periodiCALS
THE MAGAZINE OF CORNELL UNIVERSITY'S COLLEGE OF AGRICULTURE AND LIFE SCIENCES
VOL. 3 | ISSUE 2 | 2013

SPECIAL ONLINE-ONLY ISSUE!

WHAT I DID ON MY SUMMER VACATION 2013

Cornell University
OF SURFBOARDS AND SOLAR PANELS
Elissa Cook ’15

COFFEE IN THE CLOUDS: STUDYING SUSTAINABILITY IN ECUADOR
Evan Barrientos ’14

TRANSATLANTIC TRIUMPHS: EMPOWERING WOMEN THROUGH MEDIA EXPOSURE
Sam Ritholtz ’14

FROM VID TO BOTELLA IN SPAIN
Brooke Parsons ’14

A NEW WINE FROM AN ESTABLISHED FAMILY BUSINESS
Marisa Sergi ’15

FINDING FRIENDS WHILE FARMING IN GREECE
Lowell George ’14

UNITING CITIES AROUND THE WORLD FOR UNITED
Juan Ortega ’14

MAPS AND STATS IN SAN FRANCISCO
Raymond Wu ’15

HATCHING IDEAS IN COLORADO
Jaimee Alsing ’14

A SUMMER AT SHOALS
Mary Fisher ’15 and Alexis Mandon ’15

BUILDING BETTER FOOD SYSTEMS ON THE HILL
Spenser Reed ’14

GREENING THE CAMPUS
Celine Jennison ’14 and Sarah Nechamen ’15

SEEDS OF SUPPORT: STUDENT FARM GETS ONLINE FUNDING

DISCOVERING DIFFERENT STROKES IN EUROPE
Leigh Archer ’13

CATCHING UP WITH STUDENT ATHLETES
Ned Benning ’16, Kyle Dake ’13 and Rob Pannell ’13

INVESTIGATING ITHACA
Alex Koeberle ’13

DEAN’S MESSAGE

LEFT: Summer students at the New York State Agricultural Experiment Station in Geneva, N.Y., infect breeding lines of the African staple green Sukuma Wiki with a bacterium that causes the disease “black rot” for a project led by associate professor of horticulture Phillip Griffiths to identify resistant plants. Credit: Amanda Garris
School may have been out for summer, but for many students from the College of Agriculture and Life Sciences, the learning continued—in some amazing and transformative ways. They conducted research, participated in internships and traveled to all corners of the globe. Here is a sampling of what some of them accomplished over their summer vacations, to show the range of opportunities available to CALS students. Whether serving and surfing in Peru, planning plane routes at an airline internship in Chicago, or advancing world nutrition in a lab back at Cornell, CALS students truly embody the meaning of diversity. Their passion to go where others have not is a natural extension of the college’s land grant mission. As classes resume this fall, the perspectives and experience they bring back to Ithaca will build a stronger, more knowledgeable Cornell community. We hope you enjoy the following student stories in this special summer edition of periodiCALS, whether you learn something new or are even inspired to go on an adventure of your own.
Elissa Cook ’15 made waves this summer as part of a unique service learning experience in which she and 17 other Cornell students exchanged technical know-how for room, board... and surfing lessons.

Lobitos, Peru, may be a small village, but it is world renowned for its waves. Every year, hundreds of surfers flock to the area, and the influx has become a mainstay of the local economy. But the community also faces challenges that are often overlooked, such as offshore oil drilling, the need for infrastructure development, and changing ways of life.

Enter WAVES for Development, a not-for-profit organization founded in 2004 by a group of international surfers that provides service and education to coastal communities in order to foster economic development and empower youths.

Cook, an applied economics and management major, spent a week in June constructing solar panels and helping local community members.

“The solar panels consisted of a window frame and solar cells, which were super delicate. We had to solder the parts together and connect to a battery,” Cook said. “It may have looked like a hodge podge, but it still generated a lot of electricity.”

She also poured concrete floors, tended to community gardens and organized an educational beach clean-up with local children.

“After the beach clean-up, we had a pick-up soccer game, one of my favorite parts of the trip,” Cook said.

Another highlight was, of course, the surfing.

“We surfed for the first two days before huge swells came in. Everyone was able to stand up on the board by the end,” Cook said. “Even though we couldn’t surf the whole week it was amazing to watch the professionals.”

Cook also appreciated the insight she gained into the inner workings of the community and the issues its residents faced.

The landscape in Lobitos is a desert, with arid and unproductive soil. Its economy revolves around three things: tourism, oil companies and the fishing industry. Cook said. But locals question how much money from the oil companies is going back into their community, and they fear the drilling may interfere with the traditional fishing industry, which has provided them with food and money for centuries.

“It’s an interesting contrast: huge waves, a pristine beach then oil rigs out in the ocean,” Cook said. “It seems that the resources are there, just not all the money. Because of this, local community members were very appreciative of our volunteer work with WAVES.”

The Cornell chapter of WAVES already plans to return to Peru next year, with new ideas for volunteer projects.

“I recommend going outside your comfort zone,” Cook said. “Lobitos was a small, remote town. Even if you don’t go to a huge city, you can still make a difference; you can help people and touch their lives.”
Coffee in the Clouds: Studying Sustainability in Ecuador

Wielding a field notebook and occasionally a machete, Evan Barrientos ’14, a natural resources major, spent his summer studying shade coffee just below the dense mountain rainforests of Ecuador.

Shade coffee gives farmers flexibility; by growing this variety under light tree canopies rather than the open sun, farmers can maximize their yields on less land compared with traditional agricultural practices.

Barrientos found that the most effective way to learn about the challenges and successes of shade coffee was to talk to farmers. This particular shade coffee project, involving four rural communities, was implemented in Ecuador around eight years ago, with no follow-up work since. Through interviews, soil samples and plot assessments, Barrientos documented and evaluated how effective this form of agriculture has been.

“I wanted to see how shade coffee could be used to build more profitable and sustainable systems,” Barrientos said.

He also wanted to determine if this shade coffee initiative is a successful example of agroforestry, which incorporates woody plants into agricultural systems. Rather than cutting down forests, this form of agriculture works with species that are already present. It restores soils, requires less land, helps maintain biological diversity and provides more habitats for wildlife, he said.

His research, funded by the Hunter R. Rawlings III Cornell Presidential Research Scholars program, involved working with a local conservationist and a Cornell natural resources professor, Jim Lassioe.

In the past, Barrientos has worked in Alaska and Mexico, and with the Cornell Lab of Ornithology.

Barrientos hopes to continue working with local communities to address larger-scale conservation issues.

“I learned that in order to make changes, you need to be able to understand and be a part of the community you are working in,” he said. “My favorite moments were when farmers treated me as a friend. Getting to know people with such different lives from mine was genuinely remarkable.”

Read more about Evan’s summer on his blog: http://evanbarrientos.wordpress.com/
Sam Ritholtz’s summer spanned several continents. From Buenos Aires to New York City, he researched and covered a range of global initiatives in South America, Africa and North America for a senior honor’s thesis at Cornell and an internship with Newsweek. Even when Ritholtz ’14 is not in a different continent, he still thinks at an international scale. The international agriculture and rural development major is passionate about women’s issues, migration, and complex political, social, and economic relations between nations around the world. He is also a United Nations Youth Representative for Voices of African Mothers and a Public Service Center Scholars Program assistant. This passion and dedication at Cornell has led to his selection as a Truman Scholar, which comes with a $30,000 grant he can apply to graduate studies.

**What did you do this summer?**

My summer actually extends way back. I was in Argentina from February through early July at the University of Buenos Aires (UBA), where I’ve been taking classes and also writing an honor’s thesis in Spanish under the guidance of an UBA professor. After studying abroad, I returned to an internship with Newsweek’s Women in the World Foundation. I worked to use Newsweek’s media power to shed light on women’s issues and women change-makers. I focused my time at Newsweek researching new global initiatives to empower women, as well as how to include university students in these initiatives.

**How were these experiences related to your studies at Cornell?**

At Cornell, I study international agriculture and rural development (IARD) with a focus on economic development in Africa. The classes I’ve taken at Cornell have taught me how to write and research, both incredibly useful skills when I was in Argentina and with Newsweek. My classes in IARD in particular have opened my eyes to many new parts of the world and allowed me to connect with a lot of the people I meet through travel. Studying international community trends has made me realize how we are all connected. Therefore, it seemed natural for me to look for the link between the country I was living in—Argentina—and its relation with the part of the world that I have studied the most—Africa.

**Tell me about your honor’s thesis.**

My thesis was on Argentine-African political, economic, and social relations in the past 10 years under Nestor and Cristina Kirchner’s administrations. The most interesting part of my research was realizing how new this field is, as Latin America and Africa have only been forging strong bonds within the past decade. Research involved a mixture of mining world trade organization data, reading scholarly articles, and trying to talk to other people about it.

**What was the most valuable lesson learned from your travels and internship?**

The practical experience I learned abroad and in my internship has painted a clearer picture of where I see myself in the future. Certain ideas sound great in your head and then you try them out and realize they absolutely don’t work. Or, on the other hand, they do work. Investigating a new and upcoming field in a different part of the world was thrilling to me and allows me to believe that this won’t be the last time I feel the rush from travel experience.

**What advice would you offer to any other students interested in your work?**

I will never forget when I was meeting with my adviser, overwhelmed by which major was best for me, when she told me, “As an undergrad, you need to learn three things: how to read scholarly work, how to write academically, and how to research.” These past two experiences alone have showed me the validity of these statements. These skills will be handy for any field in the world. Finally, in international work, connections are vital because you never know how far one relationship can take you.
Help PeriodiCALS Go Green. Opt to always receive the magazine online at periodicals.cals.cornell.edu

How is this experience related to your studies at Cornell?

I want to work in the wine or produce business after college, and my internship has only made me more certain of this. I enjoy producing a natural product to deliver to customers and continuously striving for the best quality possible.

What was the most valuable lesson learned from this internship?

One of the most important factors to successful business, anywhere in the world, is the relationships between the boss and the rest of the team. The winery director strongly emphasized overseeing but not overpowering. He had a fabulous relationship with everyone at the winery from the vineyard workers to the wine marketers in the shop. The director viewed each person as an equal, and because of this the team was motivated, productive and innovative. As part of the team I learned how important these structural associations are, which I believe will be valuable for any future business pursuits.

What advice would you offer to any other students interested in your work?

I highly suggest studying or interning abroad—even create your own experience if there isn’t an exact program. Never be afraid to network with professors, guest speakers or alumni who may have connections to create an internship. It is important to start early and be persistent.

Check out Parsons’ summer blog: http://blogs.cornell.edu/agsci-interns/category/2013-interns/brooke-parsons/

FROM VID to BOTELLA in SPAIN

Brooke Parsons ’14 has a deep-rooted interest in agriculture, having grown up on a farm in Fulton, Calif., that grows hydroponic tomatoes and wine grapes. She also has a taste for adventure. Parsons is an instructor for Cornell Outdoor Education trail running and gorges classes and has taken several trips abroad. She participated in a trip to Israel during spring break as part of Cornell’s Agribusiness Fellows Program. She is an ambassador for her major—agricultural sciences—and has participated in undergraduate research, spending a semester studying the health of Hispanic immigrants in upstate New York and implementing a five-week nutrition workshop for children in the Hispanic community of Marion, N.Y.

What did you do this past summer?

I interned for a winery, Casa Sicilia, located in Novelda, a small town in south east Spain. It was very mountainous and about 30 minutes away from the coast. People tended to be very happy since it’s sunny almost every day. There was also agriculture everywhere: pomegranates, figs, olives and a lot of vineyards.

What was a typical day like?

My internship was great because every day varied. Some days I was in the winery, others in the lab and also in the vineyards. In the winery I helped with the wine making process, including mixing, filtering, barrel tastings, bottling and labeling. In the lab I was in charge of all the analytics, including pH, alcohol, acids and sulfur level tests. Out in the vineyards I worked with a crew forming new vines and adjusting the trellis system as the vines grew. And I gave winery tours in English whenever Americans visited!

A NEW WINE from an ESTABLISHED FAMILY BUSINESS

Marisa Sergi ’15 not only worked with wine this summer, she created her own. While interning at her father’s Ohio vineyard, L’uva Bella, Sergi was involved with every step of the winemaking process, from taste tests to chemistry analyses and even a label designed in her own image. The end result: “Redhead,” a Chilean Carmenere and California Zinfandel blend with a “sweet and spicy” expression, which is slated to hit local markets by the end of 2013. “I hope to bring something unique to the Ohio area with this new wine,” Sergi said. The viticulture and enology major credits Cornell with helping to make her dream a reality. “Cornell has been amazing,” she said. “The courses, professors and my peers have all been so helpful.” With her new knowledge, Sergi will bring even more to an already impressive family dinner table. A third generation winemaker, Sergi’s grandfather, Dominic, started the family business after coming to the United States from Italy. “I want to keep our family tradition of making wine.”
Juan Ortega ‘14 didn’t limit himself to one exciting international adventure this summer. Rio de Janeiro, Amsterdam and Bonaire—he visited each as part of his internship experience.

Want to know how to travel to a different city every weekend like this applied economics and management senior? Work for an airline.

Ortega interned for United Airlines in the network planning department, where he examined flight schedules.

“United wants to streamline future flight schedules by looking at specific plane routes, flight frequency and their times,” Ortega said.

While it may have been 90 degrees and sunny in United’s Chicago headquarters, Ortega was analyzing the colder holidays—Thanksgiving, Christmas and New Year’s—to determine which underperforming flights they should consider canceling and in which they should consider increasing capacity.

The biggest perk of the job was definitely the opportunity to take advantage of open seats on Friday afternoon flights. Over the course of the summer, he traveled throughout the world, with Brussels, London and Paris also checked off on his already impressive list.

“Rio de Janeiro was one of my favorite cities,” Ortega said. “The scenery was beautiful, and the food was amazing.”

Though this may sound relaxing, earning a job with an airline is no easy task. At Cornell, Ortega has taken classes in management, statistics and economics, and he is the vice president of corporate relations for the Aviation Society. Yet his airline experience also extends way back, as Ortega earned his pilot’s license at age 16.

His advice to others interested in airlines: “Always follow your passion and do what you love. The airline industry is challenging but a great industry to work for.”

Lowell George ‘14

FINDING FRIENDS while FARMING in GREECE

Greece may be known for its ancient ruins and idyllic islands, but Lowell George ‘14, a natural resources major (pictured in Cornell shirt), spent her summer exploring another aspect of its agriculture. As an intern at the American Farm School in Thessaloniki, her tasks were as diverse as the landscape and people of the country itself, including pruning and planting in the fields and vineyards, collecting tea leaves, processing wine bottles, bagging rice, and even visiting a pasta manufacturing plant. She still had time to explore the entire country thanks to a flexible work schedule. “Meeting other students and workers from different countries was really fun,” George said. “It helped me broaden my perspective on the world.”

UNITING CITIES AROUND the WORLD for UNITED

Juan Ortega ‘14 didn’t limit himself to one exciting international adventure this summer. Rio de Janeiro, Amsterdam and Bonaire—he visited each as part of his internship experience.

Want to know how to travel to a different city every weekend like this applied economics and management senior? Work for an airline.

Ortega interned for United Airlines in the network planning department, where he examined flight schedules.

“United wants to streamline future flight schedules by looking at specific plane routes, flight frequency and their times,” Ortega said.

While it may have been 90 degrees and sunny in United’s Chicago headquarters, Ortega was analyzing the colder holidays—Thanksgiving, Christmas and New Year’s—to determine which underperforming flights they should consider canceling and in which they should consider increasing capacity.

The biggest perk of the job was definitely the opportunity to take advantage of open seats on Friday afternoon flights. Over the course of the summer, he traveled throughout the world, with Brussels, London and Paris also checked off on his already impressive list.

“Rio de Janeiro was one of my favorite cities,” Ortega said. “The scenery was beautiful, and the food was amazing.”

Though this may sound relaxing, earning a job with an airline is no easy task. At Cornell, Ortega has taken classes in management, statistics and economics, and he is the vice president of corporate relations for the Aviation Society. Yet his airline experience also extends way back, as Ortega earned his pilot’s license at age 16.

His advice to others interested in airlines: “Always follow your passion and do what you love. The airline industry is challenging but a great industry to work for.”
Help Periodicals Go Green. Opt to always receive the magazine online at periodicals.cals.cornell.edu

MAPS and STATS in SAN FRANCISCO

Statistics and sustainability: an unexpected pairing, perhaps, but one which Raymond Wu ’15 orchestrated during his summer in San Francisco as part of an Iscol Fellowship with the Environmental Defense Fund (EDF). Wu, a biometry and statistics major, applied knowledge he gained from his Quantitative Ecology and Management of Fisheries Resources (NTRES 4110) course to create maps for the organization in an effort to help reverse the decline of marine fisheries. They included a detailed biological, managerial, and commercial map of the world’s commodity fisheries and maps illustrating the seafood supply chain, starting from the fisherman all the way to the consumer. Fishery managers around the world can now use these new tools to create more sustainable policies. “I really like the way EDF goes about finding solutions,” Wu said. “I worked with interns from all different fields and environmental backgrounds. It was fun to learn about what they’re working on.”

Raymond Wu ’15

HATCHING IDEAS in COLORADO

Jaimee Alsing ’14 is fanatic about fish. The animal science major came to Cornell with her own hermit crab food business, and she spent the summer at Pueblo State Fish Hatchery stocking an assortment of fish around Colorado. The hatchery, located in a desert near the foothills of the Rocky Mountains, mainly raised trout, a cold water species, but also stocked bass, walleye and saugeye. “Trout go to the mountains where it’s cold, while warm water fish go to the desert and plains areas,” Alsing said. Her duties included cleaning the trout “raceways” and electrofishing from a boat—using a metal wand to place a charge in the water. Stunned fish are then netted by a field worker and measured for length and weight. The internship not only helped with Alsing’s future business pursuits—she plans to expand into fish food sales—but it also aligned with her coursework, including Fish Ecology, Conservation, and Management (NTRES 3110).

“I loved to see fish every day,” Alsing said. “I know it sounds silly, but I really do love fish.”

Jaimee Alsing ’14
Local harbor and grey seals may not pose for pictures, but they provide valuable information for scientists. Mary Fisher ’15, a natural resources major, is using photography to track the movement of seal populations at Duck Island, part of the cluster of islands surrounding Shoals Marine Laboratory off the coast of Maine.

In addition to determining seal population size, Fisher is estimating the number of entanglements and vessel strikes humans cause based on photographs of injuries to seals. “I really enjoy the fieldwork,” Fisher said. “It’s exciting to get close to the harbor and grey seals.”

Alexis Mandon ’15 also used photography to survey gray seal populations for her own research this summer. The natural resources major combed through hundreds of photographs to help scientists determine more accurate assessments of seals around Duck Island. “I enjoyed getting out in the boat and seeing seals,” Mandon said. “We even got to participate in an actual release of a gray seal juvenile named Kit Kat—truly one of the best moments of my entire life.”

Back on the hill, Mandon is interested in conservation, population dynamics, and natural resources management.

“Perhaps one day I will have the credentials to do this study for the whole Gulf of Maine,” she said. Fisher also hopes to pursue marine management and conservation, influenced by her time at Shoals this summer.

“The professors at Shoals are all passionate about their research and want to help you succeed,” Fisher said. “I definitely recommend anyone interested in marine biology to consider Shoals.”

Appledore Island is rocky, jagged, and teeming with wildlife. It is also home to Shoals Marine Laboratory, a premier undergraduate teaching and research center where Cornell students have the opportunity to spend a summer. On the island, students can take a two-week summer course, spend 10 weeks doing research, and even conduct their own research projects. Faculty conduct research on seabirds, fish, seals, lobster, algae and the rocky intertidal community. Within an hour of hopping on a boat from Portsmouth, N.H., students have an entire island as a living classroom.
Spenser Reed ’14 is passionate about health—his own, and that of others. His insulin-dependent type 1 diabetes, coupled with a rare, debilitating autoimmune thyroid disorder, kept him at home for several years as a teenager. Now healthy and an avid runner, Reed is pursuing a double major in food science and nutritional science with a concentration in molecular nutrition, and he hopes to attend Weill Cornell Medical College after he graduates. Inspired by a class he took with natural product chemist Manuel Aregullin—Natural Remedies and Ethnomedicines for Health—Reed traveled to the Dominican Republic last summer to learn about plant-based folk remedies, and he has transferred that experience into a Hunter Rawlings III Presidential Research Scholar project assessing the phytochemistry and anti-diabetic properties of several Peruvian plants. This summer, he stayed in Ithaca, working in the lab of Elad Tako, a courtesy assistant professor of food science and research physiologist with the USDA Agricultural Research Service Robert W. Holley Center for Agriculture and Health.

What did you do this summer?
Dr. Tako works on alleviating dietary deficiencies of minerals like iron and zinc in at-risk populations, in collaboration with Dr. Ray Glahn, a nutritional physiologist with USDA-ARS. Using both cellular (in vitro) and animal (in vivo) models, we assessed how much of the minerals are available in standard and biofortified food crops, including maize, beans and lentils, and how they are absorbed in and transported through the intestine. I worked on trying to identify a way to determine zinc levels in chickens. There are standard blood tests to assess iron levels, but this is not the case with zinc, a mineral required for more than 300 biochemical reactions in the body.

What is a typical day in the lab like?
I spent part of the day in the lab performing different types of molecular biology protocols such as RNA isolation, gene expression, polymerase chain reaction (PCR), gel electrophoresis and Western blot. Once a week, I went to the Cornell poultry facility to collect blood and record body weight and feed intake for our diet intervention studies. I also did some writing. I’ve been preparing a manuscript for publication in a peer-reviewed medical journal on the zinc biomarker study.

How is this experience related to your studies at Cornell?
My studies at Cornell are very much science-focused. Other than the couple of lab courses I’ve taken and research conferences I’ve attended, almost everything we learn is the theory behind the science. This experience applied theory to the protocols and methods I performed on a daily basis. Research in the Tako Lab affects public health and nutritional policies of governments across the world. The real application of this research was most exciting for me, especially as I hope to become a physician. I don’t see research as separate from a career in medicine, as medical research is essential for patient care. So overall, this summer research has been a great supplement to my more structured science classes at Cornell.

What was the most valuable lesson learned from this research?
It taught me how to think, and think critically. Dr. Tako allowed me to take on many responsibilities in the lab, which helped my time management and organizational skills. Because I have worked on several studies from start to finish and have been involved with every detail—from creating the experimental design to writing the manuscript—I am fortunate to take part in the very cool process that is science.

What advice would you offer to any other students interested in this field?
Ask lots and lots of questions! Find a lab where you feel at home and a researcher who you connect with and can learn from. For me, finding the right lab dynamic was key to being a successful undergraduate researcher. Being happy and excited about what you do is really important in working on any long-term project, especially in a lab.
SEEDS OF SUPPORT: STUDENT FARM GETS ONLINE FUNDING

They may use old-fashioned scythes and traditional techniques, but the students of Dilmun Hill are also forward-thinking when it comes to sustainable agriculture, outreach and funding. In the university’s first online crowdfunding campaign, they have already exceeded their $5,000 fundraising goal, collecting nearly $7,000 from more than 85 supporters, with a few days still to go.

The 12-acre farm near Cornell Orchards offers unrivaled opportunities for experiential learning — more than 1,700 people attended tours, classes, labs and other outreach events last year. The students want to make their unique outdoor classroom even more successful and accessible. Money raised through their online campaign will be used for portable tables, folding chairs, an easel, a whiteboard, recycling and hand washing stations, a small shelter/shade tent and a portable drinking water station. An informational kiosk — featuring its own green roof — will also be installed at the farm’s entrance.

“We strive to be good stewards of the land and a model of ecological sustainability for the community. It’s hard to beat a hands-in-the-soil experience,” said market garden manager Alexandra Griffen ’14. “We’re very excited about the success of our fundraising campaign and the opportunities it presents to boost learning and attract even more people to the farm.”

Dilmun Hill has been practicing sustainable agriculture on the Cornell campus for more than a decade. Produce from the farm is sold at seasonal farm stands, donated to Loaves and Fishes, and served in Mandible Café.

GREENING the CAMPUS

Diners at Trillium need not look farther than out the window to see where part of their meal originates. The basil in their pasta or cilantro in their quesadilla may have been plucked from the new permaculture garden adjacent to Kennedy Hall, which students constructed over the summer. Celine Jennison ’14 and Sarah Nechamen ’15, both plant science majors, spent their summer designing, building and maintaining gardens.

“Permaculture is holistic and a great mechanism for building communities and ideas,” Nechamen said. “They even shared new ideas at a permaculture conference at the University of Massachusetts-Amherst in June. “It was amazing to meet so many people passionate for permaculture,” Jennison said.

They hope the new Trillium permaculture garden, and other Cornell gardens, will inspire others around campus, and Jennison said it already has.

“A worker at Trillium told me she was inspired to build her own permaculture garden at home,” she said.
Trading in farm boots for oars, Leigh Archer ’13 spent her summer training and competing for the United States.

A month of rowing preparation led to a sojourn all the way across the Atlantic Ocean to Linz, Austria, where she and her teammate earned seventh place at the highly selective World Rowing Under 23 Championships. "It was unbelievable to row with so much talent and speed from some of the best collegiate rowers in the world," Archer said. “The course and venue were incredible.”

The path to Austria proved to be nearly as formidable as the Alps themselves. Archer came to Cornell four years ago having never rowed. During a freshman year physical education rowing class, she learned that the rowing team had walk-ons and decided to take on the challenge. The 6-foot-2-inch, athletic Archer instantly caught the coaches’ attention. She was co-captain of the women’s rowing team for the 2012-2013 season and helped the Big Red to one of the most impressive seasons in over 20 years.

All of Archer’s hard work and persistence paid off, earning her a spot at the U-23 National Rowing Camp held in July in Princeton, N.J. This intensive, month-long camp rewarded only a few dedicated rowers with slots at Worlds in Austria.

“Practice started at 7 a.m. every day,” Archer said. “Then we would have a second practice with flexibility and weight training in the afternoons.”

Adjusting to a different style of rowing known as “sculling” was initially a challenge for Archer. Sculling involves each rower using two oars, different from the one-oar “sweeping” technique she had mastered at Cornell. Rowing itself is a strenuous task, let alone having to re-learn the techniques; it is estimated that a 2,000-meter race is equivalent to playing two consecutive basketball games. But Archer became adept at the new routine and made an impressive showing at the international event.

When not braving the frequently windy and frigid conditions of Cayuga Lake, Archer was involved in a range of agricultural pursuits. She majored in agricultural sciences and worked in the organic cropping systems lab, studying sustainable agriculture techniques and policy. Her interest in organic farming stemmed from her brother’s organic farm in Maine, and Archer hopes to continue to blend policy and sustainability as she pursues a future career in agriculture. In the meantime, she will keep up with her athletic pursuits.

“As for next year, I am still working on my plans, but I am tentatively going to continue rowing for the next few months,” Archer said.

Ned Benning ’16 also spent part of his summer in Austria, earning a bronze medal as a member of the U.S. men’s four at the 2013 World Rowing Under 23 Championships. The regatta, which took place July 24-28, brought together the world’s top rowers under the age of 23 to race in 21 boat classes. With temperatures nearing triple digits at the Linz-Ottensheim racecourse, the rowers faced several delays throughout the afternoon before Benning’s boat hit the water in the last race of the day. In the end, Benning and his teammates Will Gillis (Seattle), Kaess Smit (St. Louis) and Morgan Gerlak (Baltimore) won a hard-fought battle for bronze, coming in behind Romania (5:58.72) and Australia (6:01.18) in a time of 6:03.86, and finishing ahead of Italy (6:06.22), according to USRowing.

The last few months have been a whirlwind for star wrestler Kyle Dake ’13—a fourth straight NCAA title at a fourth different weight class, the Hodge Award and the inaugural Sports Illustrated College Athlete of the Year, a spot in the finals at the World Team Trials and a nomination for ESPN’s Male College Athlete of the Year ESPY (Excellence in Sports Performance Yearly Award).

Lacrosse legend Rob Pannell ’13 barely had time to clean his Cornell cleats before tearing it up in the major league. Just six games into his professional career with the Long Island Lizards, he was selected to participate in an All-Star Game, and was recently named MLL Rookie of the Year. The reigning Tewaaraton Trophy winner has also been selected to try out for the U.S. Men’s National Team.
INVESTIGATING ITHACA

The last student to feature this summer is myself.

A recent natural resources graduate, I joined the CALS Communications team and spent my summer on the Ag Quad working on many things, including this issue of *periodiCALS*. From tracking down students and writing their stories, to taking photographs and designing the layout, I was involved with every step of putting together this magazine. I enjoyed learning how a magazine is assembled from start to finish, and I enjoyed having a tangible end result.

It wasn’t my only task, however. From creating Chronicle stories, learning how to make cheese, and exploring natural areas, I did everything CALS-related this summer.

A typical day included interviewing students, professors and researchers to come up with story ideas. I truly learned something new every day.

Then there were the atypical experiences that gave me insight into new personal and professional opportunities.

In the days leading up to a Cornell-Wegmans wine and cheese event, I had the opportunity to learn how to make cheese from Rob Ralyea and Sean Schell of the Department of Food Science. We made cheese curd, “Big Red” cheddar and mozzarella while testing out a new machine. With these skills, perhaps I will one day make my own artisanal cheese.

I also had the chance to make ice cream infused with hot pepper powder—quite a spicy day at the office.

But my favorite part about the summer was spending time in Ithaca. There is so much to do in the area, and having flexibility beyond classes really put the past four years in perspective. Outside of work, I went on many bicycling, hiking and fly fishing adventures. The best part of Ithaca is that everything is so easily accessible—15 minutes from campus on a bicycle and you can be in an isolated natural area or gorge.

As Cornell students, we are incredibly fortunate to be in an area with so much to offer. I strongly encourage every student to venture off campus and explore.

I now hope to apply the knowledge I acquired in my natural resources courses and my newly acquired communication skills to address conservation issues while traveling to remote places in the world.
What did you do on your summer vacation? For students returning to the promise of a new fall semester, this question is as commonplace as the answers it elicits are personal and unique. As this special, online-only installment of periodiCALS illustrates, CALS students participate in an astonishing diversity of meaningful summer activities that defy any notion that the season is only a time for hitting the beach.

And if you think professors kick back and take it easy during the summer months, think again. Just like our students, CALS faculty members are as busy during June, July and August as we are throughout the academic year. In many cases, our research and extension programs “heat up” during the summer, while we continue to teach and prepare new coursework, write scientific manuscripts, attend academic conferences, and address countless other duties we may not have the opportunity to tackle when classes are in session.

For me, the summer of 2013 was both busy and rewarding. It began with Reunion 2013, where I met with many wonderful CALS alumni and their families who returned to campus to reunite with old friends and revisit fond memories of Cornell. I traveled to Wegmans in Rochester twice; first, to open a national Center for Produce Safety meeting and then to celebrate CALS’ exciting partnership with Wegmans that will boost artisan cheesemakers and further support the state’s booming dairy industry. I next engaged with the New York City media as part of an Inside Cornell event on the misconceptions and concerns of genetically modified foods. I cheered on CALS food science students as they competed and won top honors in college bowl and product development competitions at the annual meeting of the Institute of Food Technologists in Chicago. I attended important annual events for the New York agriculture community, including Empire Farm Days and the Cornell Fruit Field Day, where I was thrilled to participate in the naming announcement for two new CALS-developed apple varieties, SnapDragon and RubyFrost. I traveled to India to attend a scientific conference and meet with alumni and friends of the college. And in between all these activities, I worked closely with my colleagues in the CALS leadership team to conduct the day-to-day business of running the college.

So, on behalf of all of us in CALS, in answer to the question of what we did on our summer break, I’d answer with a question of my own: Why not plan to spend part of your summer with us next year? CALS is an exciting place to be!

Kathryn J. Boor
Ronald P. Lynch Dean of the College of Agriculture and Life Sciences