THE ESSENTIALS
Cornell gets an official tartan, Steve Reich ’57 wins a Pulitzer, Chinese fungi are repatriated, Merrill Family Sailing Center opens, PBS looks at “Renegade Genius” Tommy Gold

COVER STORY
Cornell’s global citizens roll up their sleeves and tackle real-world problems
BY KRISHNA RAMANULIAN
Despite its location in upstate New York, Cornell’s view is global, with students and researchers traveling far afield to help the developing world.

6 New ‘China hands’: Cultivating the next generation of expertise
BY JENNIFER CAMPBELL

8 Overseas scholarships bring the world to Cornell
BY CLARE ULRICH

10 The paradox of a ‘global Cornell’
BY GILBERT LEVINE

14 CENTER SPREAD
Worldview: Cornell’s global programs, research sites, initiatives and partnerships
ILLUSTRATION BY WENDY KENIGSBERG

CAMPUS LIFE
40 years ago, a campus takeover that symbolized an era of change
BY GEORGE LOWERY

16 ARTS AND HUMANITIES
Riché Richardson shares art quilts and American perspective as cultural envoy in Paris
Steinbeck’s depression-era ‘Grapes of Wrath’ is a recession year’s Reading Project choice
STORIES BY DANIEL ALOI

18 OUTREACH
Students mentor disadvantaged children in Florida, hosted by Harris Rosen ’61
Horticulture students head to Belize to show how gardens can enrich schools
STORIES BY SUSAN S. LANG

20
FROM THE PUBLISHER
Cornell’s reach historically has been much broader than its role as New York state’s land-grant university – exporting research and ideas to the nation and to the world while also educating students from around the globe. This has been true since the university’s earliest years.

No less today, as Cornell continues to educate global citizens who benefit greatly from early engagements with other countries and cultures. Whether in Bangladesh studying how mothers care for their babies or in southern Africa working as marketing consultants for small businesses, Cornell students are truly being trained as global citizens. At the same time, Cornell researchers are leading global efforts to develop new varieties of plague-resistant wheat and helping rice breeders across the world adapt traditional wild rice varieties to become more resistant to stress and pests.

In this issue of Ezra, we look at why Cornell historically has been so invested in international engagement and why that positions our university, and what Professor K.V. Raman describes as our “globally relevant” students, to tackle some of this century’s toughest problems.

Thomas W. Bruce
Vice President, University Communications

CORNELL BOOKS
Darwin’s life after the ‘Origin,’ Cornell’s first African-American students, how women lived through letters, the sights and sites of Ithaca and Cornell, and an alphabet book that goes green

RESEARCH SPOTLIGHT
Putting the squeeze on an old material could lead to ‘instant on’ electronic memory
BY ANNE JU

WORTH SUPPORTING
Unrestricted support is critically important, especially in challenging times
BY GARY E. FRANK AND DIANE LEBO WALLACE

Leona M. and Harry B. Helmsley Charitable Trust endows scholarship program at the Hotel School

FROM THE COVER:
Adam Scheinkman, middle left, a graduate student, and Michael McDermott ’09, middle right, along with two local women, transplant rice at a farm outside of Hyderabad, Andhra Pradesh, India, in January as part of the International Agriculture and Rural Development 602 field trip.
Photo by Christopher Bentley; photo illustration and digital post-production by Matthew Fondevre/University Photography
**BIG RED ATHLETICS**

**Men’s lacrosse falls in overtime to Syracuse, 10-9, in NCAA final**

In a thrilling, heartbreaking finish, the Cornell men’s lacrosse team lost in overtime to Syracuse University May 25 at the NCAA championship game in Foxborough, Mass., 10-9.

Before 41,935 spectators at Gillette Stadium, the No. 5 Big Red fell short one goal to the No. 2 Syracuse Orange, the defending national champions, in the central New York matchup.

“(They) battled through two pretty tough lacrosse games and almost pulled this one off,” says head coach Jeff Tambroni. Two days earlier, Cornell dismantled the No. 1-ranked University of Virginia, 15-6, in the semifinals.

**COURSE WORK**

**Teaching winery opens on campus**

With the snip of a grapevine, Susan A. Henry, the Ronald P. Lynch Dean of Agriculture and Life Sciences, opened the CALS Teaching Winery April 1.

Cornell, long known for its viticulture research, now claims the only university teaching winery in the eastern United States. The $900,000 facility promises to prepare students for careers in New York’s wine and grape industry, which ranks third nationally in wine production and includes more than 250 wineries across the state.

The 1,800-square-foot winery building, attached to the Cornell Orchards store, will act as the Ithaca hub for CALS’ new viticulture and enology undergraduate major, which enrolls roughly 30 students and draws on more than 50 faculty members from the horticulture, food science technology, plant pathology and applied economics and management departments. Inside the winery, students will access cutting-edge equipment to learn the science and art of winemaking.

**ESSENTIALLY NYC**

**Feldshuh play ‘a triumph’**

“Miss Evers’ Boys,” the 1992 Pulitzer-nominated play by Cornell’s David Feldshuh, was performed in New York City this spring. It tells the story of the 40-year Tuskegee study, a U.S. Public Health Service study that began in 1932 on the effects of untreated syphilis on some 400 impoverished African-American males in Macon, Ala. The men were never told they had the disease nor were they informed of treatment options, even after penicillin had been proven as a cure. The title character is an African-American public health nurse who assists doctors with the study.

“This ‘Miss Evers’ Boys’ is a triumph,” wrote Blogcentric’s theater editor Jon Sobel in an online review. “The stars seem to have aligned for this production: excellent actors perfectly cast, with a director [Melanie Moyer Williams] who knows just how to seize on the strengths of Feldshuh’s scenecraft. ... Their superb performances ... flesh out the disturbing story that Mr. Feldshuh’s script tells so achingly.”

**DID U KNOW?**

**Making waves**

The Merrill Family Sailing Center on East Shore Drive is now finished – providing a new home for the Cornell Sailing Team, sailing physical education classes, summer sailing camps and the Cornell Community Sailing Program.

The 5,466-square-foot facility overlooking Cayuga Lake has two levels, an expansive deck, classrooms, a wet lab for research and locker rooms.

The late Phil Merrill ’55, his wife, Eleanor Merrill, and their three children – Douglas Merrill ’89, MBA ’91, Catherine Merrill Williams ’91 and Nancy Merrill ’96 – made the lead gift to the facility.

The Cornell Community Sailing Program, which is open to the public, welcomes novices and experienced sailors. The season began June 1. For information, call (607) 277-9307.
The Cornell professor who helped NASA put men on the moon, recruited Carl Sagan to the Cornell faculty and advanced controversial theories on everything from the physiology of hearing to the consistency of the moon’s surface to the origins of oil is the subject of a new documentary, “Renegade Genius: The Story of Tommy Gold,” airing on PBS stations in May and June.

The film portrays Gold, who died in 2004, as a “brilliantly original thinker,” far ahead of his time, who thought far outside the box. At a time when disciplinary boundaries were high, Gold leapt over them with ideas practical and visionary. Though not always right, Gold’s ideas forced the conservative scientific community to consider new ways of thinking over many decades.

Gold came to Cornell in 1959, retiring after nearly three decades on campus, during which time he helped rebuild the astronomy department, was a champion of the new Space Sciences Building and aided the establishment of the Arecibo Observatory in Puerto Rico.

Chinese reclaim fungi after 70-year Cornell stewardship

After years of stewardship by Cornell scientists, a collection of more than 2,000 species of native Chinese fungi, spirited out of the country for safety before World War II, is finally set to make its way home.

On April 13, a delegation of Chinese government officials, led by State Councilor Liu Yandong, visited campus to begin repatriating the fungi to China. The specimens are the legacy of S.C. Teng, a Cornell student-turned-pioneering-scientist who risked his life during the war to keep the fungi safe.

Steve Reich ’57 wins Pulitzer

New York-based composer Steve Reich ’57, whose music is lauded for embracing the spoken word and non-Western rhythms, is the 2009 Pulitzer Prize winner for “Double Sextet,” a piece composed for two identical sextets of instruments, each made up of flute, clarinet, violin, cello, vibraphone and piano.

The New York Times called “Double Sextet” “a major work that displays an ability to channel an initial burst of energy into a large-scale musical event, built with masterful control and consistently intriguing to the ear.”

“This is a richly deserved award to a man who may be America’s greatest living composer,” says Anne Midgette, chief classical music critic of The Washington Post. The Eighth Blackbird ensemble of Richmond, Va., premiered “Double Sextet” in May 2008.
During the rainy season in Honduras, the tap water would run brown in the house of the local family where Heather Reed ’10 stayed in early 2008. Now the water runs clear, thanks to AguaClara, a Cornell engineering class project aimed at designing low-cost water treatment systems that operate without electricity. The gratitude the residents have expressed is “motivation for us to come back and work as hard as we can to make those plants more efficient and inexpensive,” says Reed.

Anna Herforth, a Ph.D. candidate in Cornell’s Division of Nutritional Sciences, recalls the afternoon she spent in 2007 helping Masai women in Kimnyak, Tanzania, thatch the roof of their house with local grasses. She was in Tanzania doing a survey on nutrition, but spending time in the communities where she was studying, she says, “lent an invaluable perspective to understanding the context in which the crop and food decisions were taking place.”

Last winter, five Cornell undergraduates distributed and treated anti-malaria bed netting in Hujimbre, Ghana, while also providing malaria-prevention education and collecting data for a malaria intervention service-learning course. “I want to make an impact, not necessarily in the short term, but over the long
sleeves and tackle real-world problems
Training. The first 12 CAPS majors graduated a combination of liberal arts and professional major: China and Asia-Pacific Studies, or CAPS, capitalist proposed a new undergraduate charting this new course. Nearly seven years ago, the engineering alumnus and venture capitalist proposed a new undergraduate major: China and Asia-Pacific Studies, or CAPS, a combination of liberal arts and professional training. The first 12 CAPS majors graduated in 2008, and the program's reputation and enrollment continue to gain momentum.

"In 2002, when we got the ball rolling, the idea of creating the pre-eminent center for U.S.-China policy generated a lot of skepticism. It's hard to imagine that now," says Zak. Few institutions can match the program's rigor in both scholarship and practice. CAPS majors complete three to four years of intensive Chinese language training; a liberal arts education in Chinese history, culture, politics and international relations; a semester with Cornell in Washington, pursuing courses and internships at such top think tanks as the Brookings Institution; and one semester in Beijing, interning with American or Chinese organizations and studying at Peking University's prestigious School of International Studies.

It's about as exhaustive an introduction as four years can hold — and that's the intent, according to Xu Xin, the program's acting director, who describes the CAPS view of China studies as interdisciplinary and holistic. Xin, like Chen Jian, the Michael J. Zak Chair of History for U.S.-China Relations, was recruited to help shape CAPS and build the program's international reputation.

"It's important to look at China with a global perspective," Xin says. "For example, even to study contemporary U.S.-China relations, you need to understand China's growing influence in Africa and Latin America and in the world economy. Our challenge becomes striking the right balance between policy specialization and all the other strengths available here."

It's the right challenge for the times. CAPS students emerge with skills that help them work with the Chinese on their terms and to understand their needs. "Historically, the American view of foreign relations has been unilateral. In the 21st century, that's unacceptable. There's growing consensus that the United States can't credibly expect other countries to deal with them only on their terms."

That cooperative ethos also characterizes the CAPS program's evolution. Xin and his fellow faculty members continue to consult not only Zak, but also the students, on ways to make the program better.

"When I talk to the students, they have a gleam in their eyes," says Zak. "They know they're pioneers."
growth. "Communities, and at the same time experiencing tremendous personal different cultures and how these worlds are connected."

And the list goes on. But why would Cornell seek to spread its influence across the globe? Why send students and faculty to often-remote places at considerable cost and effort? Why, in essence, seek to make Cornell the land-grant university to the world?

Faculty and administrators explain that internationalism has been woven into Cornell’s fabric since its founding, largely the result of a powerful legacy of altruism, which persists to this day. However, given today’s economic realities, international activities are also vital in keeping Cornell competitive in a shifting global economy and in broadening and deepening professors’ international research interests, and perhaps making them better teachers. The most powerful argument, though, is that this worldly exposure trains students to become global citizens.

“We live in a much more international world than our grandparents grew up in,” says Pell, “and if students are going to become global citizens, and perhaps making them better teachers. The most powerful argument, though, is that this worldly exposure trains students to become global citizens.

“The impact on our students is immeasurable,” says Christy, director of the Cornell International Institute for Food, Agriculture and Development. “They are making significant contributions in poor communities, and at the same time experiencing tremendous personal growth.”

As the world grows increasingly interdependent, students are finding they need to deepen their understanding of world markets and other cultures to address problems whose solutions require international and interdisciplinary collaborations to compete globally. “You interact with local people – speaking their language in their communities,” says Stephanie Leonard ’10, a human biology, health and society major, who spent last summer in Bangladesh to study mothers’ abilities to care for infants – preparing by studying Bangla for a year. "It deepens your understanding of the problems and it makes it much more personal."

No college at Cornell has met these international education needs more energetically than the College of Agriculture and Life Sciences, which in 2007 issued a strategic plan for international programs aimed at bringing about “a significant change in how we train students.” The plan boldly stated that merely adding specialized courses that students may elect – such as tropical soils, agronomic crops of the world or international agricultural development – is not enough. "Instead, internationalization must pervade the curriculum."

**Cornell leads an international trend**

Exporting U.S. expertise, learning from other cultures and arranging scholarly exchanges between students and faculty has grown exponentially across American academia as distance learning and the Internet have brought international reach to many universities across the United States.

Georgia Tech, for example, has degree programs in France, Singapore, Italy, South Africa and China; Florida State University offers associate’s and bachelor’s degrees in liberal studies in Panama; Massachusetts Institute of Technology and the University

---

**POSTCARDS FROM CHINA**

Elizabeth Skovira ’08 began studying Chinese to complement her interest in finance and labor. It led to a deep interest in Chinese culture and her affiliation with CAPS. Her internship at the American Chamber of Commerce in Beijing reinforced her choice. “There are lots of smart Chinese college graduates who can read English,” she says, “but few of them have leadership in the corporate world.” At the other end of the spectrum she found American managers working in China with leadership skills but lacking language and cultural expertise. Having both sets of skills, Skovira says, made her a valuable liaison between American companies and Chinese agencies.

McAllister Jimbo ’09 was a history major with an emphasis in European studies. But about midway through Chen Jian’s gateway course on Chinese history, “we started talking about the opening of China to the West, and I was hooked,” she says. Her most rewarding experiences to date: writing for City Weekend Beijing – an English-language magazine for the city’s burgeoning expat community – and volunteering at the 2008 Beijing Olympics. “I was able to see a lot of events and meet people from all over the world, and was in the middle of all the excitement.”

Jonathan Delikat ’10 came to Cornell for CAPS after a friend convinced him it was a cutting-edge major. “The mentality among everyone is that this is ahead of its time in so many ways,” he says. “In CAPS you stand out. You’re an expert.”
of Chicago have programs in Singapore; and Yale has dozens of research collaborations with Chinese universities. Cornell is right on par, offering master’s of professional studies degree programs in Ethiopia (in international agriculture, with an emphasis on watershed management) and in India (dual-degree programs in food science and plant breeding at Tamil Nadu Agricultural University); a joint master’s degree program in hospitality with Nanyang Institute of Hospitality Management in Singapore; and an entire medical school in Qatar.

But money is the key, making these programs difficult to maintain during a period of challenge to university finances. Solving the developing world’s most urgent problems – hunger, depletion of natural resources, climate change, access to clean water, population growth and air pollution – requires both big investments and cutting-edge interdisciplinary expertise in order to make international collaboration a reality.

Take the case of wheat rust, a pestilence spread by wind-riding spores that have devastated wheat in Uganda, Kenya, Ethiopia, Sudan, Yemen and Iran, and now threaten 15 percent of the world’s wheat crop in Pakistan and India – home to a billion of the world’s poorest people.

To attack this plague, Cornell leads the Durable Rust Resistance in Wheat project, a $27 million global partnership funded by the Bill and Melinda Gates Foundation involving plant breeders, economists, biotechnologists and data management specialists from 15 institutions.

The Gates Foundation is not the only funding institution with a global view. A new endowment from the Tata Education and Development Trust, a philanthropic entity of India’s Tata Group, will allow more students from India to come to Cornell for an education and then take Western models and knowledge home with them after four years. (See story, below.)

The Tata Trust has also provided $25 million in funding for the Tata-Cornell Initiative in Agriculture and Nutrition. “The goals of this project are to reduce poverty and malnutrition in rural India,” says Pell, who leads the initiative in agriculture and nutrition. “Initially, we will work with Indian partners in central India in areas where there is a lot of poverty.”

Attracting people who care

Opportunities to do field research and help people are a key drawing card for many researchers to seek out Cornell. “They want to see their work benefit people,” says Ronnie Coffman, director of international programs for CALS and the Durable Rust Resistance in Wheat project. “They are not satisfied just to work in the abstract, to simply publish papers, but they are interested in improving the lives of people around the world. That’s always been the culture of our college and the institution at-large.”

OVERSEAS SCHOLARSHIPS BRING THE WORLD TO CORNELL

BY CLARE ULRICH

A nyone who wants to know the value of international scholarships should meet Aadeetya Shreedhar.

Shreedhar will enter Cornell’s College of Engineering in the fall as one of the first students to receive a new Tata Scholarship for Students from India.

“There is a maelstrom of emotions coursing through my veins,” says Shreedhar. “There is jubilation at the achievement, ecstatic anticipation for the future and surreal pleasure in being able to say that I am a Cornellian.”

Or one could talk with Diana Djatsa Sokeng ’10, who grew up in Cameroon, where the average annual salary is equivalent to about $4,000 – a twelfth of what it costs to attend Cornell for one year.

She recalls screaming for joy when she learned, via e-mail, that she would receive a scholarship to attend the ILR School.

Among international students with financial need, however, Shreedhar and Sokeng are the exceptions.

Of the 250 students from outside the United States, Canada and Mexico who applied for financial aid in 2008, only 19 received aid. More than 92 percent were turned down because the university has only a limited pool of funding available for international students. In 2008, that figure was under $2 million.

Brendan O’Brien, director of Cornell’s International Students and Scholars Office, says that without scholarship support, Cornell would have great difficulty attracting students from developing countries. Yet bringing
He is considering graduate study in economics and perhaps later in higher education administration with hopes to perhaps “change the German universities a little bit to make them closer to Cornell.”

Sokeng’s plans also include graduate school and possibly working for the United Nations or World Bank – but definitely returning to Cameroon. “A lot of African students go abroad and never come back because they feel there is no opportunity,” she explains. “I hope that I’ll be able to go back and do something to contribute to the development of my country, because that is something I have in my heart.”

Students of all nationalities to Cornell can be profoundly powerful, says President David J. Skorton.

“Higher education is one of our country’s best policy tools to level the playing field for millions entering an increasingly globalized society and to alleviate inequality and poverty,” he says.

Increasing scholarship aid for international students is a component of Far Above … The Campaign for Cornell, which has already seen the creation of two major programs for international scholarships.

This fall will bring to campus the inaugural class of Tata scholars from India, including Shreedhar. The program is the result of a $25 million commitment from the Tata Education and Development Trust, a philanthropic entity of India’s Tata Group. When fully endowed, the fund will support up to 25 students at a time.

Cornell trustee Ratan Tata ’59, B.Arch. ’62, is the chairman of Tata Sons Limited, the holding company of the Tata Group, one of India’s oldest, largest and most respected business conglomerates.

Fellow trustee Martin Tang ’70, a Hong Kong businessman, in 2008 created the Martin Y. Tang International Scholarship Challenge. It matches cash gifts and commitments of $750,000 or more, on a $1 for $3 basis, with the goal of creating 12 scholarship endowments of $1 million each.

Students say that coming to Cornell from abroad promotes the exchange of ideas across cultures.

Marian Heller ’11, from Germany, is an only child in a single-parent family headed by his father. A scholarship recipient, Heller chose Cornell for its interdisciplinary curriculum – something he could not find in his home country.

“I’m only in my second year, and I’m taking a graduate-level seminar in the business school,” he says. “In Germany you have this very narrowly focused program and few electives.”

Marian Heller ’11, of Germany, is studying economics and psychology in the College of Arts and Sciences, thanks to Cornell’s international scholarship program.
Pell concurs: “The problems that faculty try to solve are intellectually interesting, and finding reasonable solutions for problems, like water shortages, for example, is imperative. There’s a feeling of being relevant and there is an altruism of wanting the world to be better when we leave it.”

Take the Emerging Markets Program in the Department of Applied Economics and Management. In one aspect of the program, students serve as marketing and business consultants for small businesses in west and southern Africa. The program’s influence goes beyond whether local businesses succeed or not, says economist Christy, the program’s director. “We have to look at doing good in the world,” he says. “We have to look at assisting developing countries and helping grow their economies and making their communities more prosperous.”

Graduate student Megan Hatch calls her trip to Kenya with the program “one of the most rewarding experiences I have had at Cornell.” She adds, “I think I learned more about agriculture and business from this real-life case study than I did from most of my other classes.”

In more subtle ways, Qi Wang, associate professor of human development in the College of Human Ecology, sees aiding intercultural understanding as another way of improving the world. She collaborates with psychologists at Peking University to explore how culture shapes personal memories and identities. Recently, when several of her students interviewed bilingual Chinese children in China, they found that when interviewed in English, the children reflected more American ideals like strong individualism. But when they were interviewed in Chinese, they conveyed Chinese values like belonging to a group.

“I think it’s crucial as our world becomes more and more globalized to provide cross-cultural perspectives,” Wang says.

The humanities at Cornell also supports important international work. The Walter LeFeber Graduate Research Assistance Fund, for example, supported Tamara Loos, associate professor of history, working with history graduate student Samson Lim, in indexing sources from the national archives in Bangkok to examine the social history of violence in Thailand.

Intercultural understanding motivates the work of Jumay Chu, as well. As a senior lecturer in the Department of Theatre, Film and Dance, Chu is studying dance companies in China to examine how Western ideas of modernity are influencing Chinese culture. Such work helps “dancers and audiences both in China and in America be active and trusting as partners rather than defensively self-conscious about their differences,” says Chu.

Also in China and in the humanities, a new partnership with East China Normal University (ECNU) created the new Cornell-ECNU Center for Cross-Cultural Studies last year as part of the growing Cornell-China Humanities Institute Initiative, which will include partnerships with two additional universities in China.

However, it is the most desperate needs of the developing world, from food to medical care to clean water, that occupy most of the research and education of Cornellians abroad. Perhaps the grandfather of all such Cornell courses is a 41-year-old class in international agriculture and rural development.
But these are only part of a global Cornell. What’s missing?

For the preparation of students for work and life in a global world, Cornell has a permissive rather than guiding environment, exemplified by graduation requirements. There is no university requirement for study of a foreign language, though there used to be. Only two schools have such a requirement for graduation. We have a flexible study abroad program, but there is no university requirement that students have a significant international experience. We have myriad courses that address world issues, but no core of courses from across the university that would ensure our graduates have at least the basic understanding of the world in which we live – a complex mix of cultures, economies and political systems based in a physical world of amazing variety. Should there be more guidance?

Cornell’s contributions to solving global problems can be found in the laboratories and libraries on the Ithaca, New York City, Doha and Geneva campuses. Probably the most important is the education Cornell has provided to its international students since the university’s beginning. But Cornell also has been a major contributor to the pool of individuals who dedicate their lives to addressing major world problems. They can be found in international research centers, in the rice and wheat fields of Asia and Latin America, in the offices of world and regional development banks, in government agencies and nongovernmental organizations. But these contributions are primarily by individuals – faculty and graduates, and occasionally by colleges, but rarely by focused effort of the university. Can the university focus its efforts more effectively?

We have an unparalleled combination of academic resources, faculty and students, a long history of international involvement and a land-grant tradition of service. But we have no university commitment to becoming a truly global Cornell. With the possible exception of the establishment of the medical school in Qatar, where, clearly, the trustees and central administration expressed a university view, in almost all of the examples cited, the direction and initiatives were the result of the individual or of small groups of faculty members, and by college leadership. Is there a need for a university view?

If the answers to the questions posed above are “Yes,” then the next question is “How?” While the occasions on which the university can express itself as an entity are relatively few, there can be a university perspective on its roles. To articulate that vision, and to provide the leadership in fostering it, is the responsibility of the president, the provost and the vice provost for international relations. To carry it out, however, requires the commitment of the colleges, the dedication of the faculty and the enthusiasm of the students.

Gilbert Levine is professor emeritus and interim director of the Mario Einaudi Center for International Studies.
culminates with a three-week field trip to south India where Indian and Cornell students work together on infrastructure and research projects. The experience helps make students and faculty “globally relevant,” says plant breeding professor K.V. Raman, associate director of international programs in CALS. “[These] Cornell students can now talk about international experience,” and faculty members return to Ithaca with “quality lesson plans they can use” and new collaborations with Indian researchers.

Cornell also sponsors many on-campus programs dealing with the problems of the developing world. Prominent is the Mario Einaudi Center for International Studies, which provides a home to many international programs. Every year the center and associated programs bring dozens of former ambassadors, government leaders, scholars and other authorities to campus exploring the ethos of other continents and supporting courses on Islam, colonialism, political culture, democratization, economic development, corruption, ethnic relations, civil violence, war and foreign relations.

The Einaudi Center also annually funds more than 120 graduate students – from anthropology and nutritional sciences to soil and crop sciences – to conduct research in countries from Afghanistan to Zambia. Almost half of the grant recipients head to Asia, about one-quarter trek to sub-Saharan Africa and one-quarter to Latin America and Europe.

The developing world badly needs hardy and high-yielding crops that resist stress and pests, so Cornell rice breeder Susan McCouch and her students hand-pick desirable traits from wild rice and breed them into traditional cultivars, and then map these characteristics on the rice genome so breeders globally can adapt traditional varieties. Her students travel to Asia, Africa and Latin America to train plant breeders and other students.

“It’s hard to grow rice in upstate New York,” says Adam Famoso, a plant breeding and genetics doctoral student who works on aluminum tolerance in rice in McCouch’s lab and has traveled to research stations in the Philippines and Colombia. Ultimately, though, it is indigenous people who must benefit from Cornell’s contributions, observes plant breeder McCouch. “We need to look beyond traditional mechanisms and networks to get this knowledge into the hands of those who need it for survival,” she says.

“We learn so much by going and seeing the actual field conditions and learning from the producers who work in these conditions every day,” says student Famoso. “The international focus is the whole reason I came to Cornell.”

Additional reporting by Lauren Gold, Susan Kelley, Robert Emro, Sheri Hall, Mary Catt, Heike Michelsen, Stephanie Specchio, Susan Robertson, Linda McCandless and Ted Boscia.

Right: Ginger Colub, a nutrition major and global health minor in the College of Human Ecology, weighs a baby at the Nairobi Women’s Hospital’s new well-baby clinic in Kenya in 2007.

Center: Nick Strutt ’08 and a water buffalo in the Philippines, preparing the land for the transplanting of rice seedlings. Strutt, a plant science major, participated in the Rice: Research to Production course at the International Rice Research Institute.

Cornell co-founder Andrew Dickson White, a world traveler and a diplomat to Germany, Russia and The Hague, in 1865 recruited two international professors as part of the university’s initial 26-member faculty and enrolled students from Nova Scotia, England, Russia and Brazil in Cornell’s first class. From the start, Cornell offered a dizzying array of foreign languages, not only the Romance and classical languages, but also Icelandic, Persian, Turkish and Tartar languages, Chinese, Japanese, Malayan, the languages of Manchuria and Turkistan and even Sanskrit. By 1905, Cornell had granted degrees to some 700 foreign students and soon thereafter became one of the first schools to engage in academic exchanges with China after the Boxer Rebellion, and to enroll Chinese students.

In the 1920s, the Cornell-Nanking Crop Improvement Program was considered “the first notable example of international technical cooperation in agriculture,” said William I. Myers, the Cornell College of Agriculture dean in 1962; the program sent Cornell plant breeders to the University of Nanking to train Chinese workers in modern plant breeding and supervised a crop improvement program that developed higher yielding strains of rice, wheat, cotton and other key crops.
Ming Lui and other Cornell students, in India for a two-week International Agriculture and Rural Development 602 field trip in January, bond with their hosts on the beach near their hotel in Chennai.

Above: During a trip to India, Neele Reimann-Philipp ’09, center, and other Cornell students mingle with children at a village school outside Ooty in south India.
Cornell’s global programs, research, and partnerships

**Mexico**
- Latin American Studies Program, Experience Latin America II: Chiapas Edition, field-study course
- CALS Durable Rust Resistance in Wheat project, collaboration with International Maize and Wheat Improvement Center and part of a broad-based global partnership (also in Kenya, Ethiopia, and Syria)

**Honduras**
- Civil and environmental engineering’s AguaClara Project brings promise of clean, treated water to Ojojona and Támara
- International Veterinary Medicine Abroad program

**Nicaragua**
- Cornell’s chapter of Engineers for a Sustainable World helps Nicaraguan women design and use solar ovens
- Latin American Studies Program, Summer Program in Nicaragua

**Costa Rica**
- Cornell Wind Ensemble’s ongoing music education and outreach project

**Peru**
- Cornell’s Undergraduate Research Program on Biodiversity’s EsBaran Amazon Field Laboratory at Yarapa River Lodge

**Bolivia**
- Vet College’s Expanding Horizons program supports students in the field (in several countries)
- Quechua Language Training program

**Cerro Chajnantor, Chile**
- Cornell Caltech Atacama Telescope project

**Dominican Republic**
- Cornell biodiversity lab and field station at Punta Cana

**Arecibo, Puerto Rico**
- Arecibo Observatory, managed by Cornell’s National Astronomy and Ionosphere Center for the National Science Foundation

**Panama**
- AA&P’s Sustainable Panama, an interdisciplinary winter session workshop course

**Colombia**
- Johnson School professor, Ph.D. student study impact of violence on entrepreneurs, also supported by Einaudi Center travel grant

**Brazil**
- Latin American Studies Program’s Brazilian Cities Summer Program

**Greater Andes Mountains, Argentina**
- EAS 4170, Field Camp in the Central Andes, summer course in mapping and geology

**Ontario, Canada**
- Johnson School Executive MBA program with Queen’s School of Business, Kingston

**Port-au-Prince, Haiti**
- Weill Cornell collaboration with GHESKIO Center on AIDS research

**Paris, France**
- ILR dual degree program with the ESCP-EAP European School of Management
- Paris Summer Institute of International and Comparative Law
- Cornell University Center for Documentation on American Law in Paris

**Rome, Italy**
- AA&P’s Cornell in Rome program

**Spain**
- Engineering students pilot study-abroad program at University of Cantabria

**Elios Proni, Greece**
- Institute for European Studies fosters sister-city relationship

**Uganda**
- CALS ABSPII collaborative project (also in India, Bangladesh, and Philippines)

**Ghana**
- Cornell’s Public Service Center service-learning course in Hujimbre
- CALS-supported University of Ghana doctoral program

**Tanzania**
- Weill Cornell physician training and Weill Bugando medical complex

**El Salvador**
- Latin American Studies Program, Summer Program in Nicaragua

**Brazil**
- Latin American Studies Program’s Brazilian Cities Summer Program

**Greater Andes Mountains, Argentina**
- EAS 4170, Field Camp in the Central Andes, summer course in mapping and geology

**South Africa**
- Cornell’s AEM Emerging Markets Program (also in Botswana)
- CALS-supported University of KwaZulu-Natal doctoral program
Early in the morning of Parents’ Weekend, April 18, 1969, 11 fire alarms rang out across the Cornell campus. At 3 a.m., a burning cross was discovered outside Wari House, a cooperative for black women students. The following morning, members of the Afro-American Society (AAS) occupied Willard Straight Hall to protest Cornell’s perceived racism, its judicial system and its slow progress in establishing a black studies program. The events that were to prompt decades of social, cultural and political change on campus were in play.

At 9:40 a.m., in an attempt to take the building back, white Delta Upsilon fraternity brothers entered the Straight and fought with AAS students in the Ivy Room before being ejected. Fearing further attacks, the black students brought guns into the Straight to defend themselves.

On the evening of April 19, in freezing rain, rookie Cornell police officer George Taber patrolled the perimeter of the occupied Willard Straight Hall unarmed. Students for a Democratic Society members – students far to the left of many of the black students inside – formed a ring around the Straight to lend support.

Today, Taber recalls the period as “a whirlwind. One thing after another. I was a raw rookie. I had no idea what was going on.”

Within hours, police deputies from Rochester, Syracuse and across New York state massed in downtown Ithaca. “Had they gotten the command to do so, they would have gone and taken the Straight back and arrested people, or who knows what would have happened. It could have made Kent State and Jackson State look like the teddy bear’s picnic. It would have been just absolutely terrible,” Taber reflects.

On Sunday afternoon, following negotiations with Cornell officials, the AAS students emerged from the Straight carrying rifles and wearing bandoleers. Their image, captured by Associated Press photographer Steve Starr, appeared in newspapers across the country and on the cover of Newsweek magazine under the headline “Universities Under the Gun.”

Although physical disaster was averted, deep psychological scars were burned into the minds of many on campus. Four decades later, feelings in some quarters are still raw. The university as a bastion of reasoned argument, thoughtful debate and academic freedom seemed to be under siege. Relationships among faculty members were destroyed. Students
were torn. An atmosphere of pervasive fear and anxiety gripped the campus and the nation. The AAS students were not punished, outraging some faculty members, students and alumni.

Within Cornell, the takeover has come to be seen as an event that gave birth to enormous social, governance and ideological change. In fact, institutional change was already under way.

In 1963, his first year in office, Cornell President James Perkins had launched the Committee on Special Educational Projects (COSEP) to increase enrollment of African-American students at Cornell and provide them with support services – the first program of its kind at a major American university.

Perkins, who had chaired the board of trustees of the United Negro College Fund, said Cornell wanted to “make a larger contribution to the education of qualified students who have been disadvantaged by their cultural, economic and educational environments.” COSEP later expanded to include Latino and Hispanic American, Native American and Asian-American students.

Only days before the Straight takeover, on April 10, 1969, the Cornell administration had approved $240,000 to create an Afro-American Studies Center and a director, James Turner, had been chosen. “The students wanted an autonomous program; they wanted the center to have control of its own destiny,” says Eric Acree, librarian at the Africana Studies and Research Center.

But change did come even more quickly after the takeover. “You now have recognition that other people need to be studied – women, gays and lesbians, Latinos, Asian Americans – all of that is an outgrowth of this movement,” Acree says.

According to Robert L. Harris, professor of Africana studies, entire scholarly fields had been ignored. “The seriousness of Africana studies as an academic endeavor had been questioned, simply because the breadth and depth of existing scholarship was not widely known,” he says. “In the decades since, the field has been the source of vast quantities of indisputably serious, relevant, compelling work.”

As the academic canon broadened, so did student living options with the establishment of Ujamaa Residential College in 1971, followed by Akwe:kon in 1991 and the Latino Living Center in 1994. The current Africana Studies and Research Center building opened in 2005 (the first center was destroyed by arson in 1970). Students and staff now serve on the Cornell Board of Trustees. The university’s need-blind admissions policy and Student Assembly can also be traced to the takeover.

Perkins resigned at the end of the semester after the takeover, and for years he was widely regarded as a decent but ineffectual president. But in 1995 Thomas W. Jones, a leader of the takeover, established the James A. Perkins Prize for Interracial Understanding and Harmony, to acknowledge the historic role that Perkins played in changing Cornell.

“President Perkins made the historic decision to increase very significantly the enrollment of African-American and other minority students at Cornell,” said Jones at the time. “He did so in the conviction that Cornell could serve the nation by nurturing the underutilized reservoir of human talent among minorities, and in the faith that the great American universities should and could lead the way in helping America to surmount the racial agony which was playing out in the civil rights struggles of the 1950s and 1960s. He made a courageous and wise decision and deserves recognition for it.”

The radical ideals Ezra Cornell advanced in 1865 to found his university survived – though the tumultuous events of the late 1960s forced them to adapt. But in the end, after a long period of radical change, they have ultimately thrived.
Riché Richardson, associate professor of Africana studies, spent a week in Paris in January as a cultural envoy to France sponsored by the U.S. Embassy. She gave a series of lectures in the city, where her art quilts depicting Barack Obama, Josephine Baker and Simone de Beauvoir were being exhibited.

The visit coincided with the Paris opening of “Un patchwork de cultures: une exposition itinérante de la Louisianese vers la France,” a traveling quilt exhibition on display at locations including the U.S. ambassador’s residence and at City Hall 5 (in Paris’s fifth district).

Richardson gave talks at various schools and exhibition spaces, and at the embassy and ambassador’s residence. She met with a newly formed diversity group at the embassy, where she gave a talk on “Southern Horrors, Global Terrors: Hurricane Katrina and Inequities of Race and Gender in the United States,” which served as a “foundation for an in-depth dialogue on diversity,” Richardson says.

Richardson also gave a gallery talk on the legacy of Rosa Parks, St. Jude Educational Institute and the Youth Mission in Montgomery, Ala., for 25 vocational school students; spoke about art, education and art literacy at Martin Luther King High School; lectured on “The ‘Race Card’ Myth, Diversity and Civility in Academia” for a group of engineering students; participated in an exhibit tour and quilting workshop with a Parisian underprivileged women’s group; talked to African-American history students about Rosa Parks and the civil rights movement; and delivered a lecture on “Black Masculinity and the U.S. South” for American studies scholars.

Her quilt “Obama Time: Always” inspired many students to engage her in conversations about the then president-elect, citizenship and exclusion in France, Richardson says.

“They made me think about how I function as an artist and as a role model,” she says. “They were interested in drawing on aspects of the African-American experience to underscore the sense of alienation they feel inside the French system.”

A short film, “Riché Richardson: Portrait of the Artist,” by Géraldine Chouard and Anne Crémieux, was shown at the ambassador’s residence, where Richardson gave a talk on Montgomery modernism for an audience of scholars, students and French and American quilters. (Chouard also documented the exhibition and Richardson’s visit in a photo album at picasaweb.google.com/chouard.geraldine/09_01_Un_Patchwork_de_Cultures_Paris.)

The cultural envoy experience “has helped to transform me, about how I conceptualize my teaching and how I make my art,” Richardson says.
The Grapes of Wrath,” John Steinbeck’s once-controversial and now-classic 1939 novel of Dust Bowl refugees who struggle to make a new life in California, is the 2009 selection for Cornell’s New Student Reading Project.

“It is an extraordinarily rich account of major economic and social upheaval during a pivotal era in American history,” says Michele Moody-Adams, Cornell’s departing vice provost for undergraduate education.

She adds that the book has a special relevance in a year of deep economic recession. “The book makes us reflect on the causes and effects of widespread homelessness and unemployment, the nature of economic and social justice, and the consequences of taking the vibrancy of the natural world for granted. It’s a good thing for undergraduates to have to confront these questions at the current moment.”

The book will be read by much of the Cornell community, including the entire incoming freshman class, new transfer students and those faculty and staff who will lead reading groups during student orientation in late August. The greater Ithaca community will also participate, with support from the Tompkins County Public Library, a Reading Project partner.

Steinbeck wrote his contemporary and very American story of the Joad family and their fellow migrants in 1938 and 1939. The most famous of the author’s 17 novels, “The Grapes of Wrath” was initially widely banned but also widely read, and was quickly adapted into a 1940 John Ford film starring Henry Fonda that expanded on the politics suggested by the novel. The book won the Pulitzer Prize for fiction in 1940. Steinbeck earned a Nobel Prize in literature in 1962.

Moody-Adams says she hopes to see a community service project or event grow from Cornell’s engagement in the novel’s major and minor themes, which include poverty, migrant and immigrant labor, the power of community, and the social and economic effects of ecological disaster.

This will be the ninth year of the reading project, which is designed to provide a common intellectual experience for the Cornell community.

Incoming students will receive copies of the book to read over the summer. An essay contest and discussions during Orientation Week will emphasize critical thinking, and related exhibits, lectures, films and other events will occur throughout the academic year.

As in previous years, the reading project will be accompanied by a Web site, reading.cornell.edu, and a blog written by Cornell librarians and guest writers.

“IT’S A GOOD THING FOR UNDERGRADUATES TO HAVE TO CONFRONT THESE QUESTIONS AT THE CURRENT MOMENT.”
—MICHELE MOODY-ADAMS
For the second year in a row, a group of Cornell students spent spring break at Tangelo Park, Fla., as part of the Alternative Breaks program, an initiative of Cornell’s Public Service Center. For a week, they mentored and tutored preschool, elementary, middle school and high school students as part of the Tangelo Park Pilot Program, which was founded by Harris Rosen ’61. In 1994, Rosen launched the program to not only provide free preschool and adult education classes, but a free college education within the Florida state system for all students in the working-class neighborhood of Tangelo Park (just outside Orlando) who graduate from high school. So far, he has assisted almost 400 students from the formerly drug- and crime-ridden neighborhood.

During their stay, the Cornell students were hosted by Rosen, who covered all but their transportation costs, at his Rosen Shingle Creek resort and spent their days helping students in classes, working on classroom projects, preparing students for an astronomy night at the Orlando Science Center, reading stories, painting or playing educational games with the younger children. In the evenings, they learned about how Tangelo Park parents partner with their children’s schools to ensure the students are getting the education they need to succeed. They also talked with high school students about college life and college admissions, and attended a Tangelo Park Advisory Board meeting.

“This allowed us to see how the residents continue to work together to make their community one that is safe and welcoming,” says Lisa Casey, a Cornell Law School student who led the student trip. “We also had a chance to speak with different [Tangelo Park] residents, hearing their firsthand accounts of the radical changes that have been made in their neighborhood in the last 15 years.”

Since the program started, crime in the neighborhood has dropped by 67 percent, and the high school dropout rate has plummeted to 0 percent from 25 percent. Also, approximately 65 percent of high school students go on to college and graduate, according to Rosen.

“This kind of program, if replicated, will change our society,” Rosen told USA Today in 2007. He says that this kind of charitable giving is particularly rewarding because of his personal involvement in the initiative. His larger hope is that others will emulate the program and provide disadvantaged children with hope.

“I applaud these young men and women for spending their spring break working in the schools with these wonderful youngsters,” Rosen said in April during a visit to campus to reconnect with the students who spent their spring break at Tangelo Park.

The students on the trip were certainly inspired: “It was refreshing to ... interact with a community that was so animated by the changes it’s made and continues to make,” Casey reflects. “That aspect of it gave me hope that a similar initiative can be implemented elsewhere. The trip also revived my drive to provide whatever resources (be they in the form of services, money or goods) I can to helping those who have not been provided with the same opportunities that I’ve had throughout my life.”

“I really enjoyed the interactions with the students and the kids,” adds Frank Ma ’12. “Being around all the kids and seeing the great amount of potential they had really made me realize how important it is to give every kid a great education.”
Students in a horticulture course this past semester prepared for a spring break trip to Belize – not to frolic at the beach but to show how school gardens can enrich curricula and serve as a foundation for community food-based and environmental education programs.

As part of the course, nine Cornell undergraduates, three Cornell Cooperative Extension educators and a team of three garden-based learning educators went to the Toledo district in southern Belize to focus on school gardens. The group worked with the U.S. nonprofit organization Plenty Belize, which has created school gardens in 32 of the region’s 55 schools.

The Cornell students conducted a teacher training and created two school gardens. To link the gardens to school curricula and community programs, they also led numerous nutrition, market, composting and basic garden-based activities for some 140 children and their teachers in two Mayan communities, according to Marcia Eames-Sheavly, course instructor and youth program leader of the Cornell Garden-Based Learning Institute.

“Numerous people in the villages commented on [the students’] collective hard work and positive demeanor,” says Eames-Sheavly. “They each went well beyond their own expectations for themselves, served as skilled gardeners and grew confident in their ability to lead garden-based learning activities with children.”

The students will now document their activities and what they learned about organic gardening in a tropical context, sketch out the best gardens, conduct a case study and develop materials for garden-based learning activities for children and youth in New York state and Belize.

“We, as students, make our way through college hoping to find direction toward a suitable and desirable career, [which can be] difficult from hours of lectures alone,” says Neele Reimann-Philipp ’09. “It is the hands-on, practical experience that, I feel, can teach us these things in a more applicable way.” The course, she says, is an example of “one of the most valuable ways to connect what I’ve learned as a student with what may someday become my career.”

For Tyler Morgan ’11, a landscape architecture major, “The highlight of the trip was working alongside the children, teachers and parents of the Santa Elena village to create their school garden. And protecting our shelter by killing an intruding scorpion with my machete.”

The trip was made possible, in part, through funding from a Faculty Fellows in Service grant from Cornell’s Public Service Center and the coordination efforts of extension aide Christine Hadekel.
Exploring Darwin’s life after the ‘Origin’

What did Charles Darwin do during the 22 years after “On the Origin of Species” was published? A new book by Darwin scholar Sheila Ann Dean answers that question and many others about the work Darwin undertook while controversies instigated by the “Origin” stirred the Victorian world. The book is “Charles Darwin: After the ‘Origin’” (Cornell University Library [CUL] and Paleontological Research Institution [PRI], 2009).

Published to coincide with the 200th anniversary of Darwin’s birth and the international Darwin Day celebration, both held earlier this year, the book also served as a companion piece to the collaborative 2009 exhibition at CUL and the Museum of the Earth at PRI. Dean is a guest curator and visiting scholar at Cornell; the book was made possible by a gift from Stephan Loewentheil, J.D. ’75.

“In this thoughtful and insightful review, Sheila Ann Dean has illuminated the most productive years of Darwin’s life,” says David Corson, curator of the History of Science Collections at CUL.

Dean’s book explores how, from 1859 until his death in 1882, Darwin worked tirelessly to provide further support for his ideas presented in the “Origin.” He continued his original investigations into botanical topics, inheritance in domesticated animals and plants, sexual selection, human descent, animal expression and the movement of soil by earthworms.

“After the ‘Origin’ was published, Darwin applied his ideas to a surprisingly wide range of plant and animal life, and scientists have continued to enlarge and refine evolutionary biology over the last 150 years,” Dean says. “This account of Darwin’s later work can inform today’s debates on the teaching of evolution.”

Cornell’s first African-American students

In Cornell’s first 80 years, more than 200 African-American students took classes on the hill. But anyone seeking to explore the world of Cornell’s first black students runs into a roadblock: The university was officially color blind. In “Part & Apart: The Black Experience at Cornell, 1865-1945” (CUL, 2009), historian and retired Cornell lecturer Carol Kammen takes up the challenge. Scouring primary sources – yearbook entries, students’ diaries, administrators’ correspondence, local and national newspapers – she identifies black students enrolled at Cornell for both undergraduate and graduate study.

Thanks to her research, we now know many of their names and can see some photographs, but we also learn something of their lives while they attended Cornell: how they interacted with white students, what special obstacles they faced and surmounted, how they maintained their identity in a small, predominantly white city in rural New York and what they thought about their place in the university and in society. Kammen places her findings in the context of post-Civil War America and the political and social changes of the decades that followed.

For the book, Kammen made use of the extensive archival materials at CUL, including letters, diaries, student records, newspapers and photographs.

The Tompkins County historian, Kammen was named the 2005-06 Public Historian of the Year. Of her many previous books, two are about Cornell: “Glorious to View: A History of Cornell” and “First-Person Cornell: Students’ Diaries, Letters, Email and Blogs.”

How they lived through letters

Over the course of the 18th century in France, increasing numbers of women, from the wives and daughters of artisans and merchants to countesses and queens, wrote letters. Taking as her inspiration a portrait of an unknown woman writing a letter to her children by French painter Adélaïde Labille-Guillard, Dena Goodman ’74 (now professor of history and women’s studies at the University of Michigan) challenges the deep-seated association of women with love letters and proposes a counternarrative – that of young women struggling with the challenges of the modern world through the mediation of writing. In “Becoming a Woman in the Age of Letters” (Cornell University Press, 2009), Goodman enters the lives and worlds of these women, drawing on their letters, the cultural history of language and education, and the material culture of letter writing itself – inkstands, desks and writing paper.

Goodman follows the lives of elite women from childhood through their education in traditional convents and modern private schools and into the shops and interior spaces in which furnishings and furniture were made for, sold to and used by women who took pen in hand. Stationers set up fashionable shops, merchants developed lines of small writing desks, and the furnishings and floor plans of homes changed to accommodate women’s needs. It was as writers and consumers that women entered not only shops but also the modern world that was taking shape in Paris and other cities.
Sights and sites of Cornell – and Ithaca

“Ithaca – the city, gorges and colleges” (Owl Gorge Productions, 2009) paints a portrait of Ithaca’s special character with more than 200 color photographs and engaging chapter introductions and captions. Several of the photos included are by photographers from Cornell University Photography.

The city chapter kicks off the book with the Ithaca Festival, downtown and Stewart Park. The chapter “Gorges, Waterfalls and Cayuga Lake” showcases Buttermilk, Treman and Taughannock Falls state parks. The 26-page Cornell chapter presents campus scenes interspersed with photos of Dragon Day, the men’s ice hockey team and rowers on Cayuga Inlet.

“Nearby Ithaca” pops with images of the GrassRoots Festival, stunning farm scenes and the Museum of the Earth. “Historical Highlights” are displayed through documents, maps, old photos and postcards.

Liz Bauman ’73 (and a Cornell editor from 1977 to 2008) collaborated with Tony Ingraham ’69, former director of environmental education for the Finger Lakes State Parks, to produce the book. Linda Haylor Mikula, associate director for public affairs in the Division of University Communications, designed the book. It is available at the Cornell Store, the Cornell Club in New York and online through the Cornell Store.

Alphabet book goes green

Did you know that Americans generate nearly 250 million tons of trash each year? Or that it takes hundreds of years for a polystyrene cup to decompose? Our negative impact on the planet is tremendous, and the challenge of protecting it can seem overwhelming. In “S Is for Save the Planet: A How-to-Be-Green Alphabet” (Sleeping Bear Press, 2009) by Brad Herzog ’90, the many environmental issues we face are described, and simple actions are suggested. From the particulars of vermicomposting and xeriscaping to the three R’s of responsible waste management, young readers learn how they can be a force of nature in protecting the Earth.

Herzog has penned more than a half dozen children’s books in his alphabet series, from “A Is for Amazing Moments” to “R Is for Race.” He also is the author of a series of travel memoirs (“States of Mind,” “Small World: A Microcosmic Journey” and the upcoming “Greek to Me: A Would-Be Hero’s American Odyssey”).
Putting the squeeze on an old material could lead to ‘instant on’ electronic memory

The technology of storing electronic information – from old cassette tapes to shiny laptop computers – has been a major force in the electronics industry for decades. Low-power, high-efficiency electronic memory could be the long-term result of collaborative research led by Cornell materials scientist Darrell Schlom. The research, which was published in April in the journal Science, involves taking a well-known oxide, strontium titanate, and depositing it on silicon in such a way that the silicon squeezes it into a special state called ferroelectric – a result that could prove key to next-generation memory devices.

Ferroelectric materials are found today in “smart cards” used in many subways and ski resorts. The credit card-sized devices are made with such materials as lead zirconium titanate or strontium bismuth tantalate, which can instantly switch between different memory states using very little electric power. A tiny microwave antenna inside the card, when waved before a reader, reveals and updates stored information.

For more than half a century, scientists have wanted to use ferroelectric materials in transistors, which could lead to “instant-on” computing – no more rebooting the operating system or accessing memory slowly from the hard drive. No one has yet achieved a ferroelectric transistor that works.

“Adding new functionality to transistors can lead to improved computing and devices that are lower power, higher speed and more convenient to use,” says Schlom, professor of materials science and engineering. “Several hybrid transistors have been proposed specifically with ferroelectrics in mind. By creating a ferroelectric directly on silicon, we are bringing this possibility closer to realization.”

Ordinarily, strontium titanate in its relaxed state is not ferroelectric at any temperature. The researchers have demonstrated, however, that extremely thin films of the oxide – just a few atoms thick – become ferroelectric when squeezed atom by atom to match the spacing between the atoms of underlying silicon.

“Changing the spacing between atoms by about 1.7 percent drastically alters the properties of strontium titanate and turns it into a material with useful memory properties,” says Long-Qing Chen, professor of materials science and engineering at Pennsylvania State University, a member of the research team whose calculations predicted the observed behavior five years ago.

Schlom calls the work a good example of “theory-driven research.”

“From various predictions, some dating back nearly a decade, we knew exactly what we were after, but it took our team years to achieve and demonstrate the predicted effect,” he says.

The researchers described successfully growing the strontium titanate on top of silicon – the semiconductor found in virtually all electronic devices – using molecular-beam epitaxy, a technique akin to atomic spray painting.

“The technological implications are staggering,” says Jeremy Levy, professor of physics and astronomy at the University of Pittsburgh, the research team member whose measurements showed the thin strontium titanate layers on silicon to be ferroelectric.

The paper’s first author is Maitri P. Warusawithana, a postdoctoral associate in Schlom’s lab. Other Cornell collaborators were David Muller, professor of applied and engineering physics, and graduate student Lena Fitting Kourkoutis. The team also involved scientists at the University of Pittsburgh, National Institute of Standards and Technology, Pennsylvania State University, Northwestern University, Motorola Corp., Ames Laboratory and Intel Corp.

The research was funded by the National Science Foundation, the Office of Naval Research and the Department of Energy.
Unrestricted support is critically important, especially in challenging times

A t a time when philanthropists increasingly seek hands-on involvement with how their gifts are used, Tom Groos ’78 adopts a different philosophy.

“My fundamental thinking is that unrestricted giving allows people to achieve the goals of the organization most effectively,” says Groos, chairman of the Viking Group and a partner of City Light Capital. “If I believe in the leadership of the organization, it’s better off for me to let them make those decisions.”

Groos has done just that over the course of many years, during which he has made gifts to the Cornell Annual Fund totaling more than $177,000.

Groos’ ongoing trust in Cornell’s leadership is based on his family’s past and current experience. His Cornell connections span nearly a century and include his paternal grandfather, Richard A. Groos ’14, along with his parents, two siblings and, now, his son, Nicholas T. Groos ’09.

“My son is in the earth sciences program in geophysics,” he says. “I’ve just been blown away by the depth that he’s gotten out of his experience there. My own experience at Cornell was very rich and rewarding, and I think he’s getting more out of it than I did.”

Unrestricted support like Groos’ is critically important during a time when Cornell’s finances have been hit by cuts in state funding, a decline in new gifts for capital projects and a sharp reduction in endowment income, says Maya Gasuk, director of the Cornell Annual Fund.

“Gifts to the Annual Fund are absolutely essential because it gives deans and directors the flexibility to apply funds where they are needed most,” she says.


“Maintaining that level is important both for the current-year support to compensate for a reduced endowment, but also to help bridge other funding demands that are happening across campus,” says Gasuk.

“Gifts to the Annual Fund are absolutely essential because it gives deans and directors the flexibility to apply funds where they are needed most.”

– Maya Gasuk

LEONA M. AND HARRY B. HELMSLEY CHARITABLE TRUST ENDOWS SCHOLARSHIP PROGRAM AT THE HOTEL SCHOOL

The Leona M. and Harry B. Helmsley Charitable Trust has announced a $2 million gift to endow the Helmsley Scholarship at Cornell’s School of Hotel Administration. The scholarship will provide tuition support to approximately 10 undergraduate students each year.

“We extend our deepest gratitude to the Helmsley Charitable Trust for this extraordinarily generous gift,” says Michael Johnson, dean of the school. “Financial aid is crucial to ensure that we maintain a diverse and talented student body that is prepared to serve our school and our industry. This gift will provide a tremendous lift as we work to meet that need.”

More than 60 percent of students at Cornell’s Hotel School currently receive some form of financial aid. Under the prospect of continuing economic uncertainty, school officials expect that the demand for aid will only grow.

“Our school must continue to attract new funding for scholarships,” Johnson adds. “That is the only way we can honor Cornell’s historical commitment to need-blind admissions, secure the future of our students and redirect resources to advance the school’s many other initiatives.”

Johnson also expressed gratitude to Takis Anoussis, general manager of the Helmsley Park Lane Hotel in New York City. A 1967 graduate of the Hotel School, Anoussis championed this generous commitment to Cornell and to future leaders of the hospitality industry.
April brought showers and tax forms, but it also signaled the end of yet another ultra-successful winter season for Cornell athletics.

The Big Red’s winter teams compiled a 172-91-9 record (.649), winning four Ivy League titles in the process. The teams’ winning percentage is the greatest in the history of Cornell winter athletics. Men’s basketball, women’s fencing, men’s ice hockey, women’s track and field and wrestling all competed at the NCAA championships, while gymnastics (USAG national champions) and both men’s and women’s polo teams earned top spots in national competitions.

Individual Big Red athletes also were locally, regionally and nationally recognized for their talents on the field and in the classroom. In all, 26 student athletes captured All-Ivy honors, with 14 taking home All-America honors. Two were honored as Ivy League Player of the Year and three others captured Ivy League Rookie of the Year accolades. Additionally, 10 student athletes were named to the Academic All-Ivy team.

Perhaps the most visible national successes came from the NCAA appearances made by the men’s basketball, men’s ice hockey and wrestling teams, as well as the incredible individual success of senior Jeomi Maduka in track and field and junior wrestler Troy Nickerson.

The Big Red hit the dance floor for the second straight year to compete in the NCAA men’s basketball tournament, the most-anticipated college sporting event in the country, becoming the first Ivy League team other than Penn or Princeton to capture the NCAA qualifiers Tasha Hall ’10, Jessica Tranquada ’11, Sallie Dietrich ’10 and Alex Heiss ’09 prior to competition at the 2009 national fencing championships.
conference’s automatic bid in consecutive seasons. The team finished three games ahead of its closest competitor while winning 21 games, one shy of the school record. The team led the University of Missouri midway through the first half before being overpowered, 78-59, by the Tigers, who advanced to the Elite Eight.

Cornell had its own NCAA quarterfinalist with the men’s ice hockey team. The Big Red was selected to receive an at-large bid to the 2009 NCAA championship, and after topping Northeastern in the first round with a furious comeback in a 3-2 win, Cornell fell to Cinderella squad Bemidji State with a spot to the Frozen Four on the line. Despite the loss, head coach Mike Schafer ’86 directed his squad to a 22-10-4 mark, a spot in the ECAC championship game and a second-place regular season finish in ECAC hockey.

The Cornell wrestling team made its march toward a national championship by qualifying seven individuals for the NCAA championships while claiming its second straight Eastern Intercollegiate Wrestling Association team title and its seventh consecutive Ancient Eight crown. Topping the season off was the national title by Nickerson in the 125-pound weight class. In all, four Big Red grapplers took home All-America honors, including third-place finisher Jordan Leen at 157 pounds.

Maduka earned the Most Outstanding Performer award for the second year in a row at the Indoor Heptagonal Championship and for the fifth time in her career overall. Her final indoor Hept was particularly special as she set meet records in the 60-meter dash and triple jump and also won the long jump and 200. Her triple jump set an Ivy League record. In the 62-year history of the Indoor Heptagonal Championship, no one - male or female - had won four individual events until Maduka accomplished the feat in February. Maduka also tied the record for career indoor individual Hepts titles, with 10. Her efforts helped the Big Red to a Hepts crown for the 14th time in the last 15 championship meets. She then placed in the top six nationally in both the long and triple jumps at the NCAA meet, including a runner-up finish in her specialty event, the long jump.

While the women’s team continued its dominance, the men’s track and field team extended its streak of Hepts trophies to 11 of the last 13 meets. The men used a balanced approach to fall just shy of a record for largest margin of victory in the Hepts, topping Princeton 176.5-121.5 on the final leader board.

By the numbers
Big Red’s winter season

<table>
<thead>
<tr>
<th>.649 cumulative winning percentage – Cornell athletics record</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ivy League Defensive Player of the Year</td>
</tr>
<tr>
<td>2 Ivy League Players of the Year</td>
</tr>
<tr>
<td>3 Ivy League Rookies of the Year</td>
</tr>
<tr>
<td>4 Ivy League titles</td>
</tr>
<tr>
<td>10 Academic All-Ivy selections</td>
</tr>
<tr>
<td>12 First-team All-Ivy picks</td>
</tr>
<tr>
<td>14 All-Americans</td>
</tr>
<tr>
<td>25 All-Region players</td>
</tr>
<tr>
<td>26 Total All-Ivy selections</td>
</tr>
</tbody>
</table>

SPRING SPORTS UPDATE

Cornell’s winter success carried over into the spring season, as the softball and men’s lacrosse teams both scored Ivy League championships. Softball won its fourth Ivy League title, while lacrosse made it to the NCAA national championship game, losing in overtime to Syracuse May 25. Baseball also won the Gehrig Division for the second time. Men’s tennis placed second, its highest finish since 1950.
No boundaries for global scholarship

Ga-Young So ’07 describes herself as a “hungry master’s student at Yale.” When she made a $50 gift to the Cornell Annual Fund, she told us it was her promise to the future.

“In the future, I hope I can give back something more to the ILR School,” she says. “I had a life-changing experience while working at the International Labor Organization in Geneva, Switzerland,” she explains. “Interacting with people from all over the world, I have realized that we human beings are more similar than different. My experience gave me a more open mind as a global citizen.”

Hearing stories like So’s reminds us that, especially in our 21st-century world, it’s more important than ever for students to make global connections.

As trustee Michael Zak ’75 puts it, to become global citizens, students need to travel outside of their home country to walk the ground, kick the turf and live life elsewhere. That’s why in 2005 Zak helped to launch a new major for students pursuing careers in China-America relations. Cornell’s China and Asia-Pacific Studies program graduated its first class last year.

Zak is one of a number of Cornellians who is vaulting students into exceptional, life-changing opportunities. By bringing far-flung students to campus, or helping to send students beyond American borders for study and research, Cornell strengthens its justifiable reputation as a world crossroads. The intersection of students and faculty with global experience and perspectives is further enriched by visits from our alumni, many of whom are among today’s leading innovators and activists who seek to bring about positive global change.

Far Above … The Campaign for Cornell supports opportunities for students to become global citizens. Such opportunities include:

• **Undergraduate scholarships:** The key to fulfilling Cornell’s need-blind access for students, scholarships also ensure that all students can choose to study abroad if they wish. At Cornell, financial awards include international study.

• **International scholarships:** For Cornell to reflect a diverse and global community, the university must be able to make resources available so that any qualified student from anywhere in the world can attend Cornell.

• **Program and research support:** Study abroad is only one pathway to global experience for Cornell students. Many students also participate in international research and service projects. Travel, fieldwork and daily living expenses are costs in addition to tuition.

• **Cornell Annual Fund:** Each year annual fund gifts support student aid, programs, research, travel and fieldwork for students and faculty members universitywide.

---

**BY THE NUMBERS**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,200</td>
<td>International students enrolled at Cornell</td>
</tr>
<tr>
<td>120</td>
<td>Countries represented by undergraduates</td>
</tr>
<tr>
<td>500+</td>
<td>Students studying abroad each year</td>
</tr>
<tr>
<td>12,500</td>
<td>Number of Cornell alumni living outside of the United States</td>
</tr>
<tr>
<td>20+</td>
<td>Interdisciplinary programs with an international focus</td>
</tr>
<tr>
<td>10</td>
<td>Colleges and units bringing a global dimension to students</td>
</tr>
<tr>
<td>650</td>
<td>Faculty involved with international research or teaching</td>
</tr>
<tr>
<td>39</td>
<td>Foreign languages taught at Cornell</td>
</tr>
<tr>
<td>$4,850</td>
<td>Additional cost per semester for Cornell Abroad programs</td>
</tr>
</tbody>
</table>

---

Stephen Ashley ’62, MBA ’64, Campaign Co-Chair
Jan Rock Zubrow ’77, Campaign Co-Chair
Robert J. Appel ’53, Chairman, Discoveries that Make a Difference: The Campaign for Weill Cornell Medical College
Why global engagement is a core value of this university

Why global engagement is a core value of this university

‘Internationalization’ is a current buzzword in higher education. Around the world, universities are developing strategies to ensure that students can study overseas and ensuring that there are agreements with foreign universities to encourage international research, that the student body has ‘passport diversity’ and that graduates have skills that will permit them to work in culturally and linguistically diverse situations. How do Cornell’s international programs compare with those of our peers? What must we do to ensure that our programs are strong and effective?

Unlike many American universities, Cornell has made international engagement an integral part of its heritage since the founding of the university in 1865. Cornell’s first graduating class in 1869 included students from Russia, Canada, England and Brazil. During the late 19th century, there were so many Brazilians at Cornell that a Portuguese language journal, Aurora Brasileira, was published regularly on campus. Cornell’s international involvement increased in the early 20th century when many Chinese students came to Ithaca. Sao-ke Alfred Sze, Class of 1902, later became China’s ambassador to the United States. The contributions of these early Chinese Cornellians ranged from modernization of agriculture (Hing Kwai Fung, 1911) to reform of the Chinese language (Hu Shih, 1914) and building of the Chinese railroad system (S.C. Thomas “Tommy” Sze, 1905). In the 1920s, Cornell became actively involved in programs overseas by participating in the Cornell-Nanking Crop Improvement program. This initiative resulted in development of high-yielding varieties of rice, wheat, cotton and other staple crops, and the training of a generation of Chinese plant breeders, who made continued progress after Cornell’s involvement ended.

The legacy of Cornell’s international tradition is profound; global engagement is a core value of the university. However, valuing global research, teaching and education is different from delivering world-class international programs. Increasingly, we need interdisciplinary efforts at the policy and grassroots levels to address complex problems. Current initiatives in the Nile basin provide a good example. Faculty members in the Law School are involved in updating treaties from 1929 and 1954 to allocate river water to Egypt, Sudan, Ethiopia and other east African countries, while students and professors from Arts and Sciences are contributing political perspectives, language expertise and understanding of cultural and historical contexts. The College of Engineering and the College of Agriculture and Life Sciences are investigating the implications of different watershed management regimes for efficient and sustainable water use. The Center for Sustainable Global Enterprise in the Johnson School has studied how to improve water access for the poor. These collaborations have resulted in a course jointly taught by faculty in the Law School, Arts and Sciences, Engineering and CALS. The success of the Nile program depends on top-notch disciplinary expertise and strong linkages across academic fields to generate effective policies and technical solutions to problems as important as water access.

Like most top universities in the U.S., Cornell is highly decentralized, largely because the most talented faculty members are drawn to institutions that give them autonomy over their research and teaching programs. As a result, most of Cornell’s international programs are externally funded and faculty controlled. This local control fosters innovation and faculty initiative, but the university runs the risk of balkanization with numerous small, unconnected international programs. How can we retain programmatic excellence while encouraging collaborations across departments and colleges?

Cornell is currently involved in a universitywide strategic planning initiative that will include our international programs. Where should we work? What international programs should the university undertake? How can the university support them better? How can we take advantage of the breadth of Cornell’s academic offerings without losing focus? How do we create a campuswide web to ensure that students and faculty are aware of programs in all corners of the university? As you read the articles in this issue of Ezra, please consider these questions. We welcome your suggestions as we design international programs for the 21st century.

Alice Pell is professor of animal science and Cornell’s vice provost for international relations. She is former director of the Cornell International Institute for Food, Agriculture and Development. Contact her at ap19@cornell.edu.
Far Above...

THE CAMPAIGN FOR CORNELL

www.campaign.cornell.edu