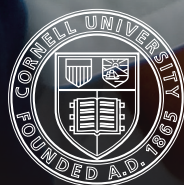
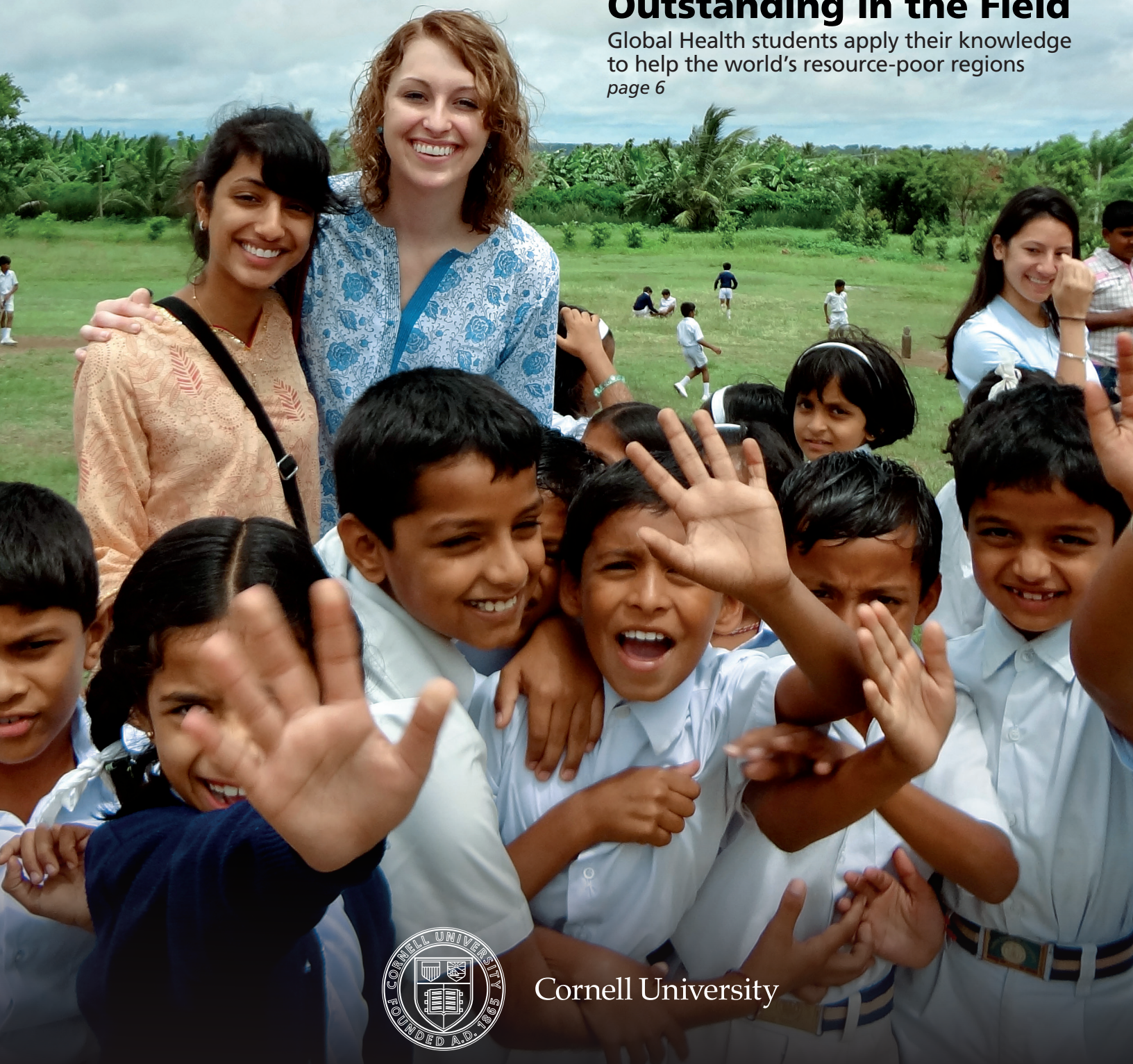


# Human ECOLOGY

College of Human Ecology, Cornell University  
Volume 42, Number 1 • Spring 2014

## Outstanding in the Field

Global Health students apply their knowledge  
to help the world's resource-poor regions  
*page 6*



Cornell University





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Cornell's College of Human Ecology publishes this magazine to illustrate how its programs address complex societal issues to improve the human condition. This mission of human improvement is accomplished through faculty initiatives in research, outreach, and teaching—with an emphasis on an ecological perspective, collaborative projects, and multidisciplinary curricula within and across five academic units: the Department of Design and Environmental Analysis; the Department of Fiber Science & Apparel Design; the Department of Human Development; the Department of Policy Analysis and Management; and the Division of Nutritional Sciences, a unit shared with the College of Agriculture and Life Sciences. The college includes the Bronfenbrenner Center for Translational Research, the Cornell Institute for Public Affairs, and the Sloan Program in Health Administration.

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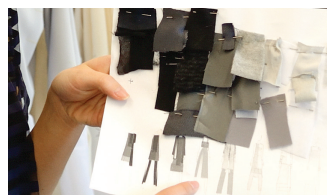
*Improving lives by exploring and  
shaping human connections to natural,  
social, and built environments*

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Mark Vorreuter.*

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Jessica Sparling '13 and Aarti  
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## Far Beyond Cayuga's Waters: The College's Growing Global Influence

From its earliest days, the College of Human Ecology has strived for a global impact by leading research, developing programs, and guiding students at home and abroad.

The college's founding directors, Martha Van Rensselaer and Flora Rose, traveled to Belgium following World War I to lead a nutrition survey that was used to guide relief efforts. In this same spirit, the college currently carries out research programs, student exchanges, and field trainings with partners around the globe—sharing ideas that prompt new discoveries, facilitating student learning, and fulfilling the college's outreach mission in the broadest sense.

Through our Global Health Program, which is featured on the cover, and other international projects, students gain firsthand experience applying their skills to solve problems in health, development, and more. At their side are the college's faculty members, who go beyond our borders to partner with scholars in fiber science, human development, nutrition, policy, design, and other areas.

Wherever that research leads, the college is taking steps to create new programs and partnerships to extend its work far beyond Cayuga's waters. I hope you enjoy discovering more about the college's global reach.

Alan D. Mathios, Rebecca Q. and James C. Morgan Dean  
The College of Human Ecology



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# In Short

## School gardens grow kids' physical activity

To get schoolchildren moving, uproot them from classrooms and plant them in school gardens, concluded a two-year Cornell study of 12 elementary schools in five New York regions. By experiment's end, kids at schools with gardens raised their moderate physical activity levels during the school day by 10 minutes per week, four times more than peers at gardenless schools. The effects also took root elsewhere—children who gardened at school were substantially less sedentary at home. With nearly one in three American children overweight or obese, lead researcher Nancy Wells, associate professor of design and environmental analysis, said school gardens could be a simple way to get kids more active.



## To combat obesity, tax sugar and fat



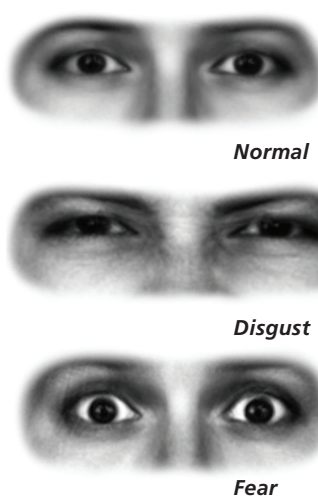
In a working paper published by the National Bureau of Economic Research, Cornell and Stanford economists reported that taxing food

producers for sugar and fat in processed goods would cause healthier food purchases and lower obesity rates than taxing consumers for products like soda or candy. Michael Lovenheim, associate professor of policy analysis and management, and Stanford's Matthew Harding modeled both approaches, using data from 123 million food and beverage purchases. They found a nationwide tax on sugar would have the broadest positive effect, estimating that a 20 percent tax would reduce caloric consumption by 18 percent.



## National 4-H leaders tour Cornell's hydroponic student lab

In January, Jennifer Sirangelo, National 4-H Council president and CEO, visited Manhattan's Food and Finance High School with leaders of Cornell University Cooperative Extension-New York City, including executive director Jennifer Tiffany. The group observed the school's Hydroponics, Aquaculture, and Aquaponics Learning Labs managed by Philson Warner, CUCE-NYC extension associate. They learned how students sustainably raise more than 10,000 tilapia, enabling them to meet New York state-mandated science, technology, engineering, and math lab requirements.



## Eyes offer a glimpse into evolution

Neuroscientist Adam Anderson, associate professor of human development, found that facial expressions are rooted in emotional responses that exploit how our eyes gather and focus light to detect unknown threats. Using optometric measures, he found that our eyes widen when we're afraid, letting in more light to the retina and expanding our field of vision to locate surrounding dangers. When repulsed, our eyes narrow, blocking light to sharpen focus and pinpoint the source of our disgust. The findings, published in the March issue of *Psychological Science*, suggest that human facial expressions evolved from universal, adaptive reactions to environmental stimuli, not as social communication signals.

## Study: Child maltreatment rises with income inequality



John Eckenrode, professor of human development and director of the college's Bronfenbrenner Center for Translational Research, and BCTR co-authors found a higher risk of child maltreatment in areas with the starkest income inequality gap—the first and most comprehensive study of its kind. The paper, published online in February by *Pediatrics*, uses income inequality rates for all 3,142 U.S. counties from 2005 to 2009. “More equal societies, states, and communities have fewer health and social problems than less equal ones—that much was known,” Eckenrode said. “Our study extends the list of unfavorable child outcomes associated with income inequality to include child abuse and neglect.”





## Fashion design senior wins \$30K Beene award

In January, Justine Lee '14, a student in the Department of Fiber Science & Apparel Design, received a \$30,000 Geoffrey Beene National Scholarship from the YMA Fashion Scholarship Fund for her winning concept of convertible and sustainable apparel and accessories. Her idea, branded as ADD (American Design & Detail), allows women to transform their garments into creative combinations that suit their individual style—for instance, a skirt that becomes a shirt in a few simple steps, and purse and shirt straps that double as belts and bracelets. Lee and three other students earned the competition's top prize out of more than 250 applicants from 41 universities. Lee became the third recipient of the scholarship from the college in the past six years.



## Nutritional sciences faculty members honored

In March, the American Society for Nutrition commended research by Patrick Stover, professor and chair of the Division of Nutritional Sciences, and assistant professor Anna Thalacker-Mercer. Stover, whose work focuses on the biochemical bases for cancer, cardiovascular disease, and other ailments, received the 2014 Osborne and Mendel Award, given for recent outstanding basic research in nutrition. Thalacker-Mercer, who studies how to boost musculoskeletal health through diet and exercise, earned the 2014 Peter J. Reeds Young Investigator Award, which honors top research in macronutrient metabolism conducted within five years of doctoral or postdoctoral training.



## NY health commissioner touts reform at college visit

By addressing the social determinants of health, New York is lowering costs and improving health care access and quality, said state health commissioner Dr. Nirav Shah during a February visit to Cornell, sponsored by the Sloan Program in Health Administration. While on campus, Shah toured the Cornell MRI Facility in Martha Van Rensselaer Hall (pictured at left), and met with college leaders and students to share his insights on reforming state health care. At a public lecture, he detailed how New York eliminated \$4 billion in medical expenses from the state Medicaid program in 2012, putting it on pace to save \$34 billion in state and federal expenditures by 2017.



# Where in the World is Human Ecology?

BY TED BOSCIA

From Argentina to Zimbabwe, Human Ecology participates in dozens of academic programs, research partnerships, and engaged learning projects on six continents. The spread of programs—from formal agreements for scholarly exchange to student-led initiatives—covers more than one-fifth of the world's nations.



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## FAR-FLUNG FACULTY

In every academic department, faculty members pursue worldwide collaborations—whether comparing social policy in Europe and the United States, testing public health and nutrition interventions in South America and Africa, or studying sustainable design and ergonomics in Asia.

Juan Hinestroza, associate professor of fiber science and apparel design, may claim more passport stamps than any Cornellian. For his research on nanotextiles, Hinestroza has partnered with scientists in Brazil, China,

Colombia, Finland, Japan, and Switzerland, working alongside many of them in their labs. Funded by Japan's Chubu Public Foundation of Science and Technology, Hinestroza recently spent three months studying new uses for cellulose fibers at Shinshu University in Nagano. No matter the location, the lingua franca in the lab is science, Hinestroza said. "Learning how to do research in another country is incredibly enriching. The beauty of science is that it can overcome language and cultural barriers."



# Global Health Programs pg. 6



## A GLOBAL CLASSROOM

With outposts in India, Tanzania, Zambia, and, coming this summer, the Dominican Republic, the college's Global Health Program provides a gateway to the world for many Cornell undergraduates. By working in resource-poor areas, students apply their course knowledge to understand barriers to healthy development and how to overcome them. Many, like Jessica Sparling '13, who worked at a ten-bed hospital in rural India, also discover even more about their place in the world, thanks to a curriculum that nurtures self-reflection.

Students also go abroad via the college's growing collection of exchange programs in Australia, France, Hong Kong, Korea, and New Zealand or through faculty-guided courses in Ecuador, India, and Italy. Others create their own international experiences, accessing travel grants and Cornell resources to lead independent projects. For some, global perspectives occur without crossing a border, thanks to the college's Urban Semester Program in New York City, allowing them to live, study, and serve in the world's biggest melting pot.





## Globetrotters

Students enrolled in the Global Health minor pursue field experiences independently or at one of five partner locations:

Santo Domingo, Dominican Republic\*

Mysore, India

Moshi, Tanzania

Mwanza, Tanzania

Lusaka, Zambia

\* New for summer 2014





# Outstanding in the Field

BY SHERRIE NEGREA

Before setting foot in southern India three years ago, Jessica Sparling '13 was dead-set on becoming a physician in her rural hometown in Ontario, Canada. But after spending eight weeks developing health pamphlets and a calendar promoting yoga, diet, and exercise at an isolated hospital, Sparling's ideas about herself and her future changed.

"It was kind of thrust upon me—the idea to be introspective and reflect on who I am, what's important to me, and what I'm passionate about," said Sparling, who arrived as a sophomore in Kenchanahalli as part of a new field experience offered by Human Ecology and the Cornell ILR Office of International Programs. "I met myself in India, and that was really powerful. I learned so much about people and the world that first summer."

While working in a ten-bed hospital, Sparling, a nutritional sciences major, realized that a traditional career in medicine no longer suited her interests. A new world opened up to her, and after spending the following summer in Zambia, Sparling now plans to pursue a master's degree in public health, a field "I didn't know existed before my summer in India."

Launched in 2007, the College of Human Ecology's Global Health Program is attracting a growing number of Cornell students who are looking for an international experience that allows them to apply their classroom learning to real-world problems facing resource-poor regions. Sponsored by the Division of Nutritional Sciences, the minor has become so popular that a new major in Global and Public Health Sciences will begin this fall.

More than 100 students are on the waiting list for the program's three-credit introductory course, drawn by its emphasis on experiential learning, said program director Rebecca Stoltzfus, professor of nutritional sciences and provost's fellow

for public engagement. "This generation of students is really interested in applying problem-solving knowledge," she said. "Global Health students want to see how their learning and knowledge applies to real-world problems."

With 68 students completing their field experiences this year, the Global Health minor offers one of the largest study-abroad programs for undergraduates at Cornell. Open to any undergraduate across campus, the Global Health minor will be a lynchpin in President David Skorton's goal, announced this spring, for 50 percent of undergraduates to study abroad by 2020, said Marina Markot, director of Cornell Abroad.

"By making the Global Health field experience a requirement closely supervised by the faculty, the program assures the quality of the students' experiences while also helping the university reach President Skorton's ambitious goal," Markot said. >>>



Jessica Sparling '13 says she "learned so much about people and the world" during her field experience in India. Photo provided.



Global Health student Vanessa Rivera '14 (right) and a classmate visited clinics in Peru and Ecuador to support the health of new mothers and infants. Photo provided.





For his field experience, Chris Caruso '14 spent eight weeks alongside University of Zambia medical students. The group addressed community health problems affecting impoverished rural villages. Photo provided.

## Leading Positive Change

Unlike many study-abroad programs, the Global Health minor offers students the opportunity to participate in international engagement, which Skorton defined in a 2012 white paper as “utilizing education, research, and academic partnership to effect positive change in the world.” This type of experience complements international studies, which Skorton defined as “understanding the world and its peoples.”

This distinction has fueled growing student interest in the Global Health Program, Stoltzfus said. “There are many students who are more interested in experiential, applied global learning than in the traditional concept of study abroad, where you go to a foreign university and sit in classes,” she added. “Our field experiences are ones where students will spend some time in coursework, but the majority of the time, they are rolling up their sleeves and doing some sort of service-learning or internship. That seems to appeal to students much more than spending all their time in a classroom setting.”

**Launched in 2007, the Global Health Program promises to be a lynchpin in President David Skorton’s goal for 50 percent of undergraduates to study abroad by 2020. Due to student demand, the college will introduce a new major in Global and Public Health Sciences this fall.**

Grace Leu '14, a human biology, health, and society major, experienced both types of programs at Cornell. In her junior year, Leu spent the fall semester taking courses on health care systems and epidemiology at the University of Copenhagen. The following summer, she joined the Global Health Program in Tanzania, where she collaborated with another Cornell student and two students from Kilimanjaro Christian Medical University College.

For four weeks, the team worked on a policy case study about the need for family planning in the East African country. After interviewing key stakeholders in the region surrounding Moshi, they learned that 40 percent of married

Tanzanian women cannot obtain contraception, primarily because of the cultural stigma attached to using birth control.

“What we found was while they had all these resources available to them—free clinics and free contraception—they were embarrassed or scared to actually go and seek out these resources,” Leu said. “There’s a stigma in the country that if you’re married and seeking out contraception, it might indicate that you’re being promiscuous.”

After working a second month in Tanzania with disabled children, Leu returned to Ithaca with a new career objective: On top of a medical degree, she wanted to obtain a master’s in public health. “I realize that doctors do work with individuals, but knowing the population and the community, and understanding the issues they face are really important and complementary to an individual practice,” she said.

Chris Caruso '14 came to a similar conclusion after his experience in the Global Health Program in Zambia. In the summer after his sophomore year, Caruso, a human biology, health, and society major, spent eight weeks in Lusaka, working with a group of students at the University of Zambia School of Medicine on community health problems affecting impoverished rural villages. Each week, the group traveled to a different region to write a case study, with topics ranging from the need for regular vaccinations to the effects of lead contamination from a former copper mine, then submitted their reports to physicians on the medical school faculty.

After his summer in Zambia, Caruso decided he wanted to pursue a joint medical doctorate and a master’s in public health, an option he had not considered before enrolling in the Global Health minor. “People talk about micro- and macro-perspectives of health,” he said. “Physicians do a very good job of looking at the patient in front of them. Public health workers do a very good job of looking at the population as a whole. I think the two things are very important and could be combined in useful ways.”

## Designing their Programs

While about half of the 280 students who have graduated with a Global Health minor completed a field experience in one of the four Cornell-sponsored programs—two in Tanzania, and one each in Zambia and India—others have designed their own projects. Along with fieldwork, students must also



take 15 credits of coursework, which exposes them to career possibilities in the global health field.

For her field experience, Narinta Limtrakul '14 chose Thailand, where she spent four weeks treating malaria patients and helping investigate a possible vaccine for the disease at Mahidol University in Bangkok. While Limtrakul grew up in Houston, her Thai parents taught her their native language.

Like several of her classmates, Limtrakul, a human biology, health, and society major, now wants to study medicine and public health after she takes a gap year working in a health-related field. "I want to be able to treat people as a physician, but I also want to keep in mind the social and environmental factors that can affect health as well," she said.

Vanessa Rivera '14 also drew upon her family background—her parents are from Central and South America—when she chose a field experience in Cusco, Peru. In the summer after her junior year, Rivera interned with Alma Sana, a nonprofit organization that produces silicon bracelets for infants to remind their mothers about regular vaccinations. The bracelets were the brainchild of Lauren Braun '11, who imagined them in 2009 while working at a Cusco health clinic as a human development student with a global health minor.

During her internship, Rivera, a policy analysis and management major, helped the staff at the nonprofit complete a study, supported by a \$100,000 grant from the Bill & Melinda Gates Foundation, by enrolling 100 mothers in the project. Rivera explained to them how to use the bracelets, which have numbers corresponding to months and symbols representing different vaccinations for women who don't speak Spanish or are illiterate.

Rivera says she learned that working in underserved regions of the world requires a great deal of cultural sensitivity. "It's really important to realize that the people you're there to help also have a voice in how you're going to help," she said. "It really has to be a partnership with a grassroots initiative in the community you're working in to have a really big impact."

In 2015, Rivera hopes to begin a two-year assignment with the Peace Corps in Latin America, but this summer she will

help launch a new field experience for the Global Health Program in the Dominican Republic. During the past year, she has worked with Stoltzfus and Tim Shenk, coordinator for the Cornell-affiliated Committee on U.S.-Latin American Relations to create a curriculum for the program, which will be based at the Autonomous University of Santo Domingo in partnership with the Center for the Study of Natural, Economic and Social Realities.

"We wanted to have an option in Latin America, and we wanted to have a Spanish-speaking program since Spanish is one of the most commonly studied languages by our students," Stoltzfus said. "None of the other programs have a language requirement, but this one does—the students must have conversational Spanish to participate."

## Working Closer to Home

In addition to coursework, the seven students enrolled in the Dominican Republic program this summer will work at two non-governmental organizations that address health issues in an impoverished neighborhood of Santo Domingo. Their work may focus on reproductive health, sexually transmitted diseases, or child health issues, Stoltzfus said.

At the same time, the Division of Nutritional Sciences is preparing for the first cohort of students in the new major, which will be offered through the College of Human Ecology and the College of Agriculture and Life Sciences. The new degree will encompass issues not only abroad but also across the United States, said Jeanne Moseley, associate director of the Global Health Program.

"One of the things that we teach in the Introduction to Global Health class is that global health is local health as well," said Moseley, the course's lead instructor. "Global health doesn't just mean beyond the borders of the United States—these are transnational issues."

Caruso, who spent a week volunteering on a Native American reservation in Minnesota last July, agrees that to "truly make global health global," it should include the United States. "I think global includes Ithaca and Upstate New York," he said. "So much of our global health work directly applies to health issues in the United States, and this experience on the reservation made me better understand the issues domestic populations face." • • •

*Sherrie Negrea is a freelance writer.*



*In Thailand, Narinta Limtrakul '14 treated malaria patients and helped investigate a possible vaccine for the disease. Photo provided.*



*Lauren Braun '11 established a nonprofit, Alma Sana, to help mothers in Peru keep their children's vaccines current following her field experience there. Photo provided.*

## Discover more

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# Sustainable Chic

College designers and scientists fashion a second life for textile waste

BY TED BOSCIA

Human Ecology fiber scientists and fashion designers, along with a Canadian apparel company, are refashioning old clothes found in Haitian secondhand markets into hip new threads.

Funded by the U.S. Environmental Protection Agency, three professors and four students are helping Toronto-based LB Designs improve its methods to dismantle discarded clothing and use the components to create pants, shirts, jackets, and professional wear for young men and women. Known as fashion upcycling, their process diverts clothes from landfills and provides humane, fair-wage jobs to Haitian tailors. The Cornell-LB Designs team is collaborating on mass production standards for upcycling secondhand clothes, including new ways to reuse leftover scraps and threads.

“There’s a growing demand, especially from young people, for clothing that is produced ethically and sustainably,” said team leader Tasha Lewis, Ph.D. ’09, assistant professor of fiber science and apparel design. “This partnership gives our faculty and students an opportunity to apply their knowledge and creativity directly to a sustainability challenge.”

In 2012, the United States generated more than 14 million tons of textile waste, with 16 percent of it recycled, according to the EPA. Upcycling allows these old clothes to have a second life, rather than amassing in secondhand markets in developing countries or going into landfills, said Lewis, who studies fashion’s global supply chain.

In the past year, students, guided by Lewis and FSAD assistant professor Huiju Park, have used body scanning equipment and computer-aided design tools to create digital patterns, allowing LB Designs to preview the fit of garments, create standard sizes, and avoid fabric waste from sample-making. From there, the project team created two prototype blazers and skirts, which Haitian tailors are fabricating for sale to the public. “It’s a great accomplishment for students to have helped create clothing that is part of a product line,” said Lewis.

To move closer to zero waste, FSAD professor Anil Netravali and students are exploring how to reuse clothing scraps. One solution may be to “fiberize” the leftovers into tiny scraps to use as stuffing for packaging, padding, and insulation, and they built a prototype machine for this purpose.

“We refer to our Cornell partners as our dream team,” said Anne Pringle, LB Designs co-founder, along with Consuelo McAlister. “We are constantly being exposed to ideas and processes we didn’t even know were possible. The combination of fiber scientists and apparel designers is ideal.”

But challenges remain, particularly with synthetic blends that are harder to upcycle than natural fibers, and can release toxins into the ground after they are discarded. “On a large scale it is difficult to pull off, which is why I find this project is so interesting to work on,” said FSAD graduate student Helen Trejo. “It feels like we can make a big difference.”



A model shows one of the upcycled blazers created by Cornell students and LB Designs. Photo provided.

With a travel grant from Cornell’s Einaudi Center for International Studies, Lewis has visited Port-au-Prince twice for a case study she’s writing on upcycling and its adaptability for nations in Africa and elsewhere. “The fashion industry has a spotty track record on environmental issues, but this project shows how to eliminate waste,” Lewis said. “And by working with local partners, we’re giving opportunities to a country with a long history of skilled apparel production.”

An entrant in the EPA’s People, Prosperity, and the Planet Student Design Competition for Sustainability, the Cornell-LB Designs team demonstrated its project at the National Sustainable Design Expo, where they received an honorable mention prize for their work. They are seeking additional funding sources to continue the project. Along with Lewis, Netravali, Park, and Trejo, the team includes FSAD students Ariana Levitt, Vanessa Sanchez, and Jianan Su. • • •

*Ted Boscia is director of communications and media for the College of Human Ecology.*

## Discover more

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# Sweet Service

Student-led foundation supports cocoa farmers in southwestern Cameroon

BY TED BOSCIA AND SARAH CUTLER

In an isolated jungle village in southwestern Cameroon, Timothy Smith '14 is laying the roots for an organic cocoa teaching and research farm to help free small growers from the cycle of poverty.

Smith created his plan after visiting Bekondo, Cameroon, last summer as a volunteer consultant for the country's WebDev Foundation, an organization that provides training for rural entrepreneurs and develops health, education, and technology resources for underserved areas. His trip was funded in part by Cornell's Engaged Learning + Research and Office of Academic Diversity Initiatives.

Staying 50 miles away from the nearest airport, with minimal Internet and cell phone service and frequent electricity outages, Smith met hardworking farmers who made meager profits after paying exporters steep fees and interest for chemical pesticides and equipment to grow their beans. Unproductive, aging cocoa trees, extended rainy seasons that interfere with bean drying and wash out surrounding dirt roads, and limited access to formal credit from banks also prevent the farmers from bringing high-quality cocoa to market. Bekondo leaders worry about the migration of young workers to Cameroon's cities in search of better jobs.

To address these needs, Smith and local partners formed the Bekondo Foundation, which is dedicated to improving village infrastructure and empowering growers to pursue sustainable, organic cocoa production independently of major exporters. Their focus is to establish computer centers in the village with the help of the Cornell Computer Reuse Association, and to build an organic teaching farm where growers can learn chemical-free disease and pest management techniques.

"Our overarching goal is just to increase the economic activity in the area," said Smith, a policy analysis and management senior. "This is a collaborative effort we're all going to benefit from."

Smith visited Cameroon, the world's fifth largest cocoa exporter, again during winter break, when he presented his plan to the village chief and general council. Together they developed a constitution and operating budget for the foundation, along with a plan to hire Cameroonian interns.

"This was a major step forward, because I worked with the leaders to go over all the costs and make sure we were actually addressing a need the villagers want met," he said. "I'm not there to impose my project on other people; the foundation is meant to support their goals."

With the group's approval, he hiked along miles of jungle trails to scout farm locations, ultimately finding two parcels that will cost roughly \$10,000. Smith imagines farms, buildings for crop scientists, farmers' quarters, and even a tourism center someday rising from the land.

Smith is currently raising funds for the Bekondo Foundation, hoping to acquire \$50,000 for the initial startup costs while he applies for 501(c) nonprofit status and networks with cocoa importers and chocolatiers for insights on the trade.



The Bekondo village crier calls together the local council for Timothy Smith to present plans for a cocoa teaching and research farm. Photo provided.

Foremost, Smith remains a student, on pace to graduate in December 2014. A nontraditional senior, Smith, 32, came to Cornell in 2012 after studying at Dutchess County Community College for two years. Prior to that, he worked in England as a consultant helping workers relocate to other positions across the globe.

"With my corporate background, I was motivated to study policy analysis and management where I could better understand economic disparities, demography, inequality, and government affairs," Smith said. "I have a huge workload between Cameroon and Cornell, but I find that the two go together and help to energize me."

As Smith advances toward his foundation goals and his degree, he is applying to the Cornell Institute for Public Affairs, where he hopes to continue his international development work as a graduate student.

"I finally feel that I love what I'm doing," he said. "I've always liked to work internationally, to have no boundaries and make a difference in some way. On my last trip to Cameroon, as I was hiking through the jungle with people I barely knew, it struck me that I'd found my passion. It drives me to keep going." • • •

*Ted Boscia is director of communications and media for the College of Human Ecology and Sarah Cutler '16 is a communications assistant for the college.*

## Discover more

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At left, Justine Lee and a classmate tour the Great Wall of China; at right, Rachel Bernstein enjoys the beach in Australia. Photos provided.

# Equal Exchange

**Human Ecology expands its international programs for students**

**BY KENNY BERKOWITZ**

It didn't take long for Justine Lee '14 to see she'd made the right choice. "Even on my first day, I could tell this program was going to be really great," said Lee, a fashion design senior who studied abroad at Hong Kong Polytechnic University last spring. "For orientation, there were 300-plus exchange students in this big auditorium, and I knew it was the place for me. I'd done a lot of research and heard so much about the school. I was just so excited to be there, and it turned out to be the best five months of my life. By far."

During that first week, Lee started traveling around the city, meeting classmates from all over the world, and taking courses in fashion, costume studies, and elementary Mandarin. By the time she left, she'd finished a series of complex assignments, taken trips to the Great Wall and the Forbidden City, and gained new perspectives on life and design. "To live for five months in a foreign country opened my eyes, showed me what's really out there," said Lee. "It really breaks you out of whatever mold you might be in and makes you more of an open thinker."

She's not alone. Since 2006, when HKPU welcomed its first Fiber Science & Apparel Design student, the college's exchange programs have grown dramatically, with students attending the University of New South Wales in Sydney, Australia; Massey University in Wellington, New Zealand; Seoul National University and Yonsei University in Seoul, Korea; and Académie Charpentier, École Nationale Supérieure des Arts Décoratifs, and École Supérieure des Arts Appliqués Duperré in Paris, France. In a typical semester, up to nine Human Ecology students travel abroad, with an equal number of students from the college's exchange partners coming to Ithaca.

Within the next year, Pauline Morin, director of undergraduate exchange programs, hopes to finalize additional agreements with universities in France, Italy, Singapore, Sweden, and Switzerland. "The program is exploding, and in

the next two or three years, I think it's going to double," said Morin, who teaches a Cornell Summer Sessions course that travels through Rome, Bologna, Florence, Mantua, and Venice. (This summer the college will offer for the first time a study-abroad course on population dynamics, taught by professors Matthew Hall, Dan Lichter, Sharon Sassler, and Laura Tach through Cornell in Turin.)

"It's a win-win situation, so there's a lot of excitement about the program, and I think professors are just as excited as students," she continued. "It's a great way for students to step outside their cultural box and see what goes on beyond our borders. International experiences are incredible, not just for learning about the world but for discovering who you are. As more students go abroad, and others come to Ithaca, they'll share new ways of thinking and doing."

After spending a semester at the University of New South Wales, Rachel Bernstein '14 agrees. "Studying abroad proved to be the most eye-opening semester of my life," said Bernstein, a human development student. "It definitely got me out of my comfort zone, and being one of the only people from Cornell was intimidating at first. But it proved to be an extremely valuable experience, and I learned a lot about myself."

Instead of focusing on psychology, as she'd done at Cornell, Bernstein decided to explore subjects outside her major, taking classes in Aboriginal history, sports and society, business ethics, and marketing. Working as part of a team, she felt surprisingly relaxed, no matter how hard she challenged herself, and now that she's applying for jobs in marketing, Bernstein credits that semester abroad for her new adventurousness.

"I did things I never thought I had the confidence to do," said Bernstein, who went skydiving, bungee jumping, hot air ballooning, jet-skiing, scuba diving, and surfing. "It was amazing, and it reminds me how lucky I am. It's the first time I can remember being completely happy and relaxed. I keep reaching out to people, encouraging them to go. It was a very independent experience, and I recommend it 100 percent." • • •

*Kenny Berkowitz '81 is a freelance writer.*

## Discover more

Human Ecology Exchange Programs  
[human.cornell.edu/academics/undergraduate/exchange-programs](http://human.cornell.edu/academics/undergraduate/exchange-programs)

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Arielle Levy and her student team created a design competition to help Shenzhen youth define their city's identity. Photos provided.

# Preserving Shenzhen

Grad student helps Chinese city regain its identity

BY NATALIE O'TOOLE

In the past three decades, more than 10 million people have flocked to Shenzhen, China, creating a dynamic financial hub, but erasing its cultural identity. At a design camp there last November, graduate student Arielle Levy '13 and student collaborators created a design competition to help the city's youth define "their" Shenzhen.

"The village it once was is unrecognizable," said Levy, a design and environmental analysis student. "We gravitated toward Shenzhen's lack of a recognizable identity. Modern Shenzhen doesn't read as a city with a particular character, much less a trace of a past character."

Levy, who studies design history, theory, and criticism, was the only American of 11 international students and more than 60 Chinese students invited to the 10-day event, which featured lectures, conferences, seminars, workshops, field trips, and discussions intended to encourage "multicultural and experimental design," according to organizers.

Students divided into 11 groups tasked with designing a product or service based on Shenzhen. Levy's group proposed a design competition and festival called YourSZ (Your Shenzhen).

"Our group came to the conclusion that the best way for the city to really shape an identity was to empower young designers to show the city what they believe is their Shenzhen," Levy said. "The competition was our solution to home in on Shenzhen's identity."

Levy said the city's "young and fresh feeling" led her team to create the competition. She was captivated by a small, artistic neighborhood filled with cafés, bookstores, lounges, and bars. "There was a mix of people—Asian and European—all seemingly exchanging ideas and inspirations. Every little store and café had its own character," she said. "I was so inspired by the graffiti and sculptures that were littered around the area. Sides of buildings were covered in the most beautiful images."

Working with Chinese students was eye-opening, Levy said, and language barriers presented a special challenge. Levy's roommate spoke no English, so they translated their ideas to each other through their phones. "She had an app that she would speak into, and it would voice her words to me in English," Levy said. "It was interesting to work in a group with two very different design processes and operate in a sort of give-and-take manner."

Levy, a researcher for the college's Intypes (Interior Archetypes) Research and Teaching Project, a lexicon of contemporary and historical interior design practices founded by professor emerita Jan Jennings, also broadened her perspectives on design while in China. Previously, as an undergraduate, Levy helped define "unroom" for Intypes, which is a term for spaces in homes and commercial buildings that have no furniture but attract people; this year she is completing a graduate thesis on museum archetypes.

"My trip really increased my global consciousness," she said. "In my studies, I am making it a point to research museums from all over the world."

Kathleen Gibson, associate professor of design and environmental analysis, accompanied Levy, assisting the design teams, meeting with counterparts at Chinese universities, and conducting research. At the conclusion of the visit, she spoke to camp participants about Intypes. . . .

Natalie O'Toole '16 is a writer intern for the Cornell Chronicle.



Discover more

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Robert Sternberg

# Moving Beyond IQ

Professor crosses the globe in search of better intelligence measures

BY KARENE BOOKER

As a child, Cornell psychologist Robert Sternberg had a bad case of test anxiety. “I failed miserably on IQ tests,” he recalled. “The school psychologist who gave the tests looked scary, and I would freeze up. Of course, I did poorly. As a result, my teachers thought I was stupid. I thought I was stupid. Each year in early elementary school, I did a little worse.”

Sternberg eventually overcame his fears, but the episodes left an impression. For a seventh grade science project, he researched the history of intelligence measures and created a test of his own, sparking a lifelong passion for the topic.

Decades later, Sternberg is a leading psychology scholar who has traveled to remote locations in Africa, Asia, Alaska, and elsewhere to develop alternatives to conventional measures of intelligence. His latest stop: Cornell, where he joined the college in February as professor of human development after serving as a professor and administrator at Yale, Tufts, Oklahoma State, and Wyoming.

Traditionally, scholars viewed intelligence as a set of basic mental skills to be assessed by an IQ test, in much the same way that a yardstick measures height. But Sternberg believes this approach shortchanges people who perform poorly on tests and harms society by leaving their talents unrecognized and undeveloped. In his landmark article, “The Theory of Successful Intelligence,” Sternberg proposed that intelligence is relative to our social and cultural contexts and should be quantified by our ability to achieve life goals in these native environments. For example, acing analogies, a central component of the SAT, won’t help much in a secluded jungle village where recognizing poisonous plants is key to survival.

“In addition to the analytical skills typically measured by academic tests, successful intelligence requires creative, practical, wisdom-based, and ethical skills to identify and solve problems, build on one’s strengths and correct or compensate for weaknesses, and adapt to and shape environments,” Sternberg said.

Sternberg developed these ideas based on numerous studies he and colleagues carried out around the world. Working in

rural villages with the Luo people of Kenya, Sternberg’s team assessed children’s knowledge of natural herbal medicines used in the home. They theorized that if traditional academic measures are an overall indicator of intelligence, children who scored higher on such tests would also excel on tests of local knowledge. However, they found the opposite: For the Luo, having more academic knowledge was not adaptive to life success—local knowledge was.

In isolated parts of Alaska and Russia, Sternberg and his colleagues made similar discoveries. Among Yup’ik Native American Eskimo children in southwest Alaska, urban children outperformed rural children on academic intelligence tests, but the rural children scored better on practical intelligence tests associated with success in the hunting, fishing, and gathering necessary for their survival. In Russia, adults’ practical knowledge better predicted their physical health than did traditional academic intelligence.

“Being smart means different things in different settings—people in diverse cultures can have outstanding talents, not recognized by standard tests, but essential for adaptation in their ecological context,” Sternberg said.

As a faculty member and administrator, Sternberg experimented with applying these findings to college admissions. He developed questions assessing “creative, practical, and wisdom-based skills” to complement traditional materials, testing the approach as a professor at Yale before applying it as an administrator to admissions at Tufts and Oklahoma State.

“If you’re trying to find out whether kids will become active citizens and ethical leaders, you’re not going to get that from grades or standardized test scores—these additional measures can help,” he added.

At Cornell, Sternberg plans to continue his research on successful intelligence to consider alternative measures for graduate admissions, test a model of ethical reasoning, and better understand work environments.

“My work fits with Urie Bronfenbrenner’s ecological approach—intelligence is the product of a dynamic interaction between biology and environment,” he said. “You can’t understand intelligence and human abilities outside of their ecological context.” • • •

Discover more

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Karene Booker is extension support specialist in the Department of Human Development.





Ramaswami "Balu" Balasubramaniam (second from left) and CIPA faculty and leaders Joe Grasso, Thomas O'Toole, and Norman Uphoff (l-r) complete the study-abroad agreement with Swami Vivekananda Youth Movement at a campus ceremony.

# Leading and Learning in India

## CIPA forms study-abroad program focused on development management

BY LISA JERVEY LENNOX

Beginning this fall, Cornell Institute for Public Affairs fellows can live, study, and work in India for one semester under a management program offered with the country's Swami Vivekananda Youth Movement.

Hailed as a "unique study-abroad opportunity" by CIPA executive director Tom O'Toole, the partnership will provide fellows with academic and professional training through an accredited SVYM program at the University of Mysore's Vivekananda Institute of Leadership Development. Fellows will take courses and pursue internships in education, health, poverty alleviation, and development.

"SVYM's outstanding Master of Development Management program will provide our fellows with a suite of coursework in strategic management in the context of development," O'Toole added. "It will be an excellent opportunity for our fellows concentrating in international development studies or public and nonprofit management."

Founded in 1984 by physician and public health advocate Ramaswami "Balu" Balasubramaniam, SVYM is India's leading nonprofit development organization. SVYM leads local, innovative, and cost-effective programs addressing health, education, and community development issues, from civic empowerment to microfinance, soil conservation, and nonprofit management. Balasubramaniam has been affiliated with Cornell since 2008, and currently serves as the Frank H.T. Rhodes Class of '56 Professor.

"He has set a very high standard of professional integrity and managerial competence for our students, and I'm hopeful that fellows who are fortunate enough to learn from and work with him will be inspired in their own careers by the passion he demonstrates in his work," said O'Toole.

The CIPA-SVYM partnership, signed in November 2013, deepens ties between the programs. For several years, fellows have interned in India, and SVYM hosted one of the first projects by the CIPA capstone program. In 2009, a team of fellows directed by CIPA Public Service Learning Coordinator Laurie Miller developed a sustainable business plan for the Grassroots Research and Advocacy Movement, a Mysore-based organization that supports community development.

In addition to the SVYM program, fellows can participate in Cornell in Rome and the Cornell Nepal Study Program. • • •

*Lisa Jervey Lennox is CIPA assistant director for external relations.*

## CIPA on track to join Human Ecology

The Cornell Institute for Public Affairs intends to join the College of Human Ecology, a move expected to help position the college to lead a new school of public policy at Cornell. In December, CIPA core faculty agreed to integrate the institute's administrative and budgetary operations with those of the college, a transition scheduled to begin July 1.

Since 2010, Alan Mathios, the Rebecca Q. and James C. Morgan Dean, has served as Cornell's lead dean for CIPA, guiding a board of oversight established by Provost Kent Fuchs.

In Human Ecology, CIPA shares academic and professional interests with the Department of Policy Analysis and Management's undergraduate and graduate programs, including the Sloan Program in Health Administration. PAM and Sloan faculty conduct research and offer courses in public economics, statistics,

quantitative analysis, and program evaluation—key components of CIPA's two-year masters degree in public administration.

"I am enthusiastic about a formal partnership between the college and CIPA," Mathios said. "CIPA's work is fully in keeping with Cornell's mission as a land-grant university. The flexibility in course selection and access to faculty enjoyed by CIPA fellows reflects the same integrated learning experience that we foster in the college. I am glad to support CIPA as an administrative unit within the college as the program continues to thrive and grow at Cornell."

Cornell has offered an MPA degree since 1946, originally through the School of Business & Public Administration. The program enrolls about 240 students per year, who are taught by 14 core faculty members and more than 100 affiliates.

Discover more  
[cipa.cornell.edu](http://cipa.cornell.edu)





*Hyuncheol Kim consults with his HIV testing project field director Kasahun Mengistu during a visit to Hetosa, Ethiopia. Photo provided.*

# The Social Doctor

**Hyuncheol Kim aims to alleviate poverty and improve health in developing countries**

BY OLIVIA M. HALL

With degrees in medicine, public health, and economics, Hyuncheol “Bryant” Kim considers himself a “social doctor,” going beyond patient care to address the socioeconomic causes of disease.

Living around the globe has inspired Kim’s research. In his twenties, he backpacked through Europe, Africa, and Asia before returning to his native Korea, where he worked as a night ER doctor and fulfilled his mandatory three-year service as a public health physician in the country’s Ministry of Health and Welfare. During those years, Kim closely witnessed poverty and its effects, both in Korea and in several developing countries, including Bangladesh, India, and the Philippines.

At his clerkship at a Korean breast cancer clinic, he noticed that wealthier patients came to the hospital at earlier stages of disease, while poorer patients often did not visit until they were terminally ill. “I felt this was unfair,” said Kim, the Lois and Mel Tukman Assistant Professor in the Department of Policy Analysis and Management. “As an economist now, it’s too obvious, but at the time I had no idea about socioeconomic determinants of diseases.”

That realization spurred him to pursue a PhD in economics at Columbia, where he completed his studies in 2013. “As a medical doctor, I could help patients individually,” Kim said. “But working at the Ministry of Health, I found that public policy has a huge impact on the quality of life of the population, so I wanted to be a social doctor instead.”

Currently, his research focuses on public health initiatives in Malawi and Ethiopia, projects he started during his doctoral program. Both apply alternative approaches to support individual and family health and to divert young people from health outcomes associated with poverty.

In Malawi, working in collaboration with Daeyang Luke Hospital, Kim initiated an HIV/AIDS program targeting

secondary school children. It offers scholarships and stipends to female students, who might otherwise resort to prostitution to pay for school. The program also encourages circumcision for boys, which has been shown to reduce male HIV infection by as much as 50 percent. “We figured out that if the procedure is offered to a group of friends, or circumcision is offered with HIV education, boys are more likely to come to the clinic,” Kim said.

Both approaches have succeeded—though that’s not always the case. In another study of maternal health in rural Malawi, Kim found that a standard package of food, malaria nets, vaccinations, and greater access to prenatal care had a limited impact on improving the health of mothers and infants. Kim suspects that the treatments didn’t go far enough, and he’s planning to make them more comprehensive for the project’s next phase.

In urban areas of Ethiopia, such health and nutrition packages don’t work well, Kim said, so he is testing programs that emphasize women’s employment status and family planning. For instance, Kim and collaborators plan to run a randomized control trial that helps women access family planning services and jobs. Partnering with factory owners, the project will subsidize 20 percent of the women’s wages and provide transportation to health care clinics for family planning. As the study expands, Kim expects all 2,000 participants to receive treatment and work opportunities.

“In developing countries, women are typically the most distressed and poor people,” said Kim. “But not much is known about the consequences of increasing their participation in the labor market and family planning services.”

Kim said that his research is inspired by his life, academic training, and observations of health disparities in some of the world’s poorest countries. “I am passionate about my research, because I believe it will help improve the quality of life of the poor and distressed.” • • •

*Olivia M. Hall, PhD ’12, is a freelance writer.*

**Discover more**

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# Afterword

## Why Internationalization Matters

BY FREDRIK LOGEVALL

Over the last year, I have engaged with Cornell colleagues, including Human Ecology faculty and staff, to learn more about their international efforts. It is clear that transnational perspectives are embedded in the college's academics, research programs, and outreach efforts. Human Ecology's global reach includes new programs, study-abroad opportunities, and vibrant research collaborations on six continents.

This issue of Human Ecology puts a spotlight on the international programs underway in the college. These stories focus on how the college's community of scholars, students, and staff are helping create solutions to critical human challenges with partners around the world.

I am delighted to share news of Cornell's progress in becoming an exemplary international university. Across the institution, we are rising to the challenge that President David Skorton articulated in a 2012 white paper, "Bringing Cornell to the World and the World to Cornell."

In response, a faculty task force proposed two dozen recommendations to enhance and expand our international activities, which I have distilled into five overarching arenas: internationalizing the student experience; supporting and recruiting faculty; developing new international partnerships; raising funds for internationalization; and providing centralized coordination with internal and external advisory councils to advise our work.

These efforts are bearing fruit, particularly in our work with students, faculty, and institutional partners.

We know that one of our most important tasks is to prepare students for global citizenship and the cross-cultural environments in which they will work. In March, Cornell signed the Generation Study Abroad Commitment, a pledge to provide international experiences for 50 percent of our undergraduates by 2020. Our approach includes both study abroad and linking meaningful international experiences—ones that advocate experiential, hands-on learning, along with mentoring and reflection—to undergraduate curricula.

We are also increasing our support for undergraduate and graduate student travel, with the expansion of the number and amounts of international travel grants. The International Faculty Fellowship is a new initiative of the Einaudi Center. The fellowships facilitate cross-campus interaction and assist

colleges with recruitment and retention of superb faculty whose research and teaching has a global focus.

Congratulations to Human Ecology's Saurabh Mehta, assistant

professor of global health, epidemiology, and nutrition, who is among the first cohort of four fellows. An expert on infectious diseases, epidemiology, and maternal and child health, his work advances clinical care in resource-limited communities. In recent years, nutritional sciences doctoral student Laura Pompano and Jere Haas, Nancy Schlegel Meinig Professor of Maternal and Child Nutrition, have also received funds for their work to improve women's health from the Jeffrey S. Lehman Award for Scholarly Exchange with China, administered by the vice provost for international affairs.

Beyond all this, Cornell colleges and units continue to nurture international partnerships around the world. In Human Ecology, Tasha Lewis, PhD '09, assistant professor of fiber science and apparel design, is leading an effort by Cornell fiber scientists and fashion designers to transform clothes from Haitian secondhand markets into professional wear for young men and women. Elsewhere, new undergraduate student exchanges are in place between Human Ecology, Massey University in New Zealand, and École Supérieure des Arts Appliqués Duperré in France.

Human Ecology is a valued partner in our work to transform Cornell, support faculty, and prepare students for global citizenship and engagement. I look forward to fruitful collaborations as we address global challenges to advance and improve the human experience both near and far. • • •

*Fredrik Logevall is Cornell's Stephen '59 and Madeline '60 Anbinder Professor of History, Vice Provost for International Affairs, and Director of the Mario Einaudi Center for International Studies.*



### Discover more

Vice Provost for International Affairs  
[international.cornell.edu](http://international.cornell.edu)

Einaudi Center  
[einaudi.cornell.edu](http://einaudi.cornell.edu)





Hazel Hauck (fourth from left) and research partners in the Cornell-in-Thailand project navigate a river near Bang Chan, a rural rice village, in the early 1950s. One of the college's first professors to work overseas, Hauck served as a nutrition specialist under a Fulbright Program grant, working with Cornell anthropology professor Lauriston Sharp to investigate the food habits of Bang Chan inhabitants. Their findings led to improved dietary recommendations for Thai mothers and children. A professor in the Department of Food and Nutrition, Hauck later conducted applied research in Nigeria on nutrition and disease before retiring in 1961.

Courtesy of the Division of Rare and Manuscript Collections, Cornell University Library