mental retardation diagnoses for several years after a new test is introduced.

The consequences of taking intelligence tests at the end or beginning of a test's cycle are most critical, however, when determining whether a death row inmate is mentally competent. Of the 350 people executed since 1990, 112 were known to have IQ scores of 70 or below (the cutoff for mental retardation).

Among children, the researchers found nearly a six point difference between those taking the two tests. "This variance can make the difference between a child being diagnosed as mentally retarded or not," Ceci said. "This study shows for the first time that two children in the same classroom with the same cognitive ability could be diagnosed differently simply because different test norms were used for each child."

The researchers report that perhaps tens of thousands of children could be affected by these IQ trends over the course of their school years, with far-reaching financial implications. "Our results imply that millions of taxpayers' educational dollars may be misallocated because students are being misdiagnosed every year that an IQ test ages," Ceci pointed out.

A diagnosis of mental retardation also determines whether a person is eligible for Social Security disability benefits. And the year in which a military recruit takes an IQ test can determine whether he or she is eligible for service or certain occupations and ranks.

"Caution must be used when IQ scores are used to base important financial, social or legal decisions. It may not be sufficient to simply look to see if an IQ score is below some cutoff point," concluded Ceci. "The most important times to be particularly careful are when the test is either at the beginning or the end of its cycle."

The research was supported, in part, by a grant to Ceci from the Smith Richardson Foundation.

Entomologists show evidence of better insect control with 'gene pyramiding'

By Peter Seem

GENEVA, N.Y. — Entomologists at Cornell have provided the first experimental evidence that breeding plants to produce two different proteins by a process called "gene pyramiding" delays the development of resistance in targeted insect pests.

The research has important implications for the long-term protection of agricultural crops produced through biotechnology, particularly Bt corn and Bt cotton. The team performed the research using diamondback moths, one of the world's major insect pests, and Bt broccoli.

The paper, "Transgenic plants expressing two *Bacillus thuringiensis* (Bt) toxins delay insect resistance evolution," was published in the journal *Nature Biotechnology*, Dec. 1.

Bt, or *Bacillus thuringiensis,* is a type of bacterium that produces proteins toxic to many major agricultural insect pests. Bt was promoted as an environmentally benign insecticide by Rachel Carson in her 1962 book *Silent Spring*. Even though it is benign, Bt accounts for less than 2 percent of the world's insecticides because of its cost and relatively low effectiveness. When plant breeders developed the technology to genetically engineer the gene for Bt into a specific crop, the crop itself became a very effective method of control. Bt plants were first commercialized in 1996, and Bt corn and Bt cotton became widely used alternatives to conventionally bred corn and cotton. In 2002, Bt crops were grown on 36 million acres worldwide.

"Breeding plants to express Bt proteins provides positive economic benefits to growers, and health benefits for the environment and farm workers," said Tony Shelton, Cornell professor of entomology at the university's New York State Agricultural Experiment Station in Geneva and one of the paper's authors. "We're moving into the second generation of the technology now. As techniques have become more sophisticated, technology allows us to pyramid two Bt genes in a plant."

The paper is the result of 10 years of research by Shelton and his collaborators to develop transgenic plants as an alternative to conventional insecticide sprays. The researchers used dual-toxin broccoli plants developed by Professor Elizabeth Earle and Jun Cao, senior research associate, in the plant breeding department at Cornell. Shelton's lab examined how resistance to the two toxins developed in a population of diamondback moths after 24 generations. Resistance was compared under several different management strategies.

"Plants containing two Bt toxin genes substantially delayed the development of resistance compared to two single-toxin plants used sequentially or in a mosaic," said Shelton. "Regulatory agencies and companies now should work together to promote the development of these pyramid plants and, in the long term, phase out single gene plants."

Mathematical models of insect resistance suggest that plants with genes for two different Bt toxins would delay resistance longer than planting a mixture of two single-toxin plants in the field (termed a mosaic), or using two single-toxin plants sequentially in crop rotation. Such models already have prompted one company to develop a variety of cotton that expresses two Bt proteins. Shelton's lab provides the first experimental confirmation of the value of dual-toxin plants.

Since the commercialization of Bt plants for insect control, there have been no instances of insect populations developing resistance in the field, but there is a constant danger that a pest species will develop resistance to the toxin, as has happened with many conventional insecticides. To help prevent insects from developing resistance to transgenic Bt crops, the Environmental Protection Agency has mandated that a portion of acreage next to a Bt crop be devoted to what is called a "refuge." A refuge is an area in which the non-transgenic version of the crop is grown. This area allows some susceptible insects to survive so that the gene that encodes for resistance does not become abundant in the insect population.

In addition to providing better resistance management, plants with pyramided genes for Bt proteins require less space set aside as refuge, which helps growers get a greater return for their acreage, Shelton said. Preventing insect resistance also extends the useful life of Bt crops, which helps manufacturers and growers.

"This work has important implications in the U.S., but also in Australia, India and China, where millions of acres of the cotton crop contains Bt," added research associate Jian-Zhou Zhao, the paper's first author.

"Using more Bt crops and less insecticide are environmentally and people-friendly strategies in pest control," said Shelton. "The next step in our research program is to extend the crop's useful life by having plants express the Bt proteins only when the crop is most susceptible to insect damage."

Olympic village *continued from page 1*

M.R.P. student.

"They took us up on the roof of the industrial design center, which has great aerial views, told us about the history of the area, supplied us with photographs and let us take our own," said Christine Simpson, an M.L.A. student who is Hart's teammate.

The students took notes on the site's limitations – among them a railroad line that bisects the site – and the stringent demands of the planners – for example, while about 4,400 apartments need to be built, 25 percent of the limited area needs to be parkland. Their final projects were presented Dec. 10 in West Sibley Hall's GEDDES computer studio. And they will be shown next week in New York City to city and Olympic committee staff, who promise written comments.

Rather than build 40-story buildings with the best river views limited to those able to afford them, all of the projects proposed constructing mixed-use lower buildings in keeping with the surrounding neighborhoods' essential character and with New York's own 1916 zoning ordinance that resulted in stacked "wedding cake" buildings allowing more sky exposure, noted Trancik.

Hart and Simpson proposed a "walkable" village, treating the area much like the winding streets of Greenwich Village in lower Manhattan, with sidewalk cafes and craft shops visitors can stroll by. Their plan stresses that views of the river and Manhattan skyline are to be open to all, instead of a wealthy few. In addition, it features clusters of low buildings with commercial space on the first floors and apartments on the upper floors. The neighborhood is intended to be car free.

"When you're in this area, you don't have to hop into your SUV and drive to Wal-Mart, you can just walk to where you want to shop," said Hart.

The rail line problem is partially solved by building a parking garage above the rail yard where residents can leave their cars. Rather than a standard, solid parking garage, they propose a terraced structure, with directed walkways and plantings. A map they created measuring the distance between the garage and the farthest residences ensures that walking distances are reasonable.

Another team, Moon-Gi Koh and Susan Luescher, employed environmental sustainability concepts in their proposal – calling for recycled water, green roofs on the parking garages, treating the shoreline in an ecologically responsible way and preserving the area's soil and vegetation.

Another sustainable feature proposed by students included houses employing solar energy. A third project, by Nathan Barnhart and Laura Shagolov, echoed the transformation of the Corona dump in Queens into the 1939 World's Fair fairgrounds.

Courtesy of Roger Trancik

Professor Roger Trancik, ninth from the left, and students and TAs in his Designing Cities in the Electronic Age studio stand on the roof of the Greenpoint Manufacturing and Design Center in Brooklyn, looking across Newtown Creek toward the Queenswest Olympic village site they are designing for a course project. Third from left is Cornell alumnus Wilbur Woods, B.Arch. '59, director of waterfront and open-space planning for the New York City planning department. The midtown Manhattan skyline is in the background.

While Trancik's Olympic village studio helped the students test out some original planning and design ideas shared with the site's planners, the actual project's ultimate designers are professionals who will be selected by the New York City Olympic committee through an international competition. Finalists are expected to be announced Dec. 12, and the winner selected from that group. Whatever group is finally chosen would do well to incorporate some of the innovative ideas proposed by Trancik's students.

Schwab named Law School dean *continued from page 1*

pany, 3rd ed., 2002), with Steven L. Willborn and John F. Burton Jr. He has written about employment discrimination, workplace accommodations to people with disabilities, sexual harassment in the workplace, constitutional tort litigation and labor law reform and has contributed numerous chapters to books on employment law. He has published articles in scholarly law journals at Yale University, the University of Chicago, New York University, William and Mary College, University of Michigan and Cornell, and he is currently co-editor of the *Journal of Empirical Legal Studies*.

At Cornell he has taught courses on comparative labor law, contracts in a global society, corporations, empirical studies of the legal system, torts, employment and labor law, and law and economics. He was a distinguished visiting professor at the University of Nebraska Law School in spring 2003 and a Fulbright senior scholar at the Australian National University's Centre for Law and Economics in January 1998. He has been a visiting fellow at Oxford University's Centre for Socio-Legal Studies, the Chapman Tripp Visiting Lecturer at Victoria University Faculty of Law, New Zealand, an Olin visiting research professor of law and economics at the University of Virginia Law School and a visiting professor at law schools at Duke University and the University of Michigan.

Schwab has consulted for the World Bank on reform of labor and employment laws in parts of the former Yugoslavia and Soviet Union and has been a consultant on ERISA, ESOP and Title VII litigation. Among the projects he currently is working on is "What Do CEOs Bargain For?: An Empirical Study of Key Legal Components of CEO Contracts" (with Randall Thomas). He also served on the city of Ithaca Board of Zoning Appeals in 1985-88.

Schwab, the school's 15th dean, succeeds Lee Teitelbaum, who served as dean of the Law School from July 1999 to June 2003. In addition to the provost, search committee members were: Walter Cohen, vice provost; Stephen Crane, chair, Law School Advisory Council; and these Law School faculty members: Professors Theodore Eisenberg, Stephen Garvey, Barbara Holden-Smith, Sheri Lynn Johnson, Annelise Riles and Faust Rossi, and Carol Grumbach, senior lecturer and director of the Lawyering Program. For details on the other finalists, see the provost's Web site: <http://www.provost.cornell.edu>.

Founded in 1887, Cornell Law School is a major research center and a leader in legal education. The school has about 45 full-time faculty members as well as a number of adjunct faculty members and practitioners teaching part time. It enrolls about 600 students, from most states and several countries, in its J.D. degree program and 60 additional students, most holding foreign law degrees, in its master of laws (LL.M.) degree program. It also offers specialized or combined degrees, such as the U.S. Juris-Doctor/French Maîtrise en Droit degree, offered jointly with the Université Paris I Panthéon-Sorbonne, and the J.D.-M.LL.P. degree, offered in conjunction with Berlin's Humboldt University.

Alice Cook House will launch new West Campus community

By Franklin Crawford

In August 2004, approximately 360 upper level students, primarily sophomores but a mix of juniors and seniors as well, will become the founding student members of the Alice H. Cook House, the first of five houses being built as part of Cornell's West Campus Residential Initiative (WCRI).

Cook House will have its own dining hall, common rooms, library and a guest suite where, for instance, A.D. White Professors-at-Large or distinguished alumni can stay during visits. The other houses will follow suit.

With Ross Brann, house professor and dean, at the helm, the students of Cook House will help create Cornell's new residential learning environment, backed by a supporting crew of six graduate residents, three undergraduate student assistants, 30 to 35 non-resident faculty and senior administrative staff house fellows headed by an assistant dean, and even a house chef. The last role is certainly not the least important: Much of the Cook House's informal learning experiences will center around meals, especially dinner.

"Imagine a scenario where Janet Reno or John Cleese is staying in the guest suite and they informally pop in for breakfast or dinner with students – as opposed to the structured, planned interactions of the lecture hall and classroom," said Isaac Kramnick, vice provost for undergraduate education, professor of government and co-chair of the West Campus Council. The council, composed of administrators, faculty, students and staff, is the governing body for the West Campus initiative. "That kind of absolutely spontaneous interaction with students is emblematic of the whole spirit of Cook House," he said.

'The idea is that we're creating a smaller-scale intellectual *community* that is faculty-led and student-run, with staff acting as partners to both students and faculty.'

– Ross Brann, house professor and dean of WCRI's Alice Cook House

Brann further described the "spirit" of Cook House: "The idea is that we're creating a smaller-scale intellectual *community* that is faculty-led and student-run, with staff acting as partners to both students and faculty," said Brann, the Milton R. Konvitz Professor of Judeo-Islamic Studies and chair of the Department of Near Eastern Studies. "We're counting on student leaders to emerge who are willing to take ownership of the house and to help us establish house identity and craft programming. Cornell is big, with all of the resources that come with the size of a major research institution, but it succeeds best when we can create smaller intellectual and social communities out of the larger Cornell community. Alice Cook House will be one such subcommunity."

Brann's appointment is a three-year commitment and he will live at Cook House, with his family, at least through 2007.

The search for an assistant house dean is under way and should be concluded in the spring of 2004, said Jean Reese, WCRI program leader. Recruitment and selection of faculty fellows, graduate resident fellows and undergraduate assistants also is under way. The remainder of the Cook House staff will be on board by the end of the academic year.

At a meeting of the West Campus Council in November, President Jeffrey S. Lehman voiced his support for the WCRI, which has been in the planning stages since 1998.

"I believe in the West Campus Residential Initiative because it will strengthen undergraduate education in two mutually reinforcing ways: by creating smaller communities in the midst of our large university and by promoting the greater integration of intellectual activities into our students' lives," Lehman said.

Planned from the inside-out in terms of programming, Cook House is a template for the West Campus residential system, resembling in certain ways the living-learning concept of North Campus. However, WCRI is programmatically geared toward the scholarly and career-oriented needs of upper-level students. When it is completed in 2010, West Campus will be populated by a student mix of about 75 percent sophomores, 15 percent juniors and 10 percent seniors.

"Unlike North Campus, which had to be built in four years, with West Campus we had the luxury of thinking about the programming first," said Susan Murphy, Cornell vice president for student and academic services. "What we've developed is consistent with the Cornell philosophy of permitting and encouraging student choice. It's important that people understand this is open to students across all the colleges and of every race and ethnicity, and these students will be the founding members of a new house system at Cornell."

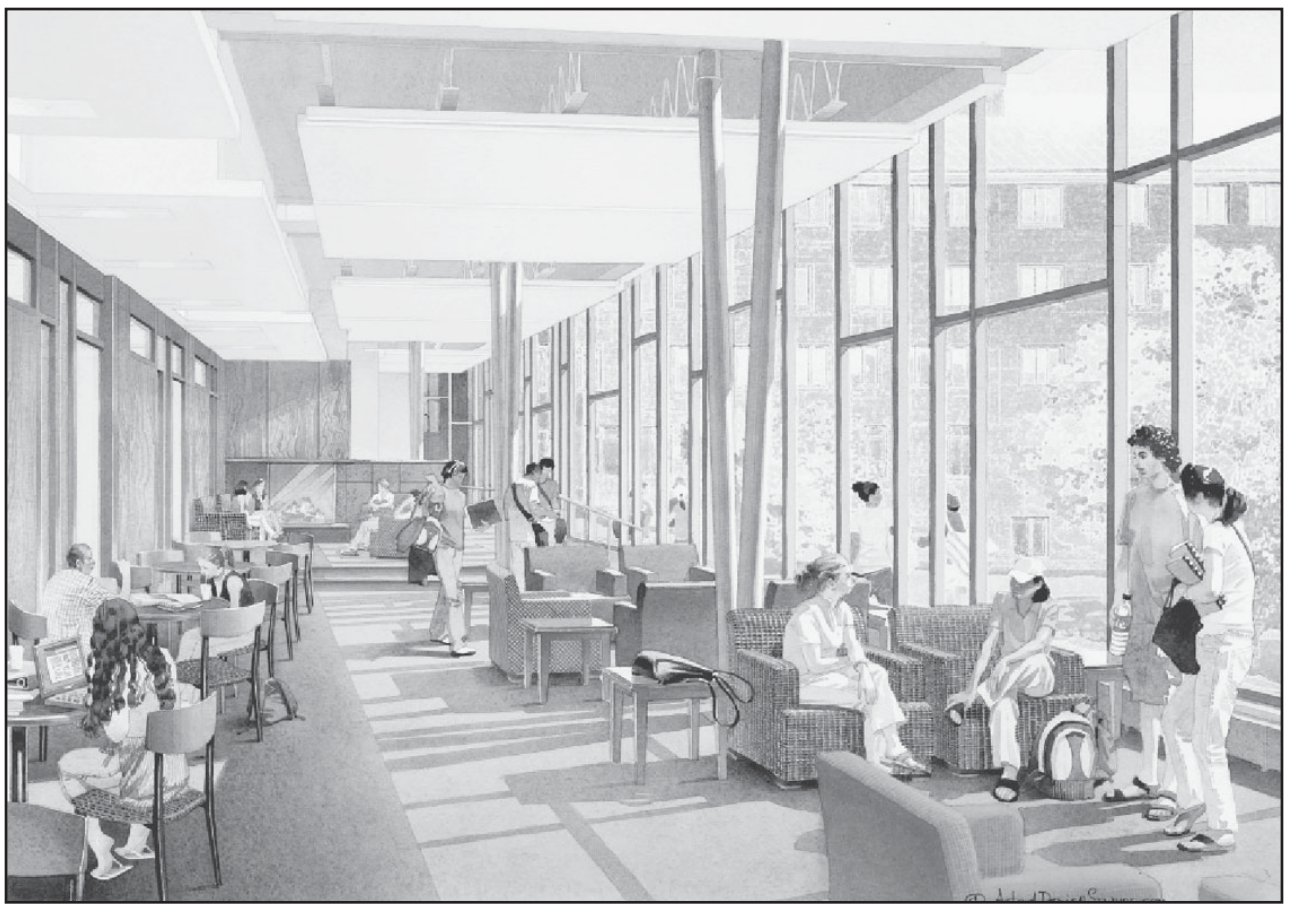
Kramnick said that this egalitarian spirit of the house system is "uniquely Cornellian" in at least two other key ways.

For one thing, it's optional, not mandatory, he said. That's a big departure from residential house models at many peer institutions.

Secondly, Kramnick said, "there are no themes connected to the houses. Cornell prides itself on the diversity of its scholarly as well as social offerings and we want to build a diverse, inclusive community. Each house will develop its own personality reflecting the student and faculty leadership in residence at any particular time."

Frank DiMeo/University Photography

On West Campus, from left, Professor Ross Brann, who will be the new Alice Cook House professor and dean, joins Edna Dugan, assistant vice president for student and academic services and co-chair of the West Campus Council, and Isaac Kramnick, vice provost for undergraduate education and West Campus Council co-chair, in front of a mock-up displaying the exterior surfaces of the Alice Cook House, Nov. 21.



An artist's drawing of a Common Room in a West Campus house.

'People will leave here knowing that they went to Cornell but also knowing that they connected to 360 other students. Twenty years later they will say, "I was a member of Alice Cook House" ...'

– Edna Dugan, assistant vice president and co-chair of the West Campus Council

Cook House members may stay with the house for one year or longer and, if they leave, retain an affiliation with the house. That idea, along with a system of student self-governance, is modeled, in part, from the fraternity-sorority system, said Edna Dugan, assistant vice president for student and academic services and co-chair of the West Campus Council.

While the West Campus house system differs from those at peer institutions, she said, it also incorporates many features in place – or lacking – at other university house systems. West Campus council members visited Stanford, Harvard, Princeton, Yale, the University of Pennsylvania and the University of Michigan, among other schools.

"We looked at what worked and didn't work and what would be a good fit for Cornell," Dugan said. "I jokingly say there are one or two things that we didn't 'steal' from the schools we visited."

Six graduate resident fellows will serve as mentors and role models to Cook House students, said Reese. They also will provide academic and program support for the house dean and assistant house dean to help create "a positive, vibrant and academically engaged community," she said.

Three student assistants – either juniors or seniors living in Cook House – will likewise provide support, focusing primarily on the well-being of house members and acting as resources and referral guides.

The Cook House administrative infrastructure will get a boost from the members of the longstanding Language House Program in Boldt Hall. Language House residents also will be members of Cook House, said Dugan.

"To have Language House members as part of the Alice Cook House is very exciting and compatible," Dugan said. "They have actively engaged faculty and students who are eager to be part of the Cook House system. It's a great partnership."

The Cornell residential vision, as a whole, is based on the premise that college learning is an ongoing process that evolves as much outside the classroom as in it. The ideal is a seamless continuum between formal and informal learning, with students taking an active leadership role in how

Continued on page 8

After failed negotiations, CU Library cancels Elsevier journal package

After several months of negotiations, Cornell University Library (CUL) administrators have decided not to renew CUL's subscription with publisher Reed Elsevier for a bundled package of more than 900 journals. Beginning in 2004 the library will subscribe to a smaller number of individual Elsevier titles. Library administrators cite an unsustainable pricing model, prohibitive selection options, and the financial impact on the library's ability to purchase other journals as reasons for its decision.

Many key academic journals, especially in the sciences, are now owned by a small number of for-profit companies in Western Europe. The largest of these publishers is Reed Elsevier, which has a significant presence in North America and Europe. Last year a Morgan Stanley Report enthusiastically proclaimed that "scientific publishing [has been] the fastest-growing media subsector of the past 15 years." It has also become one of the most profitable. Part of the growing profits has been fueled by journal bundling, in which a publisher offers electronic access to all of its journals for the sum of previous individual subscription fees, plus a premium. Among librarians, this is known as the "big deal."

In good times, the big deal is almost irresistible. Scholars love it because they have access to more content and librarians appreciate it because they can build comprehensive collections. But there is a drawback: Once a library signs up for the big deal, it is very hard to walk away and the subscription fees increase much faster than most library budgets. Publishers prohibit libraries from canceling (even duplicate subscriptions) as a prerequisite for remaining in the big deal, and they provide incentives for libraries to contract for the aggregation for three to five years.

Once a library has licensed access to a bundle of journals, it can become even more costly to extricate itself from the agreement, as individual subscription prices increase substantially for the journals it retains after canceling the bundle. In addition, libraries run the risk of disappointing readers who have become dependent on access to a broad range of journals.

Starting in 2004, CUL will opt out of Elsevier's bundled package of journals – which comprises primarily science journals – and return to title-by-title purchasing. "The big deal was an unsustainable model for Cornell," said University Librarian Sarah Thomas. "We were going to have to start canceling high-value journals from societies and nonprofit association publishers that we needed, in order to pay for Elsevier journals we didn't need, but couldn't cancel."

In 2003, CUL's subscription included 930 online and print journals published by Elsevier. Although these titles represent less than 2 percent of the library's subscriptions, the contract with Elsevier for the bundle amounted to more than 20 percent of the library's journal subscription expenditures.

Cornell is not alone in its decision this year. Harvard recently announced that it is reconsidering its big deal with Elsevier and other research libraries are following suit. Several well-respected researchers have called for a boycott of Cell Press journals (which are owned by Elsevier) since the University of California has been unable to negotiate for fair prices. (See <http://walterlab.ucsf.edu/cell.html>.) Columbia University is maintaining access to its Elsevier titles, but will be eliminating almost all print copies in favor of electronic journals only.

After making the decision that Elsevier's terms for continuing access to the bundled package were not in the best interest of Cornell scholars, CUL now faces higher individual subscription fees for the journals it will retain. As a result, the library has had to cancel significant numbers of its Elsevier journals in order to reallocate its resources to pay the higher prices. However Ross Atkinson, CUL's associate university librarian for collections, noted that the library has been analyzing usage statistics for Elsevier titles for several years. "When the cost per use is calculated, it's clear that it hasn't been a wise use of our limited budget to subscribe to many of these titles," he said. "Our focus now is on canceling duplicate subscriptions and reducing the number of subscriptions to printed journals that we hold in electronic form."

CUL also will cancel unique titles that are both expensive and receive little use. "Faculty members have been integral in helping us distinguish the journals that are essential to teaching and research from those that are of less importance," Atkinson said. The library remains committed, library administrators say, to obtaining access to information needed by Cornell students and faculty to meet teaching and research needs.

The recent announcement about the library's position regarding Elsevier has inspired considerable debate on campus. The University Faculty Library Board plans to ask the Faculty Senate to consider the issue in a forthcoming session.

Members of the Cornell community who have questions or concerns about the library's journal holdings can contact Ross Atkinson at 255-5181 or <ra13@cornell.edu>.

Alice Cook House *continued from page 7*

that informal learning process is shaped.

With 30 to 35 non-resident faculty participating, Kramnick envisions a setting where students and professors seek each other out to pursue noncredit, informal seminars or programming on subjects of mutual interest, he said. It may be music, movies, science or politics. The idea is that faculty get to know the real student – and vice versa.

"One of the saddest moments in being a professor at Cornell is when a student comes up to you at the beginning of their senior year and says, 'I know you don't know me that well, but I need two professors to write a letter of recommendation for law school or a job on Wall Street,'" said Kramnick. "For students coming out of the house system, hopefully this will never be the case. In addition to having a professor in their field, they will have another from the house who knows the student as a multidimensional person and can write that letter of recommendation."

Faculty affiliated with Cook House also will benefit by a deeper connection with the students they teach and advise, said Brann.

"Many faculty across the colleges are committed to deepening a sustained intellectual dialogue with students because they know the great pleasure and joy that comes from seeing students grow and succeed and discover themselves," he said. "We have found that the more faculty have become involved in planning the West Campus house system, the more faculty want to join us and become house fellows."

Within a few weeks of arrival, Cook House students, faculty and staff will most likely know one another by first name, and maybe even know something about one another's intellectual passions or favorite hobbies.

An artist's rendering of a West Campus house system dining room.

"People will leave here knowing that they went to Cornell but also knowing that they connected to 360 other students," said Dugan. "Twenty years later they will say, 'I was a member of Alice Cook House,' the way an alum today might say, 'I was a member of the Glee Club or hockey team.' It provides another positive sense of identity, which we all need."

The Cook House program also goes a long way toward fulfilling Cornell's primary mission: to graduate intelligent and thoughtful individuals who will become leaders in the community of the United States and the wider world beyond, Dugan said.

West Campus Residential Initiative *continued from page 1*

Brann, the Milton R. Konvitz Professor of Judeo-Islamic Studies and chair of the Department of Near Eastern Studies at Cornell, was appointed house professor and dean of the Cook House in April.

Cook House and the entire West Campus initiative is emblematic of the Cornell Residential Communities Policy Statement, outlining the university's overarching residential vision. Adopted by the Cornell Board of Trustees in 1996, the statement includes the following:

"Cornell aspires to create an environment where the lives of students inside and outside the classroom form a cohesive experience, with each part positively reinforcing the other."

The WCRI is the second segment of the university's comprehensive residential plan, said Edna Dugan, assistant vice president for student and academic services and co-chair of the West Campus Council. The council is the governing body for the project.

With the opening of the Carol Tatkon Center on North Campus in August 2003, the first part of the residential plan for first-year students neared completion, Dugan said. With West Campus now in progress, the university is focusing on the third piece of the initiative: strengthening and improving faculty engagement programming for the fraternity and sorority residential system, she said.

"We're really reframing the way we look at the entire residential initiative," said Dugan. "We looked at North Campus and West Campus and we've also looked at the fraternities and sororities."

Purely from a bricks and mortar perspective, the WCRI is a perpetuation of the North Campus Residential Initiative. However, the WCRI "is not proposing the addition of any more beds than the 1,800 beds that currently exist," said Dugan,

As on North Campus, the Residential Communities Policy Statement is manifest in the new West Campus architecture and landscape design. Facility-wise, the WCRI incorporates and preserves the gothic halls while replacing the class halls that were built in the 1950s to accommodate matriculating WWII veterans. The West Campus transformation also involves the demolition of Noyes Center and its replacement with a new Noyes community recreation center.

Crews labored for several months to blast, clear and haul bedrock from the Cook House site. In midsummer, flatbed trailers arrived towing massive slabs of pre-cast concrete forms. As the concrete sections were set on foundations and secured, members of the Cornell and the greater Ithaca communities caught their first glimpse of the future skyline of West Campus. Once the slabs were in place, masons applied brick cladding to the concrete facades, with the brick patterned to mimic the stonework of Baker and Boldt halls next door. Finished exterior details call for leaded copper roofing and slate shingles at the tops of the building's end walls, and polished granite porticos. The windows are deep-set, another architectural reference to the gothic halls.

In addition to the construction of Cook House, crews are erecting a residential wing of the yet-to-be-named second residential house, in keeping with phase one plans, Reese said.

Upon completion, the new West Campus houses will be realigned along an east-west axis as opposed to the current north-south configuration, opening the whole site to both the Cornell and Ithaca communities, said Isaac Kramnick, vice provost for undergraduate education and co-chair of the West Campus Council.

Kramnick spoke of the overall design as having three interconnected spaces: the first space being the houses unto themselves, each with its own identity, yet physically open to one another. The West Campus grounds is a second space, with its intersecting pathways that create an integrated whole that yet again opens to the third, larger space, which he described as: "The university and the West Campus neighborhood bordered by the fraternities and cooperatives and symbolized by the Noyes community recreation center."

On an environmental note, Reese pointed out that the project team incorporated "green building" concepts in the design of Cook House and will seek Leadership in Energy and Environmental Design (LEED) certification, which, if approved, will make this Cornell's first LEED-certified building. The sustainable design goals for the west campus houses include the optimal use of natural light, low energy lighting systems, a mechanical system that controls indoor air quality, and the use of recycled materials and other low environmental impact materials.

Mars ho! Rover Spirit heads for a Jan. 3 landing on the red planet

By Blaine P. Friedlander Jr.

After a six-month journey through space, Spirit, the first of the twin Mars rovers, is scheduled to bounce down on the red planet's Gusev Crater Jan. 3, 2004, at about 11:35 p.m. EST. But for the Cornell team that designed the rovers' Athena instrument package and who will be monitoring the tools during the mission, Spirit's run will be just beginning.

The second rover, Opportunity, is scheduled to land on Mars Jan. 25 at 12:05 a.m. EST.

"Mars is getting pretty big in the windshield now," said Steven Squyres, Cornell professor of astronomy and the lead scientific investigator on the rover missions, at a media briefing at NASA headquarters in Washington, D.C., Dec. 2. He reminded reporters that while a good landing will be important, for the scientists, research is the thing. "This is a marathon," he said.

Although the rovers' primary mission is to search for evidence of water on Mars, Squyres cautioned the media that important findings are unlikely to occur immediately after landing. "The best stuff could come in February, March, April," he said.

Rover Spirit, he said, will plod the Martian landscape carefully. "It doesn't zip. It is more like a Galapagos turtle."

During the press briefing, Squyres revealed that during in-flight testing of the Athena instruments aboard Spirit in August, the Mössbauer spectrometer's drive system appeared to be jammed. Scientists and technicians from Germany and from the mission manager, the Jet Propulsion Laboratory (JPL) in Pasadena, Calif., worked slowly and methodically to solve the problem. Squyres reported that there was a minor obstruction in the drive system, probably a bent wire.

The Mössbauer spectrometer will analyze the composition and abundance of iron-bearing minerals to gather information about early Martian environmental conditions. The instrument was provided by Germany.

"You try to design an instrument with lots of margin," said Squyres in a recent online diary entry on his mission team's Athena Web site, <www.athena.cornell.edu>. "In other words, you try to make it better than it really needs to be. That way, if something goes wrong, it might still work okay after you make an adjustment. We did [this] on our Mössbauer, and it paid off big time," he said.

The scientists adjusted the instrument's vibration velocity and the frequency, giving it less total motion. "While we never expected to operate the instrument with a total motion that small, we built it with enough margin that the spectrometer still will work properly on Mars," Squyres said.

In late November, Squyres and his science team completed the last operations-readiness test at JPL. The team simulated five Martian days of driving a practice rover, using the vehicle's version of a geologist's rock hammer, the rock abrasion tool, or RAT. "We use it to remove the outer layers of a rock so that we can see what lies underneath," said Squyres in his online diary.

The team spotted a rock to study, nicknaming it Fromage, which means "cheese" in French. "Bait for the RAT, get it?" joked Squyres. "We drove the rover to Fromage, stuck out the arm, and used the RAT to grind a beautiful circular hole in it. Then we stuck [the Athena] instruments into the hole and got fantastic data. It was by far our coolest [test] yet. It was nice to finish up on such a high note."

Mars missions leader has found the secret of the 25-hour day

By Kate Becker

Steven Squyres, the principal investigator for the science instruments aboard the Spirit and Opportunity Mars rovers, juggles his commitments to the four space missions he is actively involved in, as well as to his teaching and advising duties, with an energetic ease that makes some wonder if he has found the secret to a 25-hour day.

Well yes, actually, he has.

Not 25 hours, to be exact, but 24 hours, 39 minutes and 35 seconds, the length of one Martian day, or "sol."

As the rovers' landing dates draw closer (see story, above), Squyres is preparing to live on Mars time for the duration of the mission, expected to be about four months. Spirit is scheduled to touch down in the red planet's Gusev Crater on Jan. 3; its twin, Opportunity, will land at Meridiani Planum on Jan. 25.

"Our vehicles are tied to the Martian day/night cycle," said Squyres, professor of astronomy at Cornell. "They rely on a vision system to avoid obstacles," and being solar powered they must operate during daylight and "sleep" at night.

Because the rovers' daily communications windows also are tied to this cycle, Squyres, along with almost 100 other scientists and engineers, must lengthen his days to stay in sync.

Squyres admits that the longer days, at first, seem attractive – "you get to sleep in 39 minutes later every day" – but points out that there is "very little hard data on the physiological impact of extended Mars-time living."

The fundamental problem, said Squyres, is that the human cycle is adjusted to a 24-hour cycle.

The entire rover team will work from the headquarters of the mission manager, the Jet Propulsion Laboratory in Pasadena, Calif. They already have rented apartments in a quiet neighborhood equipped with light-tight blackout shades, and many team members will wear specially made Mars watches that record an additional 39 minutes, 35 seconds every day. But when rover team members step outside, they will be bombarded with external stimuli running on the 24-hour clock to which their bodies are accustomed.

"We decided we needed to get some serious advice in this area," said Squyres. When, jet-lagged and exhausted, he ran into Cornell sleep researcher James Maas at the Pittsburgh airport in 2000, both realized that a collaboration would be a boon for data-hungry sleep researchers and for the rover team.

Nicola Kountoupes/University Photography

Cornell astronomers James Bell, left, and Steven Squyres plan to live on Mars time while at the Jet Propulsion Laboratory in Pasadena, Calif., for the duration of the Mars rover mission. The two members of the rover team pose in front an image of the rover, Nov. 14.

"While we were doing our own experiments, there was the opportunity for us to be the subject of someone else's experiment," said Squyres."

Consequently about 40 members of the rover team will be the subjects of the sleep study led by Harvard professor Charles Czeisler. Small wristwatch-like accelerometers will keep a record of the scientists' motion through the days and nights of the Mars mission. From the accelerometer readings, Czeisler's team will deduce when the scientists were awake and when they were asleep.

Workshops with sleep experts from Harvard, Brown, Stanford and the NASA Ames research center also have helped shape the Mars team's strategies.

"The key is not to overschedule people," said Squyres. Scientists will stick to a six-sol workweek, working four sols and taking a two-sol weekend.

But engineers on the team with permanent homes in Pasadena will get a longer, three-sol weekend. The engineers "have groceries to buy, lawns to mow, PTA meetings to go to," and must contend with more signals from the 24-hour world than the visiting scientists, said Squyres.

Squyres is most worried, though, about the "wicked case of Martian jet lag" he will get when Opportunity lands on Jan. 25. The rover's landing site is almost 180 degrees away from Spirit's, meaning that when Squyres leaves the Spirit team to join the Opportunity group, he will be about 12 hours off schedule. It is the Martian equivalent of a trip from Ithaca to Australia – without the benefit of a daylong plane ride during which to adjust.

There is one vestige of Earth time Squyres won't be able to escape, though: the press conference. So if, come January, Squyres looks a bit bleary-eyed in front of the cameras, remember that it might just be 2:30 a.m. back in Gusev Crater.

CU landscape architecture senior awarded Edward Murray Scholarship

Jones-Camel

Elizabeth Violet Jones-Camel, a Cornell senior in landscape architecture in the College of Agriculture and Life Sciences, is the 2003-04 recipient of the Edward M. Murray Committee on the Arts Scholarship.

The award is administered by the Cornell Council for the Arts and the Cornell Council's Committee on the Arts. Recipients are chosen by faculty members within their own colleges and departments. The scholarship provides financial assistance for artists showing exceptional promise in their fields.

Landscape architecture faculty selected Jones-Camel "because of the combination of talent and initiative she has shown," said Kathryn Gleason, chair of the landscape architecture department.

Jones-Camel, a single mother throughout her college career, transferred to Cornell in 2000 after attending Tompkins Cortland Community College for two years. In 2002, Jones-Camel served a nine-month apprenticeship with the Ithaca-based firm, Trowbridge and Wolf Landscape Architects. Jones also was active in the Ithaca community, serving as a board member for, and later as president of, the Ithaca Community Gardens.

"Violet has turned the constraints of her situation into opportunities that have significantly furthered her education as a designer," said Gleason. "We would like to recognize her achievements at this stage of her studies."

Jones-Camel said she plans to attend graduate school once she has finished at Cornell.

"I would like to work on designing master plans for cities that incorporate nature, the arts and environmental sustainability," she said. "Eventually, I would like to teach in college, sharing my knowledge and interests with future generations."

The Edward M. Murray Committee on the Arts Scholarship is presented annually to undergraduate majors in arts and culture-related programs. Murray, who died in 2000, was a Cornell professor of music theory as well as a conductor, composer and pianist.

The COA established the award in 2000, through the guidance of its former chair, Sidney Goldstein '52; alumnus James Byrnes '63, MBA '64, CEO of Tompkins Trust Co.; and Elizabeth Trapnell Rawlings.

Cornell's IRIS photo collection keeps an aerial eye on land-use changes

By Roger Segelken

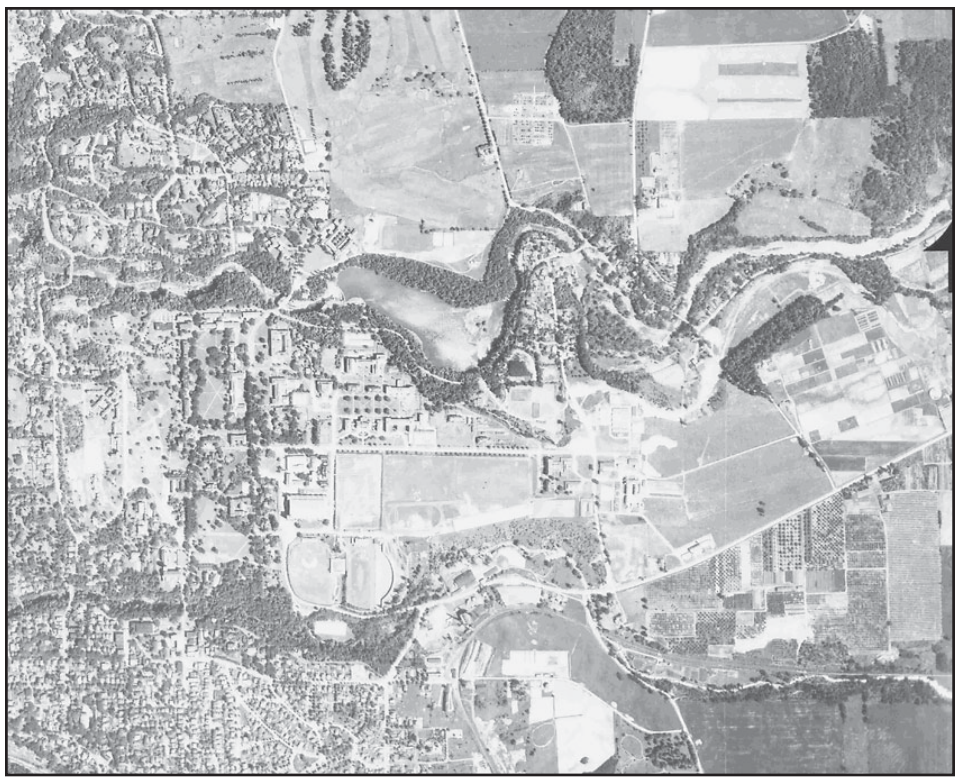
Imagine the dismay when scores of Suffolk County residents learned that their Long Island homes were built next door to – and, in many cases, on top of – abandoned waste-disposal sites.

Fortunately, old aerial photographs of Long Island had been preserved in Cornell's Institute for Resource Information Systems (IRIS). Sets of photos from 1947, 1962 and 1972 were used in a countywide evaluation to recall the murky underpinnings of modern suburbia – a land-use history of mining operations that subsequently became waste dumps, pits and lagoons before developers and landscapers arrived to pave over a toxic legacy.

The Suffolk County Department of Health survey, which identified more than 1,000 "sites of concern" before focusing on 200 properties for detailed investigation, is one example of the power of archived aerial photographs. Now, to make sure IRIS's photographic prints don't "get buried," countywide collections are being digitized and Web-archived so that computer users anywhere can learn what the old neighborhoods used to look like.

"We have good coverage of every county in the state, but we're starting right here with Tompkins County. We will scan and convert several collections dating from 1936 up to 1991 to electronic media and make them available on Web servers," explained Eugenia "Jeannie" Barnaba, IRIS program leader in resource inventory. She credits a small grant from the Cornell Library system for jump-starting the digital archive project, but notes that additional funding is needed to preserve thousands more of IRIS's most important images.

"Every time we pull photographs for users, it puts wear and tear on the collection and takes away staff time from assigned projects. Digitization will preserve the data and potentially enhance access through the Web site by anyone – students, faculty and staff, researchers in government and nongovernmental organizations, individuals, businesses and agriculture," according to Barnaba.



An aerial photograph from Cornell's Institute for Resource Information Systems shows the Cornell campus area in 1938. (Beebe Lake can be seen at the upper center of the photo.)

Before joining the Department of Crop and Soils Sciences, IRIS was part of the Cornell Center for the Environment, and the collection is still located on the third floor of Rice Hall. From 1984 to 1996, the program was known as CLEARS (for Cornell Laboratory for Environmental Applications of Remote Sensing) and before that, it was the Remote Sensing Program in the College of Engineering and the Resource Information Program in the College of Agriculture and Life Sciences. The director of IRIS is Stephen D. Degloria, who also is a professor and chair of soil and crop sciences.

Over the years, most IRIS special projects have involved land-use changes. Barnaba points to one, in particular, when IRIS's historical aerial photos helped geologists and soil scientists identify the most-responsible party for polluting a Superfund site in New York's Ulster County.

And now IRIS is moving from land to water with what Barnaba calls the most intriguing project yet, a multiyear survey of submerged aquatic vegetation (SAV) beds in a 100 mile stretch of the Hudson River. A first of its kind, the project brings together collaborators from Cornell, New York state's Department of Environmental Conservation and Hudson River National Estuarine Research Reserve, the Institute of Ecosystem Studies and New York Sea Grant.

Although boaters generally regard the so-called water weeds as a nuisance, Barnaba points out that many native SAV species offer environmental advantages, as habitat for sheltering animal life and by contributing oxygen to the water. One exception is Eurasian water chestnut, a non-native plant that grows in dense mats and depletes oxygen in the water column. By examining stereo aerial images with optical equipment, analysts can differentiate among the various SAV species and map plant beds of interest. As much as 15 percent of the Hudson between Kingston and Catskill is occupied by SAV, according to the study, which began in 1995. The results are expected to aid policymakers in managing the Hudson ecosystem for years to come.

In an effort to collect annual data on some of the river's SAV beds, project managers enlisted local volunteers with two qualifications – experience with kayaks or canoes and an enthusiasm for the Hudson. The citizen-science paddlers are trained with global positioning systems (GPS) to locate and document plant bed presence or absence, as well as bed density and condition.

"People really care about their local environments," Barnaba said,"and this collaboration provides the opportunity to collect useful information, in combination with strengthening environmental stewardship."

An IRIS index

• **Total number of photographs:** About 50,000 in 221 data sets, covering 57 New York counties and the New York City boroughs, between 1936 and 1995.

• **Oldest imagery:** 1936 Susquehanna Watershed collection.

• **Biggest:** Aerial photo enlargements mapping natural resources in New York City parks, printed to scale 1 inch = 200 feet, with some photos as large as 40-by-40 inches.

• **Rarest:** 1930s contact prints from silver nitrate plates that no longer exist.

• **Newest:** 2002 true color 1:14,400 scale photos of the upper Hudson River, made for the submerged aquatic vegetation study, but available to the public for any other purpose.

Johnson MBA students learn critical-thinking skills for a fast-paced world

By Linda Myers

In a world where a bullet fired in Baghdad has repercussions from Miami to Moscow, making the best fast decisions in every sphere, business included, is getting harder as the stakes get higher.

"It's a critical skill that leaders of companies have to have," said Douglas Stayman, associate professor of marketing at Cornell's Johnson Graduate School of Management. Indeed, teaching business students to think critically under time pressure has become so important that the Johnson School now not only has a Foundations of Leadership course in its first-year curriculum, but has added a new "analytical thinking thread" to it and is taking steps to integrate it across the curriculum.

"We want to give MBAs all the skills needed to succeed as leaders," Stayman said.

Introduced this semester starting at orientation, the new component was put together last spring and summer by a team that included Stayman; Randy Allen, former partner at Deloitte Consulting, now a consultant-in-residence at the Johnson School; and Cathy Dove, associate dean for MBA programs, with assistance from two recent MBA graduates, Amit Nissenbaum and Nina Lukin.

Following a leadership skills-assessment component that resulted in individualized action plans for improvement, new students spent time during orientation week learning analytical tools for structuring one's thinking, and got lessons on how support their arguments in a debate format from Pamela Stepp, a senior extension associate in advanced human resource studies at the School of Industrial and Labor Relations.

"The message to MBA students is: Here are some important skills you have to work on and here's a framework and tools, so you have some sense of what to work on and some ways to go," said Stayman

They then were divided into 14 "A" (for analytic) groups of about 18 students. During several sessions interspersed between classes this fall, they met to analyze real business cases on the spur of the moment, led by senior faculty and administrators working in conjunction with second-year MBA students trained as "strategic analysis fellows."

"These were all real-world business issues, some simple, some complex, that students could face later in their careers," said Allen.

Frank DiMeo/University Photography

Randy Allen, consultant-in-residence at the Johnson School, talks to students in the Foundations of Leadership course's new analytical thinking module.

Working in teams of three to four and individually, they had only a few minutes to size up the problems, structure their thinking logically and defend their analyses and solutions. The fast pace and lack of advance knowledge were intended to mimic real-world situations. Fellows and first-year classmates then critiqued the presenters on their thinking ability. "We challenged the students to challenge each other," Dove said.

"What's important," said Allen, "is not only the solution but also the process. Are you are solving the right question, are you thinking about it broadly, in 'big buckets,' and also diving down into the details?"

One case involved an international company that made and sold footwear. Stamped on the soles of one line of shoes was an image inspired by Chinese temple bells. In the predominantly Muslim country where the product was made and marketed, a fundamentalist Muslim newspaper story asserted that the image resembled Allah's name in Arabic, and that it was being defiled each time a wearer took a step. The student teams were asked what short- and long-term steps might the company take to resolve the situation.

While all agreed that a long-term hiring strategy of more local managers sensitive to cultural issues was needed, short-term solutions were limited to a public apology, explanatory ads and recalling the product. In the discussion that followed, Stayman pointed out that the students had missed some important strategic issues – real security threats to plants, equipment, staff and stores, the brand and sales, exacerbated by an unstable government and an opposition looking to politicize the conflict to unseat the current regime. "Only in thinking about it systematically do you realize the extent to which it is a political issue," he said.

One leadership skill that the new component reinforces is the ability to listen and simultaneously synthesize information, said Stayman. In class, students are "cold called"– called on randomly to comment on what's being discussed – and must build on what the people who spoke before them said. "You can't build if you don't listen."

"In my previous job as an army officer, I was expected to quickly assimilate large amounts of information into sound decisions while under pressure and then present it in a cogent manner," said Tiffany Burns, a first-year MBA student. "The analytical thinking thread helped me hone those skills in a business context. It was great starting my MBA studies with this kind of training."

"This training was a great foundation for the kind of thinking that I've needed in some of my core courses and will need for my later course work," said Matthew Dunker, another first-year student. "Integrated with the Johnson School curriculum, it should make me a better decision maker and problem solver for the long run."

"While other management schools tend to teach leadership skills separately from their core, our philosophy is different," said Stayman. Core faculty now emphasize analytic thinking in problem solving to reinforce the expanded leadership course, and the skill eventually will be infused into electives and student club activities.

In addition to Stayman, Allen and Dove, leaders of the A-group sections were: Robert Swieringa, the Johnson School's Anne and Elmer Lindseth dean; professors Robert Frank, John McClain, Mark Nelson, Vithala Rao and Joe Thomas, associate dean for academic affairs; Vrinda Kadiyali, associate professor; senior lecturers Jan Katz and Jan Suwinski; Michael Hostetler, director of leadership studies; and Dick Shaffer, associate dean for corporate relations.

Procurement-operations review targets quality, while delivering savings


DeStefano

Continuing the university administration's mandate to redirect funds from administration to strategic initiatives, Cornell's Workforce Planning initiative is now being focused on its first nonpersonnel-related review. Led by Joanne DeStefano, vice president for financial affairs and university controller, the new focus, started in August 2003, is on Cornell's procurement operations, with the expectation of saving at least $5 million. But DeStefano emphasizes: "The quality of goods and services that Cornell acquires will not be sacrificed for price."

The greatest area of non-personnel expenditure at the Ithaca campus is on "supplies and general expenses," which includes scientific supplies, books and subscription services, IT (information technology) hardware, telecommunications, and furniture and office supplies. In fiscal year 2003, this category amounts to $213 million. Another area of particular interest to the review team is procurement card purchases, which, while amounting to $35 million, do not routinely take advantage of favorable terms from approved vendors.

Consultants from the Huron Consulting Group are analyzing the university's spending patterns by a strategic sourcing review. "Cornell's examination of its sourcing practices and opportunities is one of the most comprehensive performed to date in higher education," DeStefano said.

"In addition to savings through better sourcing, the review will focus on the procurement process itself and will clarify roles and accountabilities in value-added activities," DeStefano continued. Also part of the initiative is a five-year strategic procurement plan that will address competitive pricing models, benchmarks, and tools to ensure the best pricing and quality of goods and services.

The current stage of baseline gathering should be completed by the end of this calendar year, and implementation of early recommendations will begin in early 2004. Phase I of the review is expected to conclude next fall.

Guiding the procurement review is a steering committee, chaired by DeStefano, which includes faculty and staff representatives from the School of Hotel Administration, the College of Agriculture and Life Sciences, the School of Industrial and Labor Relations, the Division of Budget and Planning and the University of Rochester. In addition, there are three subcommittees:

• The Baseline Financial Sub-Committee is chaired by Eric Ludewig of the Division of Financial Affairs (DFA) Office for Purchasing Services. This subcommittee includes representatives from the Campus Store, Campus Life, the School of Chemical Engineering, University Libraries, and the Department of Molecular Biology and Genetics.

• The Roles and Responsibilities Sub-Committee is chaired by Anne Shapiro, DFA associate controller, supported by representatives of Wilson Laboratory, the Department of Chemistry and Chemical Biology, and the School of Electrical and Computer Engineering.

• The Strategic Planning Sub-Committee is chaired by Vince Patriarco, DFA purchasing director, and includes representatives from Campus Life, Facilities, the College of Human Ecology, Cornell Information Technologies, the Treasurer's Office, and Campus and Business Services.

Biomaterial inventions bring in $1.75 million in licensing payments

By Susan Lang

Cornell Professor C.C. Chu was browsing through *Business Week* in 1997 when he read about a cardiologist using radioactivity to reduce artery reblockage following angioplasty and stent surgery, a condition called restenosis. Chu called the cardiologist to say he had a better approach.

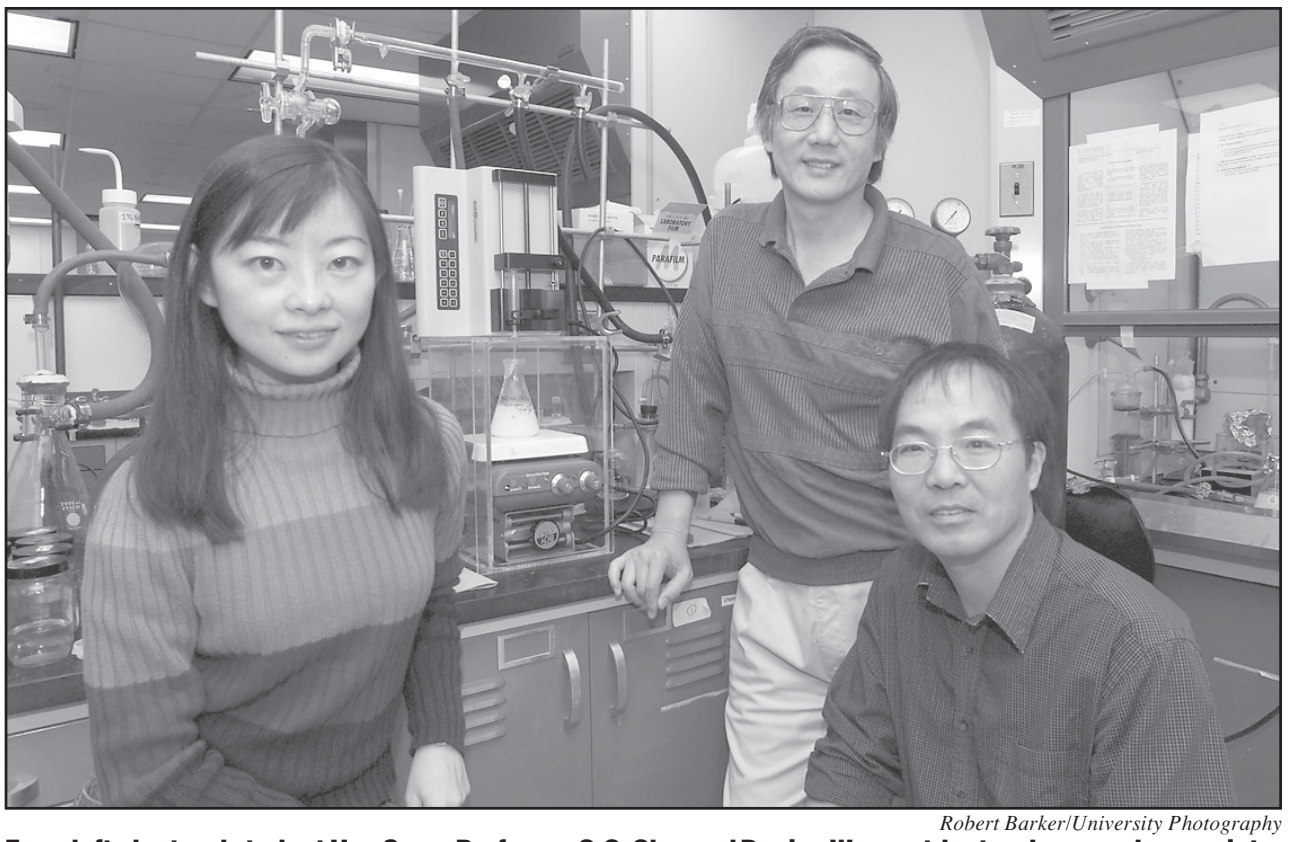
Now, five years, four U.S. patents and $1.75 million license payments later, Chu has been proven right. He and his lab in the Department of Textiles and Apparel in the College of Human Ecology at Cornell have developed a group of biodegradable biomaterials that can deliver nitric oxide (NO) derivatives and other biologically active compounds.

One is an amino acid- (or protein-) based, very elastic biomaterial that can coat stents to deliver NO derivatives to prevent the restenosis of an artery. Elasticity is critical since stents tend to contract and expand significantly. Another class of the patented and licensed biomaterials is star-shaped biodegradable polymers that also can be formulated into jellylike biodegradable materials called hydrogels to improve the delivery in the body of a wide range of bioactive compounds via three-dimensional porous network structures.

"Biodegradable hydrogels also have potential for wound-care products and as substrates for tissue engineering to replace aged or diseased tissues or organs. They may even work for environmentally friendly diapers or for agricultural devices because of their very high water retention capability," said Chu, a fiber and biomedical materials scientist whose inventions have reaped a total of nine patents through the Cornell Research Foundation.

Four of these patents were licensed to MediVas, a privately held San Diego-based company that developed new techniques for coating stents with Chu's biomaterials. The company recently sold the exclusive worldwide license to these new biomaterials to Guidant Corp. for an initial payment of $35 million, of which Cornell received $1.75 million. One-fourth of the payment to Cornell went to the College of Human Ecology, the college's first patent-derived revenue. Additional payments are expected if the U.S. Food and Drug Administration approves the use of Chu's biomaterials.

Among the many advantages of Chu's amino acid-based biodegradable biomaterials are their biocompatibility. They also are low in cost, are easily biodegraded and are versatile in biological and material properties so that their design can be film- and fiber-forming, or highly elastic. This allows them to be particularly promising carriers of a wide range of drugs and other bioactive substances. They also are designed to use enzymes, which allows Chu and others to create "self-degradable" polymers with programmable rates and duration. This makes them ideal for bioabsorbable surgical implants and controlled devices for drug delivery. In addition, when used for wound care, they provide nutritional value to local wound sites for facilitating faster healing.


Robert Barker/University Photography

From left, doctoral student Hua Song, Professor C.C. Chu, and Daqing Wu, postdoctoral research associate, stand in front of a syringe pump and stirring system for formulating biodegradable biomaterials as drug carriers. Song and Wu are working in Chu's lab doing followup research on these inventions.

Of the Chu group's new biomaterials, the amino acid-based polymers are the closest to becoming a clinical reality. Chu noted, "Restenosis occurs in as high as 30 to 45 percent of patients after balloon angioplasty procedures and placements of stents to open clogged arteries. The U.S. market size for stents is about $5 billion a year."

To prevent restenosis, current treatments include stents coated with immunosuppressant drugs, cancer drugs or radioactive compounds. "Using NO derivatives allows us to use a biochemical that is naturally produced by the body for the cardiovascular, immune, reproductive and nervous systems," Chu pointed out. "Research shows that our new NO derivative-coupled biodegradable biomaterials have the same biological function as the NO produced by the body. That means that our approach may have great potential to open a new means to treat those diseases caused by the lack of NO."

Researchers believe NO and NO derivatives can prevent restenosis by preventing the proliferation of smooth muscle cells, which typically block blood vessels after stent implantation. "As our biologically active biomaterials biodegrade, they release the NO derivative," Chu said.

Among Chu's collaborators on various aspects of the research is Ramaz Katsarava of the Republic of Georgia. Katsarava worked with Chu through the Civilian Research and Development Foundation, which helps former-Soviet Union weapons scientists to redirect their skills toward peaceful solutions. Other collaborators include Jack Freed, professor of chemistry and chemical biology at Cornell; M. D. Lang, a professor at East China University of Science and Technology, who did postdoctoral research in Chu's lab; and Keun-Ho Lee, Chu's former doctoral student.

The research has been supported largely by MediVas and in part by the College of Human Ecology at Cornell.

Sociologist looks at how interest and social relations impact the economy

By Susan Lang

Social relations, culture, politics, law and gender influence economic decisions. Studying the roles that these factors play in economic phenomena is called economic sociology.

To provide a general introduction to this relatively new and rapidly growing field, Richard Swedberg, a Cornell professor of sociology and vice director of Cornell's Center for the Study of Economy and Society, has published an introductory text, *Principles of Economic Sociology* (Princeton University Press, 2003).

"My goals in writing this book are not only to present the field's major concepts, ideas and findings, but also to introduce a new perspective into economic sociology," said Swedberg, the author of *Max Weber and the Idea of Economic Sociology* and several other books on related topics. "Economic sociology shouldn't be concerned only with the impact of social relations on economic actions, but also needs to take interest into account. And that interest must not be reduced, as economists tend to do, to self-interest. Interest is a driving force in human life, and it takes many different forms, such as emotional, political and ideal. In other words, we need to identify people's interests in their economic decisions and then study the social forces that affect these interests and the consequences of these forces," Swedberg said.

The book includes a review of classical and contemporary economic sociology and then looks at how the economy is organized and how the dynamics of different types of economic organizations are influenced by the structures, interests and social interactions of modern firms. It discusses theories about markets, which are viewed as social structures, and it reviews how interests play a role in the analysis of markets and markets throughout history.

The book also discusses the economic sociology of politics and focuses on the role of the law, culture and gender in current economic sociology. The final chapter discusses often-ignored topics, such as reflexivity in economic sociology, the advantages and disadvantages with using the concept of interest in economic sociology and the role of economic sociology as a policy science.

CALENDAR

December 11 through January 15

TO SUBMIT A NOTICE:

Items for the calendar should be submitted by campus mail, U.S. mail or in person to Chronicle Calendar, Cornell News Service, Surge 3, Ithaca, N.Y. 14853. Notices should be sent to arrive 10 days prior to publication and should include the name and telephone numbers of a person who can be called if there are questions.

exhibits

Johnson Museum of Art

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

• Holiday hours: The museum is open regular hours except on the following dates: Dec. 24, 10 a.m.-3 p.m.; Dec. 25-26 and Dec. 29-Jan. 1, closed.

• "Stephen Hendee: Iron Skies," through Jan. 4.

• "Ithaca's Favorites," through Jan. 4.

• "Patty Chang and Janine Antoni: Two Video Works," through Jan. 4.

• "North and South: Renaissance Prints," through Jan. 11.

• "CU Art Faculty Exhibition," through Jan. 11.

• "Selected Videos by Vito Acconci," through March 28.

Cornell Library

"Legacy of Leadership: Cornell's Eleven Presidents," on view in Olin, Kroch and Uris libraries through the end of the semester.

Costume Collection

The Cornell Costume and Textile Collection is available at <http:// costume.cornell.edu:8080/>.

Kroch Library

"*Artifex*: Leonard Baskin & the Gehenna Press," on view in the Hirshland Gallery, level 2B of Kroch Library, through Jan. 9.

Sibley Hall Fine Arts Library

Pre-thesis painters' library exhibition, through Feb. 1.

films

Films listed are sponsored by Cornell Cinema and held in Willard Straight Theatre, except where noted, and are open to the public. All films are $6 ($5 for undergraduates and seniors; $4 for Cornell graduate students and kids 12 and under).

Thursday, 12/11

"Whale Rider" (2002), directed by Niki Caro, with Keisha Castle-Hughes, 7:15 p.m.

"Terminator 3: Rise of the Machines" (2003), directed by Jonathan Mostow, with Arnold Schwarzenegger and Kristanna Loken, 9:30 p.m.

Friday, 12/12

"The Philadelphia Story" (1940), directed by George Cukor, with Cary Grant, Katharine Hepburn and James Stewart, 7:15 p.m.

"eXistenz" (1999), directed by David Cronenberg, with Jennifer Jason Leigh, Jude Law and Willem Dafoe, 7:15 p.m., Uris.

"Terminator 3: Rise of the Machines," 9:30 p.m., Uris.

"Northfork" (2003), directed by Michael Polish, with James Woods, Nick Nolte and Claire Forlani, 9:45 p.m.

"Cabin Fever" (2002), directed by Eli Roth, with Rider Strong and Jordan Ladd, midnight, Uris.

Saturday, 12/13

"Woman of the Year" (1942), directed by George Stevens, with Katharine Hepburn and Spencer Tracy, 7:15 p.m.

"Whale Rider," 7:15 p.m., Uris.

"Terminator 3: Rise of the Machines," 9:30 p.m., Uris.

"Northfork," 9:45 p.m.

Sunday, 12/14

"Whale Rider," 4:30 p.m.

"Student Films II," 7:30 p.m.

Monday, 12/15

"Woman of the Year," 7:15 p.m.

"Cabin Fever," 9:45 p.m.

Tuesday, 12/16

"Northfork," 7:15 p.m.

"Whale Rider," 9:30 p.m.

Wednesday, 12/17

"The Philadelphia Story," 7:15 p.m.

"Cabin Fever," 9:45 p.m.

Cornell Cinema will be closed Dec. 18-Jan. 20.

Whale Rider

Courtesy of Cornell Cinema

"Whale Rider" opens at Cornell Cinema tonight, Dec. 11, at 7:15 p.m. This art-house hit tells the moving, unsentimental tale of a Maori girl, played by Keisha Castle-Hughes, who rises unexpectedly to lead her ailing community.

music

Department of Music

• **Dec. 14, 2:30 p.m., Unitarian Church:** Ensemble X, Ithaca musicians and local poets will present a reading of music and poetry of Ann Silsbee, jointly sponsored by The Bookery.

Risley Residential College

The Risley Residential College for the Creative and Performing Arts presents its 34th annual open reading of Handel's "Messiah," Dec. 13 at 3 p.m. in Risley's Great Hall. Audience and performers are one and the same, as people come from across the university, town and region to perform this holiday favorite. Admission is free. For information, contact Stacy Deery at <smd47@cornell.edu> or 254-2325.

Society for the Humanities

Soprano Libby Dorsch Maxey and pianist Kathy Hansen will perform works by Handel, Bach, Mozart, Bizet, Strauss and Verdi, Dec. 14, 4:30 p.m., Guerlac Room, A.D. White House.

Bound for Glory

Bound for Glory will broadcast albums from the studio Dec. 14-Jan. 18. Catch the special holiday show Dec. 21 and the New Year's special Dec. 28. Bound for Glory is broadcast Sundays from 8 to 11 p.m. on WVBR-FM, 93.5 and 105.5.

religion

Sage Chapel

Services will resume Jan. 25.

African-American

Sundays, 5:30 p.m., Anabel Taylor Chapel.

Baha'i Faith

Fridays, 7:30 p.m., meet in the lobby of Willard Straight Hall, speakers, open discussion, games and service-oriented activities. Classes, speakers, prayers, celebrations at alternating locations. For more information, call 272-3037 or send e-mail to <bahai@cornell.edu>.

Baptist Campus Ministry

Weekly Bible study meets Wednesdays at 8 p.m. in 314 Anabel Taylor Hall. For information contact Keith Bowman at <kcb29@cornell.edu> or 277-2283.

Buddhist

• Meditations: Monday, Wednesday and Thursday, 12:15-1 p.m., Founders Room, Anabel Taylor Hall.

• Zen Meditation practice is Mondays and Wednesdays, 5:30-6:30 p.m., Founders Room, ATH. For information, call Anne Marie at 266-7256.

Catholic

• Sunday Mass schedule: Dec. 14 – 10 a.m. and 5:15 p.m., Anabel Taylor Hall Auditorium; 9:30 p.m., Sage Chapel; Dec. 21 and 28 – 10 a.m. only, ATH Auditorium.

• Christmas Eve Mass: Dec. 24, 5:15 p.m., ATH Auditorium.

• Daily Masses: Monday-Friday, 12:20 p.m., ATH Chapel.

• Sacrament of Reconciliation: Sundays, 4 p.m., G22 ATH.

• Evening Prayer: The Liturgy of the Hours; Tuesdays and Thursdays, 6-6:30 p.m., ATH Chapel.

Christian Science

Testimony meetings: Thursday, 7:30 p.m., Founders Room, Anabel Taylor Hall. Church services: Sundays, 10:30 a.m., and Wednesdays, 7:30 p.m., First Church of Christ Scientist, 101 University Ave., Ithaca.

Cornell Christian Fellowship

The InterVarsity chapter meets Fridays at 7:30 p.m. in Hollis E. Cornell Auditorium, Goldwin Smith Hall. For information: <http://www.ccfiv.org>.

Episcopal (Anglican)

Wednesdays, worship and Eucharist, 5 p.m., Anabel Taylor Chapel. Sundays, worship and Eucharist, 9:30 a.m., ATH Chapel. For more information, call 255-4219 or send e-mail to <eccu@cornell.edu>.

Friends (Quakers)

Meeting for worship, Sunday, 11 a.m., Edwards Room, Anabel Taylor Hall. Child care provided. For rides or directions, call 273-5421.

Grace Christian Fellowship

The InterVarsity chapter meets Fridays at 7 p.m., B11 Kimball Hall. For more information visit the Web site at <http://www.curw.cornell.edu/gcf>.

Hindu

Weekly religious service is Saturday at 4 p.m. in the Edwards Room, Anabel Taylor Hall, followed by a Gita reading at 5 p.m.

Jewish

• Conservative and Reform: Fridays, 5:15 p.m., Welcoming in Shabbat with song, in the lobby of Anabel Taylor Hall, followed by a community Shabbat dinner at 6:45 p.m. in the Kosher Dining Hall. Saturdays, 9:45 a.m., Conservative services in the Founders Room, ATH. Call the Hillel office at 255-4227 for more information.

• Orthodox: Friday, Center for Jewish Living, call 272-5810 for weekly times; Saturday, 9:15 a.m., Edwards Room, ATH. For daily services, call 272-5810.

Korean Church

Sundays, 11 a.m., One World Room (in English), and 1 p.m., chapel (in Korean), Anabel Taylor Hall. Call 255-2250 for more information.

Latter-Day Saints (Mormon)

Cornell student branch: Sundays, 11 a.m. Call 272-1564 or 255-2928 for information.

Lutheran

Campus ministry at St. Luke Church, 109 Oak Ave., in Collegetown, Sundays, 10:45 a.m. and 5 p.m. Bible study Tuesday, 7 p.m. For more information call 273-6811 or e-mail <rlb8@cornell.edu>.

Muslim

Daily congregational prayer at 218 Anabel Taylor Hall.

Weekly Halaqa, Thursdays, 6:30-7:30 p.m., ATH.

Weekly coffee hour Tuesdays, 4:30 p.m., Tower Café, Uris Library. For more information visit the Web site: <http://www.meca-online.org/>.

Pagan

For information about United Pagan Ministries, call Cornell United Religious Work at 255-4214.

Protestant Cooperative Ministry

Sunday service at 11 a.m. in Anabel Taylor Chapel.

seminars

Biomedical Sciences

"Intrinsic and Extrinsic Factors That Modulate Cardiac Hypertrophy and Remodeling," Karen Vikstrom, Upstate Medical University, Dec. 16, 4 p.m., Lecture Hall III, Veterinary Research Tower.

Energy & Engineering

"Hydrogen-Based Energy," Johannes Schwank, University of Michigan, Dec. 15, 10 a.m., B17 Upson Hall.

Integrated Nutrient Management

CU-Wisconsin Video Seminar Series: "Next Steps in Nutrient Management Tool Development," Mark Powell, University of Wisconsin, Dec. 16, 1:30 p.m., 164 Morrison Hall.

Molecular Biology & Genetics

"Shake, Rattle and Roll: Conformational Changes in Cobalamin-Dependent Methionine Synthase," Rowena Matthews, University of Michigan, Dec. 12, 4 p.m., G10 Biotechnology Building.

Nutritional Sciences

"Tracing Nutrients From Soil to Humans: The Example of Zinc, Rice and the Nutritional Status of Children in Bangladesh," Anne-Marie Mayer, Dec. 11, 4 p.m., 100 Savage Hall.

Plant Breeding

"Mapping Quantitative Trait Loci Associated With Seed Dormancy in Rice," Muhamad Yunus, graduate student, Dec. 16, 12:20 p.m., 135 Emerson Hall.

miscellany

Alcoholics Anonymous

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

Emotions Anonymous

Emotions Anonymous, a 12-step program for those dealing with emotional problems, meets Sundays at 7:30 p.m. and Tuesdays at 8 p.m. at St. Luke's Lutheran Church, 109 Oak Ave. For information, call Ed at 387-8257.

Big Red sports

Over break, keep up with the Big Red at <http://cornellbigred.ocsn.com/>. Check out the latest scores, highlights and upcoming games.