From CALS to the Capitol

AEC Students Bridging the Gap Between Researchers and the Public

Students Learning, Growing and Getting Their Hands Dirty
LETTER FROM THE DEAN

A Year of Celebration

This has been a year of celebration and engagement in all the areas that make this a great college. The college is at the heart of the threefold land-grant mission of teaching, research and Extension. And in this issue we celebrate the ability to reach a growing number of students and learners with our expanding online presence. The college is also able to offer degrees in a wide range of areas in food, health and the environment. In the area of food science and human nutrition we learn about how one student gives back to underserved populations in rural areas and how another is now a physician for Congress. Other articles focus on students getting out of the classroom and engaging hands on with their learning. Finally, CALS students have been active in bridging the gap between researchers and the public.

These and many more stories demonstrate how CALS is engaged across Florida and the U.S., making a difference. We have a lot to proud of, and I invite you to stay tuned for even more great news in the months ahead!

Go Gators!

Teri Balser, CALS Dean

TABLE OF CONTENTS

3 FSHN Student Takes the Fast Track to Underserved Medicine
4 CALS Distance Education Expanding
5 Students Learning, Growing and Getting Their Hands Dirty
6 From CALS to the Capitol
8 AEC Students Bridging the Gap Between Researchers and the Public
9 Getting Students Out of the Classroom and Into the Lab
10 2011-2012 Scholarship and Leadership Awards
12 Horizon and Distinction Award Winners

Editor: Gretchen Wulff  Adviser: Cathy Carr, Director, Alumni and Career Services  Designer: Stacey Jones, IFAS Information and Communication Services  Cover photo: iStockphoto.com
FSHN Student Takes the Fast Track to Underserved Medicine

BY NICOLUS HARTLEY

Food science and human nutrition senior Chelsea Wiltjer is one of only four students accepted into the inaugural class of a new early acceptance program for the University of Florida College of Medicine.

The goal of the Rural and Urban Underserved Medicine Track, established and directed by Nancy Hardt, M.D., is to enroll academically excellent juniors who demonstrate a sincere interest in rural or urban medicine in underserved populations.

This eight-year B.S. or B.A./M.D. medicine track will accept as many as six juniors each year based upon academic requirements, volunteer activities and other factors. Admitted students do not have to take the MCAT for medical school entrance and can focus their attention on learning about the needs of underserved populations while gaining hands-on experience.

RUUM students focus especially on those who cannot help themselves. They spend a great deal of time volunteering with the Mobile Outreach Clinic developed and directed by Hardt. The Mobile Outreach Clinic travels to areas throughout Gainesville providing health care to people who do not have health insurance.

Wiltjer said her background in food science and human nutrition has helped her be a more effective Mobile Outreach Clinic volunteer.

“I am able to really talk to the patients in the mobile clinic about their health and proper nutrition,” said Wiltjer.

Many new and emerging populations are at risk for health disparities in health care access and outcomes due to race, ethnicity, gender, sexual identity, culture, geography, social factors and more, said Laura Guyer, Ph.D., administrator for the RUUM program. Often those living in rural or urban areas have little or no access to dentists, physicians and other medical professionals, she said.

“We’re trying to improve the access to care and health care outcomes for these individuals,” said Guyer.

Beyond the required senior courses, RUUM participants also complete a research project and present it at a symposium at the end of spring semester.

Wiltjer’s research topic is health literacy. By surveying residents, she hopes to draw a baseline for how to apply medicine to particular populations within Gainesville.

“There is need everywhere, and you don’t have to go far to find it,” Wiltjer said.

For more information on RUUM, visit http://ruum.med.ufl.edu.

Students volunteer with the Mobile Outreach Clinic, developed and directed by Nancy Hardt, M.D., providing health care to people throughout Gainesville. (Photos by Cheston LaBarr)
A new University of Florida distance education master’s degree, focusing on agroecology, is the first of its kind to be offered in the U.S. The agroecology concentration was created about a year ago. Agronomy professor Greg MacDonald said other agroecology programs exist, but UF’s is the first to be offered completely online.

MacDonald defined agroecology as "crop production in an ecologically sound manner.”

MacDonald was brought in to assist with the program not only because of his educational background, but also because of his experience as a professor in distance learning.

"The reason we’re looking at this program is because students need training in basic agronomy and basic soil science,” he said. “This provides a master’s degree to students.”

CALS currently offers nine distance education degree programs, as well as five certificate programs. CALS senior associate dean Elaine Turner said the distance learning program is still expanding.

"The first word that popped into my head was growing,” Turner said of the program.

"We’ve been involved in distance education for a long time.” Turner said that more certificate and degree programs are being developed for CALS distance learning.

"More certificate programs will be added, mainly targeted at working professionals who need additional education to advance in their careers,” she said.

Graduates from UF’s online agroecology program will be able to apply ecological concepts to diverse and complex farms and other systems within agriculture, MacDonald said.

Students interested in applying to this program must have a bachelor’s degree in agronomy or soil and water science or an approved equivalent to those majors. The program consists of 23 required credit hours, as well as seven elective credit hours.

For more information on CALS Distance Education, including agroecology, visit www.cals.ufl.edu/distance.
UF students are getting their hands dirty while they learn by growing their own food in the introductory vegetable gardening course.

HOS 1014, Vegetable Gardening, provides students an overview of different vegetable families, while also integrating basic gardening principles.

Course supervisor Bala Rathinasabapathi, Ph.D., provides ideas to students of what they can cultivate.

“This gardening class becomes an avenue to teach students about a healthier diet,” Rathinasabapathi said. “It is also an avenue to bring in issues related to food production that they normally wouldn’t think about, things like pest control or why some vegetable crops are locally grown or why some other vegetables are imported.”

Doctoral student Libby Rens is the lead instructor and oversees each class meeting. She lectures and assists students with the hands-on techniques required in the course.

“The course gives us all a hands-on experience of where our food comes from,” Rens said. “It gives students a small glimpse of the bigger industry and a glimpse of how to grow your own food.”

The course, offered in fall semesters, fulfills one credit hour and meets one day a week. The course has two sections with a capacity of 45 undergraduate students in each and often filling up as soon as registration opens.

“It [this course] gives someone who would not traditionally learn about these things in their regular classes a chance to get to learn and apply those skills in gardening,” Rens said.

Students receive lecture for an hour and then they obtain hands-on experience gardening at the Fifield Hall garden for the remainder of the class period. One innovative method introduced this year is that students blog about their gardening experiences, Rens said.

Jill Gordon, a sophomore majoring in business and marketing, said gardening is something that she can do in the future at her home and she can be frugal by planting instead of going to the store.

“My favorite part of this course is the anticipation before going to the garden and then seeing plants that can be twice as big as the week before,” Gordon said. “The effort pays off in the satisfaction that my sweat and tears went into growing that [plant].”

The students grow a variety of crops, including squash, tomatoes, sunflowers, snap peas and carrots.

“Here is an opportunity for experiential learning,” Rathinasabapathi said, “which is actually time consuming and difficult to do, but we are doing this in this course seamlessly well.”

For more information, visit http://hos.ufl.edu/courses/hos1014.

“This gardening class becomes an avenue to teach students about a healthier diet.”
U nder the Speaker of the House Office, and a mere ten steps from the Capitol Dome, resides the Office of the Attending Physician. Here, food science and human nutrition alumnus, Rahim Remtulla is one of five staff physicians on Capitol Hill.

The Office of the Attending Physician was established in 1928 to provide primary care and meet the medical needs of members of Congress. Within two years the office expanded to also serve the Supreme Court. The Office of the Attending Physician was originally staffed with one physician and a handful of nurses, now five physicians and numerous nurses and technicians serve the country’s leaders who choose to participate in this program. They also provide emergency support for Capitol events, the surrounding area and the occasional scuffed knee tourist. The Office of the Attending Physician responded to the 2001 anthrax attacks on Senator Tom Daschle’s Senate office, testing nearly 6,000 people who were potentially exposed.

The Office of the Attending Physician is funded through the U.S. Navy budget, and all staff physicians are active duty U.S. Naval Officers.

For Florida native Rahim Remtulla, the University of Florida was an obvious choice. Growing up a Gator fan, he made his mother pretty nervous when UF was the only school he applied to, Remtulla said. Even though science was a favorite course in high school, Remtulla thought business was the way to go. He quickly realized he was wrong.

Remtulla excelled at science and always had a great interest in health. A friend suggested food science and human nutrition. Since nutrition did not cover all of his interests, Remtulla double majored in zoology through the College of Liberal Arts and Sciences.

Elaine Turner, CALS senior associate dean, taught many of the undergraduate nutrition courses that Remtulla enrolled in. It was obvious this was where he belonged, Turner said. He loved the material and read the course text books “like other people would read a romance novel,” says Remtulla.

In a large lecture it is easy to get lost in the shuffle, said Turner. “[Remtulla] took the initiative to come to office hours and ask questions not only about the course, but also where a degree in nutrition could lead him,” said Turner. Remtulla was active in many student organizations such as Student Government and Florida Blue Key and served as a dorm president. Remtulla also worked many part-time jobs at businesses ranging from an ear, nose and throat lab to Best Buy and Gator Textbooks.

Even with an overflowing schedule, Remtulla’s drive never wavered. He continued at UF, receiving a master’s degree in food science and human nutrition and working as a graduate research assistant. His active research in the field of ear, nose and throat (ENT) led to a publication in Otolaryngology Head and Neck Surgery.

Under the mentorship of professor Linda Bobroff, Remtulla’s master’s project involved implementing and expanding the Extension health-related project called “Take Charge of Your Diabetes.” It interested him how a relatively simple program could dramatically improve a patient’s outcome. Since then, “Take Charge of Your Diabetes” has grown from CALS to the Capitol.

Rahim Remtulla has traveled to 12 countries including Estonia with the Congressional Delegation.

Rahim Remtulla has been present for many events at the capitol such as the 2011 Memorial Day Concert.
“I recommend CALS for all students who wish to pursue a career in medicine because it builds such an applicable foundation,”

into a very successful patient-centered Extension program in numerous counties throughout Florida, Remtulla said. With his interest in patient education, Remtulla thought he could best serve as a physician rather than a researcher. So he applied and was accepted to the Drexel University College of Medicine in Philadelphia.

Remtulla chose to apply to the U.S. Navy Health Professions Scholarship Program that would pay for medical school in return for his active duty military service. During medical school, Remtulla spent his summers attending Officer Development School and Annual Training. He met his wife, Michaela, during his third year. After school, Remtulla completed his internship and residency in internal medicine at the National Naval Medical Center in Bethesda, Md. He was then selected as chief of residents and served as a mentor, counselor and teacher for 42 medical officers training in internal medicine.

Remtulla’s attention to patient care earned him a 100 percent satisfaction rating with the Navy Bureau of Medicine. He was also awarded a Navy and Marine Corps Commendation Medal twice and promoted to assistant professor of medicine from the Uniformed Services University. He also has Top Secret clearance level which is rare for any physician, said Remtulla.

Remtulla was hand-selected for the position at the Office of the Attending Physician. He is on his first year of a three to four year active-duty military tour, has traveled to 12 countries and has been present for many historic events such as the Presidential Inauguration and all of President Barack Obama’s State of the Union addresses. His day-to-day work is that of many physicians, ranging from scheduled appointments to every kind of emergency imaginable. He currently lives in the Washington, D.C., area with his wife, also a physician in the area, and 18 month-old daughter, Alivia.

It is often said that the road to success is long and bumpy; in part this is true for Remtulla. His long journey was filled with hard work and dedication that all started in the UF College of Agricultural and Life Sciences.

“I recommend CALS for all students who wish to pursue a career in medicine because it builds such an applicable foundation,” Remtulla said. “I utilize the knowledge that I obtained from my bachelor’s and master’s degrees on almost a daily basis with my patients. I am forever indebted to CALS.”

Rahim Remtulla currently resides in the Washington, D.C., area with wife Michaela, also a physician, and 18-month-old daughter, Alivia.
Agricultural education and communication students have teamed up with the Florida Museum of Natural History to create a permanent video exhibit based on University of Florida research. The permanent video exhibit, called Explore Research at the University of Florida, is a tool to connect UF researchers to the public and share their research topics in a manner that everyone can understand, said Caroline Roper, BSA ‘12, who worked on the videos. The videos are shown in the museum to inform the general public about specific UF research projects, Roper said. Agricultural education and communication professor Ricky Telg selects students for the advanced agricultural communication video production class which works with the museum. “The whole purpose of this project is to communicate the wonderful research that is being done at UF,” said Becky Raulerson, a lecturer who teaches the class with Telg. “Because the videos are being shown at the museum, they had to be very visual. You couldn’t just have the talking head of the researcher.” The students work to provide a quality product for display at the museum, and the museum provides them a way to showcase their talents, Raulerson said. Each student creates at least four videos during the semester and the class produces approximately thirty. Not only are the Explore Research videos benefitting the museum and the researchers by informing exhibit visitors about research topics, but these projects are also beneficial to the students, Raulerson said. Students such as Peter Byatt have received jobs or internships from the skills they learned in the course. “Currently, I work as a videographer for the museum and have also launched my own production company from the skills I learned from Dr. Telg’s video classes,” Byatt said. The Explore Research videos have the potential to educate people of all ages, Raulerson said. Students working on the videos were exposed to topics they would not be familiar with otherwise, she said. “One of my favorite videos was working with Dr. Edward Scott. He did research on salamanders that glow in the dark under black lights, which was really cool,” Byatt said. “He is basically studying regeneration properties of the salamander and trying to apply them to humans one day.” The display incorporates interactive components, such as touchscreen activities, along with the videos. Six to eight Explore Research videos are shown at a time and updated monthly. They are also posted to the museum’s YouTube channel and to an educational video site called TeacherTube. Some videos have more than 2,000 views. Explore Research videos are being shown locally on UF’s PBS stations and on cable channel six. Within a year, the Florida Virtual School, which provides online courses for K-12 students, will add Explore Research videos to its science curriculum. □

Students interview Charles Sims, a professor of food science and human nutrition, about UF’s research to develop better tasting produce. Videos can be seen on the Florida Museum of Natural History YouTube channel: http://www.youtube.com/user/FloridaMuseum?feature=watch. (Photos by Tyler Jones)
Entomology and Nematology faculty are helping students to embrace the creative process of science and research, bringing together education and hands-on research experience in the classroom setting.

The Department of Entomology and Nematology added Undergraduate Research, a section of ENY4905, to its program. The course was first taught in Spring 2012 and was designed to teach students the processes of science and research.

Assistant professor Christine Miller conceptualized the undergraduate research course. She leads a research team and decided to include a classroom full of undergraduates, Miller said.

“I am always interested in doing projects that are beneficial to many different people,” Miller said.

The inspiration for the course originated because Miller had thousands of insects that needed to be measured. On her own, or with the help of just small groups of students, the data collection would have taken years to complete, Miller said.

Postdoctoral researcher Jennifer Hamel was also very involved in the conceptualization of the class. Much of the design and materials for the course came from Hamel, Miller said.

“Overall, the goals of the course were to benefit the research group by collecting a large body of data accurately and completely and to benefit the students by developing their idea of what science is and how it works,” Hamel said. “The third goal of the course was to promote our development as educators and try out this new model.”

By being involved in the collection of data, students had the opportunity to develop a work ethic essential to research, Miller said.

“Data collection is partly about learning to be consistent, to follow instructions carefully, to be accurate and to stay focused on the work,” Miller said. “They learn that a high level of consistency and accuracy is crucial to the development of research.”

An important aspect of the class was that it was a nurturing environment, which made the idea of research less intimidating for undergraduates, Miller said.

“I remember the first time I went into someone’s office when I was an undergrad to ask about a research position; I could barely talk I was so nervous,” Miller said. “I was terrified and really intimidated.”

However, data collection and research were only one side of the course, Miller said. Another side of the class was structured similar to a humanities course, with students leading the class in discussions and explaining their thoughts and ideas on the topics.

“It wasn’t about us lecturing and telling them what to think, we wanted to know what they thought,” Miller said. “I want to know what’s going on in students’ heads.”

Christian Caro, BS ’12, took the course in Spring 2012 and worked in the lab in the fall. The discussion section of the course was his favorite part, Caro said.

“They weren’t telling us what to think, and there wasn’t necessarily a right or wrong answer,” he said. “They actually wanted to know our thought process.”

Caro said he enrolled in the course because he would soon be graduating and decided he needed research experience.

“For students who want to go to graduate school, or even students who are considering graduate school, research experience as an undergraduate is crucial,” Miller said.

Getting involved in a research study changes how students perceive science classes, especially classes they take later in their college years, Miller said.

“A research experience, although not always fully comprehensive, can provide students with the perspective that they are acquiring a skill-set through their science classes,” Hamel said.
DANA BIGHAM earned a Ph.D. in the fisheries and aquatic sciences program in the School of Forest Resources and Conservation in 2012. She earned a B.S. in zoology from the University of Wisconsin–Madison and an M.S. in fisheries and aquatic sciences at UF. In spring 2008, Dana began serving as a teaching assistant for Introduction to Fishery Science/Fish and Limnology, a combined undergraduate/graduate course she was involved with each spring term. Daniel Canfield, professor and one of two instructors for this course, noted, “I feel that permitting her to lead our course has greatly enhanced the education and enthusiasm of our students.” Dana is a graduate of the 2011 CALS Teacher’s College.

Graduate Teacher/Adviser of the Year

SUSAN JACOBSON is a professor in the wildlife ecology and conservation department. Her goal in teaching is to organize relevant intellectual material and to present it clearly and convincingly to awaken students’ curiosity and enhance their knowledge and skills. “When Dr. Jacobson teaches, everyone listens, ruminates and participates,” says Robert Fletcher, assistant professor and one of her colleagues. Jacobson views advising and mentoring as a “womb to tomb” process, working with her students from the formation of a research question and selection of coursework to the publication and presentation of papers, development of a resume, an effective job search, and becoming a professional colleague. “One quality that sets Susan apart is that she is a life-long mentor and colleague,” says Mallory McDuff, Jacobson’s first doctoral student.

Under-graduate Adviser of the Year

ANNE MARIE MATTISON joined the food and resource economics department in December 2010 as student services coordinator. She earned both bachelor’s and master’s degrees from UF, focusing on higher education leadership for her master’s program. As an adviser, her goal is for students to leave their appointments with more information and resources, the beginning of a plan, and the knowledge that their adviser listened and cared. Since joining the department Mattison has revised and created many advising documents to help students become more proactive in their academic planning. She has also formalized the internship process for the department. Mattison has aggressively sought out employment and internship opportunities for her students. “Perhaps most notable and appreciated, on a daily basis she displays a sincere dedication to the academic welfare and personal success of every student within the department,” commented senior John-Walt Boatright.

Under-graduate Teacher of the Year

KATE FLETCHER earned her master’s degree in family, youth and community sciences; continued to work in the department; and eventually became a full-time lecturer in 2008. She teaches several of the foundation courses in the department, reaching nearly 300 students each semester. Fletcher welcomes any student to see her during office hours if a concept or theory is not clear or to just talk about life. As she states in her teaching philosophy, taking time to get to know more about her students, “...further reinforces the intimacy in which FYCS is founded.” Fletcher strives to facilitate an active learning environment where students can participate, be engaged and use complex critical thinking skills in a variety of ways to engage different learning styles.
2011–2012 Scholarship and Leadership Awards

Undergraduate Teacher of the Year
KARLA SHELNUTT, assistant professor, splits her faculty time between the family, youth and community sciences department, where she has Extension responsibilities and the food science and human nutrition department, her teaching home. She received B.S. and Ph.D. degrees in food science and human nutrition at UF and earned an M.S. in clinical nutrition and completed her dietetic internship at the University of Alabama at Birmingham. It is obvious that Shelnutt genuinely cares about each of her students, both academically and personally. As colleague Gail Kauwell, professor, wrote, "Her friendliness, enthusiasm, ability to use humor and genuine interest in her students as people and learners is evident in every aspect of her teaching."

Larry J. Connor Medal of Excellence Award
ELAINE SUAREZ TAN graduated with a food science and human nutrition degree in 2012. The Lakeland, Fla., native was a member of the CALS Honors Program and completed her honors thesis on nutritional status and immunity under the direction of Dr. Bobbi Langkamp-Henken. In 2011, Tan was a finalist for the E. T. York, Jr. Medal of Excellence Award and made the CALS Dean's List every semester. Dr. Mitchell Knutson, associate professor, comments, "Elaine is one of those rare individuals who is gifted with a mix of high intelligence, a strong work ethic, musical ability, a pleasant disposition and a commitment to service."

Jimmy G. Cheek Graduate Student Medal of Excellence Award
CORY KREDIET earned his Ph.D. in interdisciplinary ecology in August 2012 through the School of Natural Resources and Environment. His research focused on mechanisms of resilience in native coral-associated microbial communities. Krediet shares his passion for coral reef microbiology and preservation of corals with as many people as possible. Last spring, Dr. Kim Ritchie, Mote Marine Laboratory, wrote, “Cory is an exemplary graduate student who has already achieved great academic success, shows strong leadership abilities and always goes the extra mile to achieve success.”

Alumni and Friends Leadership Award
ASHER ADAMEC is a senior food science and human nutrition major from Atlantic Beach, Fla. He has held many leadership roles throughout his UF career, including community group leader with Campus Crusade for Christ, service chair for the Pre-Dental American Student Dental Association and Benton Engineering Council representative for the Engineering ambassadors. Allen Williams, campus director for Campus Crusades for Christ, says of Adamec, "He has a heart that desires to serve people and he uses his many gifts and abilities to carry that out."

E. T. York, Jr. Medal of Excellence Outstanding Junior Award
JOHN-WALT BOATRIGHT is a senior from Live Oak, Fla., majoring in food resource economics with a specialization in international food and resource economics. A member of the CALS Honors Program, Boatright also has extensive leadership experience including service as a CALS Ambassador, diplomat for the FRE Department, vice president of industry for the Agricultural Economics Club and elections chairman for the Suwannee Republican Executive Committee. He also served as a summer intern for the Office of U.S. Representative Steve Sutherland in Washington, D.C., Jennifer Clark, faculty advisor for the Ag Econ Club, comments, "... he shares in Dr. York's perspective on international agricultural development."

J. Wayne Reitz Medal of Excellence Outstanding Senior Award
MICHELLE CORRADO graduated with a B.S. in food science and human nutrition with a minor in family, youth and community sciences in 2012. The Boca Raton, Fla., native was a member of the CALS Honors Program and represented the Howard Hughes Medical Institute Science for Life Program at an international conference. Corrado's thesis research aimed to show the feasibility of a bio-artificial pancreas as an approach for curing diabetes. Research mentor, Dr. Nicholas Simpson, wrote, "... her lofty goals and aspirations are motivation to all students in the lab, and her contagious enthusiasm enlivens our workplace."
The 2012 CALS Horizon Award recipients were Brian Estevez and James T. DeValerio. The 2012 CALS Award of Distinction recipients were Thomas Richard Barber, Jr. and Wayne Smith.

Both of these awards recognize individuals who have demonstrated strong commitment and dedication to UF, IFAS, CALS and related industries.

The Horizon Award specifically recognizes alumni who have received their most recent UF degree in the past 10 years. The Award of Distinction recognizes individuals for a lifetime of service to UF, IFAS and CALS.

Collectively, these men have given more than 137 years of service to agriculture, life sciences and related industries in the state of Florida.

Their contributions to our university range from encouraging youth to one day pursue careers in the agricultural and life sciences to serving as interim dean of the college. They are helping small farmers through Extension and advocating for the land-grant mission of teaching, research and Extension through the UF/IFAS SHARE Council.