BRIGHT FUTURES

MODERN AGRICULTURE IS A BEACON OF SCIENTIFIC ACHIEVEMENT.
Through a spectrum of scholarship and support, the College of Agricultural and Environmental Sciences equips graduates to champion progress in this global industry.

Alumnae Alexis Barnes (left) and Tracey Troutman (right) and student Thomas Gottilla have served as presidents of the college’s MANRRS chapter, which celebrated 20 years of student support in 2017.
new academic year is underway here at the University of Georgia. Once again, we have a freshman class that set records in terms of academic preparedness. The college’s graduate student enrollment continues to increase, and this summer we saw a 22 percent increase in summer enrollment. More than 78 percent of those students are from the state of Georgia.

This fall, we were approved to begin recruiting students into 16 degree pathways in the Double Dawgs Program (see page 32), a new UGA initiative that allows students to earn both bachelor’s and master’s degrees in five years or less. We are excited about the future for these students.

In August, we co-hosted listening sessions with the UGA College of Engineering in Tifton and Gainesville, Georgia, to discuss needs within agriculture that require engineering-based solutions. We received excellent feedback from producers, growers and business leaders that will lay the foundation for a new level of cooperation between agriculture and engineering. Over the summer, we also began conversations with potential corporate and governmental partners to integrate big data, the agriculture cloud and informatics as tools to help solve the challenges facing agriculture and food production. These new, high-tech tools will help us efficiently use current resources in South Africa.

The future of agriculture is complex and challenging, but with the combination of exceptionally bright students entering the field and the emergence of new tools and technologies that they will have at their fingertips, I am confident that they will solve the world’s grand challenges and help agriculture grow faster and stronger.”

From the Dean
Sam Pardue
Dean and Director
College of Agricultural and Environmental Sciences
Like most researchers, University of Georgia food scientists Xiangyu Deng and Henk den Bakker have traditional white coats and labs filled with beakers, flasks and Bunsen burners. As pioneers in the field of food safety bioinformatics, however, they spend most of their time at their computers. This UGA College of Agricultural and Environmental Sciences research team fights foodborne pathogens by developing computer software.

The software creates graphs that are used to find genomic differences between strains of foodborne bacteria. “By studying graphs of complete populations of a pathogen, we can look for genetic variation in genomes that help us to fingerprint bacterial strains,” den Bakker said. “Basically, this makes it easier to find bacteria with a similar genomic fingerprint, for instance, bacteria involved in a disease outbreak.”

This work means that scientists can detect the source of a foodborne illness outbreak faster. The sooner the source is found, the sooner the outbreak can be stopped.

Together with Lee Katz, a bioinformatician at the Centers for Disease Control and Prevention, den Bakker and Deng, who was awarded a Creative Research Medal from the UGA Research Foundation for his work, formed the UGA Food Safety Informatics Group.

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Together with Lee Katz, a bioinformatician at the Centers for Disease Control and Prevention, den Bakker and Deng, who was awarded a Creative Research Medal from the UGA Research Foundation for his work, formed the UGA Food Safety Informatics Group. “We are able to analyze really large chunks of data in a matter of hours using the data Dr. Deng has collected through SeqSero and the software program I created,” said den Bakker, who joined the Center for Food Safety faculty on UGA’s Griffin campus last spring. “We recently analyzed 390 salmonella genomes in about four hours. This normally takes scientists days to do. And we can now add new genomes to the data set and rerun the data in just 20 minutes.”

The publicly accessible National Center for Biotechnology Information Sequence Read Archive currently includes genomic information for more than 70,000 genomes, what den Bakker calls a “ginormous chunk of data.” The cloud-based SeqSero software tool quickly classifies strains of salmonella and identifies serotypes, or individual, distinct strains, using whole-genome sequencing.
For investigation and surveillance purposes, you need to be able to profile your suspect's differences, from general demographics to fingerprints. If your suspect is salmonella, serotype determination, or serotyping, is the first step of your profiling.”

XUANYU DENG

Continued from page 3

Developed by CAES food science researcher Shaokang Zhang under Deng’s direction, SeqSero is used by public health officials and scientists across the globe. After researchers upload sequence files, the system sends an analysis in minutes, 24 hours a day, seven days a week, at no charge.

Deng compared the system to a detective investigating a crime. “For investigation and surveillance purposes, you need to be able to profile your suspects at different levels, from general demographics to fingerprints. If your suspect is salmonella, serotype determination, or serotyping, is the first step of your profiling,” he said. “It’s now possible to do all the profiling with the help of incredible community members and volunteers, we got the work done in a year.”

Soil, water, animals, sustainability and even air quality come back to food and human consumption, Dann said, adding that nearly 75 percent of crops use animal-mediated pollination. Pollinators are a crucial part of food production and environmental sustainability.

Dann used the grant she received from The Pollination Project to plant a pollinator garden along the edge of the rooftop using plants from the State Botanical Garden of Georgia. When these plants bloom, they attract pollinators. “I am really amazed at the implications that smaller and seemingly insignificant things can have,” she said. “It’s a project of ‘I’m going to take these wildflower plants, put them on a roof, watch bugs come and invite people up to see them.’”

Now that she’s graduated, Dann has passed garden management on to Emma Courson, the urban agriculture intern for UGA’s Office of Sustainability. Dann is proud of the work she accomplished, but warns that it’s easy to get discouraged when working in sustainability. She said this project is one small step toward making a true impact.

“What I’ve learned is that it’s the small things that make the smallest difference,” she said. “It’s those things coming together, not one person coming for the whole world or one garden saving all the pollinators. I’d be gardener inspiring others.”

Erica Cooke
Greenhouse research is a vital part of University of Georgia College of Agricultural and Environmental Sciences scientists’ work. University scientist Esther van der Knaap’s research on tomatoes — and their development from a tiny to a very large fruit — requires a greenhouse.

“We need a greenhouse facility where we can grow the plants under the same conditions in different seasons,” van der Knaap, UGA Athens campus horticulture professor, said. “Therefore, we need good climate control to obtain similar results regardless of whether the plants are grown in summer or winter.”

Peggy Ozias-Akins, a UGA Tifton campus scientist and director of the UGA Institute of Plant Breeding, Genetics and Genomics, was instrumental in the university’s work in sequencing the first peanut genome. She uses greenhouse research for genetic crossing, disease phenotyping, reproductive development studies and transgenic line analysis.

“It’s very important to keep our greenhouses functioning properly so we can have healthy plants,” Ozias-Akins said. UGA-Tifton plant pathologist Tim Brenneman conducts winter trials through greenhouse research. Cold temperatures don’t allow peanut plants to grow in the field. In the greenhouse, Brenneman screens plants for disease resistance, evaluates seed treatments, characterizes the movement or residual activity of fungicides in plants, and inoculates mycorrhizal fungi on pecan trees. Mycorrhizal fungi — truffles, in this case — are part of a beneficial relationship between the fungi and the plant in which the fungi improve the mineral nutrition of the tree.

The controlled environment of the greenhouse is an advantage for scientists because they can manipulate the conditions under which their plants are being grown, Brenneman said. In the field, researchers have to deal with unpredictable weather patterns daily.

“Detailed studies on the effects of temperature and moisture have to be done in the greenhouse as studies on specific isolates of airborne pathogens would be immediately compromised under field conditions,” Brenneman said. “These facilities can never replace field studies, but they greatly complement them and allow us to work more efficiently in the field.”

Greenhouses enable controlled experiments, which lead to developments in the crop and horticultural sciences, and are essential to the future of UGA research. • Clint Thompson

GREENHOUSES ARE HOME TO CAES SCIENTISTS’ EARTH-SHATTERING RESEARCH
Brain Glue could help heal damage from traumatic brain injuries

With a gel-like consistency similar to Jell-O, Brain Glue, a scaffold that can protect brain tissue and enhance brain healing, could serve as a treatment for traumatic brain injuries (TBIs). Developed by researchers at the University of Georgia’s Regenerative Bioscience Center (RBC), Brain Glue supports neural stem cell function and protects transplanted stem cells, which are capable of repair. It can be formed to any shape, so Brain Glue can be applied to fill any voids in the brain after severe trauma.

The RBC team that designed and created this new hydrogel was led by Lohitash Karumbaiah, assistant professor in the UGA College of Agricultural and Environmental Sciences. Unlike other synthetic hydrogels, Brain Glue provides a variety of possibilities to trap neural stem cells and protective factors to provide a more natural, regenerative healing environment, all within a supporting framework made of components native to the brain.

“TBI is a complex sequence of events caused by physical injury that damages the brain tissue and is then followed by a cascade of secondary events that often lead to long-term brain damage,” said Karumbaiah. “The Brain Glue works to support the function of the surviving cells, to facilitate repair and stabilize the damaged brain during these secondary events.”

The Centers for Disease Control and Prevention estimates that approximately 1.7 million TBIs occur in the U.S. each year, and for moderate to severe TBIs, there is no effective treatment. “There is nothing people can do clinically to help heal or regenerate the brain after a severe TBI. That was our starting point to address the problem,” Karumbaiah said.

The brain has a plasticity, capacity for self-renewal and a stimulation process to spawn new neural cells. “What we did next was look at the brain’s neurogenesis process and the ability to self-renew, then built a complementary scaffold consisting of protective agents to create a very porous, yet pliable, multifaceted, regenerative solution,” he said.

The National Institutes of Health awarded Karumbaiah $1.5 million for his TBI work, which was initially funded through a seed grant program by the Regenerative Engineering and Medicine Center, a collaboration between UGA, Emory University and the Georgia Institute of Technology, where he partnered with Ravi Bellamkonda. The RBC team will continue to work on scalable treatments for TBI with tools to not only protect neural stem cells, but also to evaluate how they work. This combined approach could encourage the activity of the brain to remodel itself and potentially restore function, providing new hope for TBI victims. • Charlene Betourney

“There is nothing people can do clinically to help heal or regenerate the brain after a severe TBI. That was our starting point to address the problem.”

LOHITASH KARUMBAIAH

The top photo shows damage to the brain structure, which was largely repaired due to neurogenesis, facilitated by the application of Brain Glue (right).
Grant funding doubled, ADS education consolidated under Bertrand’s leadership

Keith Bertrand retired this summer after nine years at the helm of the University of Georgia College of Agricultural and Environmental Sciences Department of Animal and Dairy Science. He leaves behind a thriving department with a robust academic program that’s significantly grown its grant funding. “Our undergraduate student numbers have almost doubled from 2008 to today. We probably were at 150 or 160 (students) when I took over the department and now we’re at 300. The graduate student numbers are around 50 (students) in our department, which is the highest it’s been in probably the last 50 years,” Bertrand said. Grant funding more than doubled in Bertrand’s nine years. In 2008, ADS had $2.9 million in grant funds. In 2016, that total reached more than $4 million. Bertrand estimated that, in 2015, half of the department’s funding came from grants or from commodity sales. “One of the biggest changes has been that faculty in all areas, whether you are talking research, teaching or Extension, have to be a lot more focused on pursuing external funding,” Bertrand said. “When I came to Athens, (Georgia), in 1983, the department heads of all those areas had a lot more resources provided by the state and federal governments in terms of what they needed to provide for their programs. Now, faculty have to go out and obtain a substantial portion of the resources needed by their programs to be successful.”

For more than 30 years, Bertrand was a staple in the department. He taught undergraduate courses, advised and mentored students, and was involved in researching breeding values predictions for economically important traits in livestock. Bertrand believes that the department is garnering more external funding, which is not the case now. “The way it is set up now provides many more opportunities to cooperate across disciplines and across program areas in terms of research, teaching and Extension. There used to be many more faculty with 100 percent Extension appointments. That doesn’t happen very often now,” Bertrand said. “Most have appointments in research and teaching as well.”

Bertrand retired from the department in June. UGA-Tifton Professor John Bernard is acting as the interim department head while a search is conducted for a permanent hire.

Allen Moore named CAES Associate Dean for Research

Geneticist Allen Moore spent his career studying the nurturing behavior of insects. Now he nurtures the careers of researchers working within the University of Georgia College of Agricultural and Environmental Sciences.

Moore, who took on the role of CAES associate dean for research on July 1, plans to support collaboration among researchers and to help scientists leverage their grant-seeking efforts to bring in more funding.

“I like the challenge of trying to expand the research that goes on here at UGA,” Moore said. “We have phenomenal researchers here who are doing amazing work. If I can facilitate that, that’s just fun. I get a lot of enjoyment out of watching others succeed.”

Moore most recently served as head of the Department of Genetics in UGA’s Franklin College of Arts and Sciences. Before that, he held research and administrative posts at the University of Manchester and the University of Exeter in England and in the Department of Entomology at the University of Kentucky.

CAES Dean Sam Pardue announced Moore’s selection in late April after a national search to replace the longtime associate dean for research, Robert Shulstad.

“Moore’s own recent research focused on the impact of genetics on behavior, especially in regard to genes activated after an animal — specifically burying beetles, in his study — becomes a parent.”

Moore received his doctorate in behavioral genetics from the University of Colorado, Boulder, in 1988. He has participated in academic research for decades. Working with agricultural researchers, especially at UGA, offers great opportunities thanks to the college’s existing culture of collaboration, he said.

“In the College of Ag, you have, all brought together, people who think differently, and that is a resource that most other colleges and schools don’t have,” Moore said, referring to the teams of basic and applied scientists who come together to solve problems at CAES. “That diversity provides for the exciting possibility of bringing people together and allowing them to creatively interact.”

In addition to fostering collaboration, Moore also aims to provide researchers with more support when they submit new grant applications. The college earned more than $65 million in extramural funding in 2016, a historic high. However, Moore feels that number could be higher with more support staff in the college’s grant support office.

“My focus is going to be very much on people doing research and how we facilitate people doing research,” Moore said. “Given all the constraints we have — the federal budget, the state budget, things I cannot change — I can help people make the most of what we have.”

“We have phenomenal researchers here who are doing amazing work. If I can facilitate that, that’s just fun. I get a lot of enjoyment out of watching others succeed.”

Allen Moore took up the post of CAES associate dean for research in July. He was previously the head of UGA’s Department of Genetics.
In the 1980s, when Georgia Winery and Habersham Winery opened their doors, the north Georgia mountains were known more for moonshine than for fine wine. Now, Georgia wineries draw thousands of visitors a year and contribute more than $81.6 million to the state’s economy annually. Georgia’s wine industry is thriving and pushing its way onto supermarket and wine shop shelves by sheer will and a little bit of that rogue moonshiner spirit.

Vineyard and winery owners have worked to gain a foothold for the state in the world of wine while managing the challenges that come with farming wine grapes in Georgia. In the last few seasons, the establishment of vineyards in the southern Piedmont region, with the addition of multiple north Georgia vineyards as well as the establishment of vineyards in the southern Piedmont region, Georgia’s wine industry is hitting critical mass, said Larry Lykins, the owner of Cartecay Vineyards in Ellijay, Georgia, and has an education specialist degree from the University of Georgia (BSA – Animal Science, ’96; MS – Animal Science, ’98), who also Georgia’s wine grape industry is on the rise, said Larry Lykins, who also contributed more than $81.6 million to the state’s economy annually. Georgia’s wine industry is thriving and pushing its way onto supermarket and wine shop shelves by sheer will and a little bit of that rogue moonshiner spirit.

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“Just having a point person who can give us good information and help us organize workshops and field days for all our producers is huge,” DeFoor said. “It’s just steady growth.” Today there are almost 60 wineries in Georgia, spread across the north Georgia mountains, the west Georgia foothills and even on the flat expanses of the Coastal Plain. On land that used to be cattle pasture, sorghum fields or pinelands, a diverse group of planters have staked their claim in the name of grapes and winemaking, a big investment that often takes seven to 14 years to break even, said Lykins. Georgia Wine Producers worked with UGA College of Agricultural and Environmental Sciences administrators and the Georgia General Assembly to put together funding for a UGA Cooperative Extension state viticulture specialist and hired Cain Hickey in 2017. Hickey’s expertise will help to take the industry to the next level, said Emily DeFoof, president of the Georgia Wine Producers and general manager of Habersham Winery in Helen, Georgia. ”Just having a point person who can give us good information and help us organize workshops and field days for all our producers is huge,” DeFoof said. “It’s a pivotal turning point for us as we shift into truly supporting the industry.”
Stice produces a small amount of wine under his own label. He worked with family friends at Caymus Vineyards in Rutherford, California, to bottle his Stice Russian River chardonnay in 2014 and his Stice Russian River zinfandel in 2015. Taylor Lee (BSA – Food Science, ’13) learned about jobs in the wine industry during his time in the study abroad program. “If I had not taken UGA’s viticulture and enology course, I would have been pretty lost,” Lee said.

He worked as a lab technician at Robert Mondavi Winery in Napa Valley, California, before starting his master’s degree in viticulture and enology at the University of California, Davis. He is currently working at E. & J. Gallo Winery in Modesto, California. “Most people have this romantic vision of what winemaking is,” Lee said. “But it’s a lot of dirty work. You get your hands messy. That’s something I really enjoy about it. … Even though it has this culture of fineness around it, it’s still agriculture at its core. We’re still working with the land to produce a great product that people enjoy.”

As a graduate student in plant pathology, Stephanie Bolton (MS – Food Science, ’12; Ph.D. – Plant Pathology, ’16) helped to lead the college’s viticulture and enology study abroad trip, performed research on fungi from Vitis vinifera vineyards in the southeastern U.S., and surveyed mycotoxins in red wine. Today, she works as the grower communications and sustainable winemaking director for the Lodi Winegrape Commission, a California winemakers advocacy group. “(Bolton) brings an extensive knowledge of grape growing along with a strong background in sustainability initiatives,” Lodi Winegrape Commission Board Chairperson Galen Schmiedt said. “Her valuable connections within the academic and research communities will continue to position Lodi as an innovator in the viticulture and enological world.”

Internships with Georgia wine producers are also a cornerstone of winemaking education at CAES. The program pairs students with north Georgia vineyards and provides a stipend for living expenses.

Sharon Dowdy Cruse 35x44 to 336x248

GRIFFIN

The Grass is Greener

UGA debuts turfgrass facilities on Athens, Griffin and Tifton campuses

University of Georgia, state and industry leaders officially opened new UGA College of Agricultural and Environmental Sciences turfgrass research and education facilities on the university’s Athens, Griffin and Tifton campuses on Sept. 21. UGA–Griffin houses the largest of the new facilities and served as the site of the ribbon cutting. During the 2014 legislative session, Gov. Nathan Deal and the Georgia General Assembly appropriated funds for the statewide turfgrass facilities enhancement project, which was also supported by the Board of Regents of the University System of Georgia. At UGA–Griffin, the new turfgrass research building sits adjacent to the turfgrass research plots. The building houses offices for seven turfgrass scientists, staff, postdoctoral research associates, visiting scientists and graduate students. It includes labs, conference and classroom spaces, and attached greenhouses.

“Even though we have an excellent team, our buildings and greenhouses were old now we have state-of-the-art facilities and the team can be located in the same building,” said Paul Raymer, UGA–Griffin professor and turfgrass breeder. “Extramuralists, plant pathologists, agronomists and support staff were scattered across campuses in six or seven buildings. Now we can work together in a facility designed to support our turfgrass research program.”

The funds replaced antiquated facilities at UGA–Tifton with new greenhouses and a headhouse to support UGA’s expanding warm-season turf breeding program. “The grass breeding program in Tifton has developed turf and forage grasses during the past 60 years that have been used successfully on every continent except Antarctica,” said Brian Schwartz, UGA–Tifton associate professor and turfgrass breeder. “Even with aging facilities, cultivars like ‘Tifton 85,’ ‘TifBlair,’ ‘TifTangle’ and ‘TifTuf’ have successfully entered and dominated the marketplace over the last 30 years.”

UGA–Athens turfgrass faculty now have new greenhouses and a combination classroom and office complex to use for undergraduate teaching and research programs. “These world-class facilities will enhance UGA’s undergraduate and graduate education programs, enable our turfgrass scientists to conduct innovative research, and position the College of Agricultural and Environmental Sciences to retain and recruit the top turfgrass scientists necessary to ensure a prosperous future for the vital Georgia turfgrass industry,” said CAES Dean and Director Sam Pardue.

UGA–bred turfgrasses cover lawns, championship golf courses, urban green spaces, and Major League and Little League playing fields across the world. Since 1990, the UGA Turfgrass Team has generated close to $12 million in royalty income, with a significant portion of the revenue returned to UGA turfgrass research. - Sharon Dowdy Cruse

In spring 2017, the University of Georgia College of Agricultural and Environmental Sciences’ Agricultural and Environmental Services Laboratories (AESL) offered its first Soil Testing and Plant Analysis Scholarship to Rachel Lawless, a senior studying water and soil resources in the Department of Crop and Soil Sciences. The annual $1,000 scholarship, funded by retired UGA soil scientists Bill Segars (left) and David Kissel (right), supports a junior or senior studying crop and soil sciences. Segars, who died in July 2017, worked his way through UGA by hoeing cotton near his hometown in Banks County, Georgia, and completed his degree in 1954 thanks to a scholarship. After he received his doctorate in agronomy from Clemson University, he worked as a UGA Cooperative Extension agronomist and served as Extension’s first water quality coordinator. He was a widely acclaimed expert in the area of waste management and groundwater protection. Kissel is the retired director of AESL
Noteworthy

Between tornadoes in January and Irma in September, Georgians saw widespread destruction, flattened homes and long-term power losses statewide in 2017. These storms also destroyed thousands of pecan trees, a significant source of revenue for southern Georgia farmers.

University of Georgia Cooperative Extension pecan specialist Lenny Wells estimated that about 30 percent of this year’s pecan crop was lost to Hurricane Irma — downgraded to a tropical storm when it reached Georgia — as it moved through the state on Sept. 11. Winds knocked immature nuts to the ground, broke limbs and toppled trees, many of which were between 5 and 25 years old.

Growers in Georgia’s Peach and Berrien counties lost thousands of trees, he said. “A lot of the trees that were blown down were just coming into good production, which is a tough loss to take,” Wells said.

The tornadoes that swept through Albany, Georgia, in January marked the first time that James Morgan, 12-year UGA Extension Agriculture and Natural Resources (ANR) agent in Dougherty County, witnessed such devastation.

“I have helped some of our farmers with assessments. A lot of their center irrigation pivots were destroyed as well as a lot of pecan acreage. I have helped collect data and worked with the local storm recovery team to put a value on how much of the farms were affected,” Morgan said. More than 4,000 mature pecan trees, or 400 acres, were damaged in Dougherty County. Thirteen center pivots and numerous hay barns were also destroyed.

“The same tornadoes that ripped through Dougherty County on Jan. 21 and 22 impacted Cook County, Georgia. At least 235 acres of pine trees, five center irrigation pivots and two ponds’ dams were destroyed, according to Tucker Price, Cook County Extension coordinator. He said Extension’s organized response system helped in the storm’s aftermath. “Extension was a resource that people could count on for information, whether they needed debris removed or some land cleared or to know where to donate clothes,” Price said. “Partnering with Cook County government officials, we were able to get that information out in a timely manner at the local level.”

Several weather-related events have tested UGA Extension’s response system. A drought in fall 2016 hampered Georgia’s peanut crop. An unseasonably warm winter and late freeze in March hindered Georgia’s blueberry and peach crops.

“In times of natural disasters, county agents are relied upon for their expertise in crop management. Farmers may ask if they should abandon their crops, reduce inputs or continue to try for maximum yields. Correct answers from our agents can determine their financial outcome for the year,” said Tim Varnedore, Southwest District Extension director.

The mid-March freeze severely limited blueberry and peach production. Damage totaled near 100 percent on all rabbiteye and southern highbush blueberry varieties except for those that were saved using overhead frost protection, said Jeremy Taylor, former ANR agent in Lanier County, Georgia. Taylor, who currently serves as the ANR agent in Coffee County, Georgia, encouraged use of frost protection, identified the extent of freeze damage in commercial fields, communicated with crop insurance agencies and recommended applications to prevent the spread of diseases.

“Extension is the only resource growers can use for information that will help their business,” Taylor said. “We are here to make sure Georgia growers are equipped with the information to make good decisions on their farms that help them produce a good crop and stay sustainable.”

Weather conditions are unpredictable, but Laura Perry Johnson, associate dean for UGA Extension, believes that agents are essential resources during emergencies. “Agents know the community and the people who live there. They know how to make connections and how to find the people who are needed to get things done,” Johnson said. •

Clint Thompson

Weathering Disaster

Extension agents help farmers, residents recover following destructive weather

The tornadoes that swept through Dougherty County on Jan. 21 and 22 impacted Cook County, Georgia. At least 235 acres of pine trees, five center irrigation pivots and two ponds’ dams were destroyed, according to Tucker Price, Cook County Extension coordinator. He said Extension’s organized response system helped in the storm’s aftermath. “Extension was a resource that people could count on for information, whether they needed debris removed or some land cleared or to know where to donate clothes,” Price said. “Partnering with Cook County government officials, we were able to get that information out in a timely manner at the local level.”

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Clint Thompson
As part of an irrigation efficiency study by University of Georgia Cooperative Extension, a 29-person team of social scientists, agricultural economists, climatologists, agricultural engineers and UGA Extension agents from the UGA College of Agricultural and Environmental Sciences is researching agricultural irrigation to increase water-use efficiency in row crops common in southern Georgia.

Laura Perry Johnson (BSA – Animal Science, ’87; MS – Animal Science, ’89; Ph.D. – Animal and Dairy Science, ’93), associate dean for UGA Extension, started the project in response to a report issued during the Georgia-Florida water wars, a legal dispute over water availability for everyone.

“Extending the knowledge gained on the farm to these other citizens helps spread the word that farmers are working to better manage water resources to produce the food and fiber we use and consume daily,” Hawkins said. “Putting too much water on the crops does not help and can reduce water availability for other people,” Knox said. “Our project on the use of smart irrigation techniques that includes the monitoring of soil moisture will help make sure there is enough water available for everyone.”

Clint Thompson
Livestock and bonds

Youth livestock programs, whether through 4-H or FFA, teach young people to appreciate agriculture by caring for animals. They also teach life lessons.

“The Georgia 4-H Livestock Program is a footprint for learning to be successful in an endeavor from the ground up,” said Dr. Dan Daniel, said the animal is the device used to get the child through the gate to opportunities,” said Heather Shultz (MAL – Agricultural Leadership, ’18), University of Georgia Cooperative Extension 4-H livestock programs specialist. Shultz grew up in Manterca, California, where she showed cattle through 4-H and FFA. She was part of an FFA team that led to her livestock judging at the junior college and collegiate levels. Now, Shultz’s 11-year-old daughter is in her third year of showing livestock.

“In the summer and during school breaks, she gets up and feeds and cares for her animal. She rinses and works her heifers so their hair will grow,” she said. “During school, as parents, we help with the bare necessities, but a lot of the work is done on the weekends. She has to make sure their nutrition is good, but a lot of the work is done on the weekends. She has to make sure their nutrition is good, keep accurate records, identify when their next shots should come and keep them healthy.”

Livestock program alumni seem to agree that, through these programs, they learned to accept defeat, make improvements and try again. “Looking back, I learned way more than I ever did from winning,” said Chris Campbell (BSA – Agribusiness, ’14; MAL – Agricultural Leadership, ’16), now a UGA Extension 4-H agent in Carroll County. “Livestock showing and judging programs teach students that, if they don’t succeed the first time, there is room for improvement and a reason for the loss.”

Participants also learn to make quick decisions, according to Grady County UGA Extension Coordinator Deron Rehberg (BSA – Animal Science, ’88; MAL – Agricultural Leadership, ’07). “In livestock judging, you learn decision-making skills, how to think on your feet and to be able to back up your thinking with sound reasoning,” Rehberg said. “Giving oral reasons while judging also helps young people perfect their public speaking skills.”

Growing up in the Thomas County, Georgia, 4-H program, Rehberg showed steers and heifers at the local, district and state levels and exhibited the State Reserve Champion steer his senior year. As a member of the judging team, he traveled to national competitions. The 4-H livestock program and Project Achievement introduced Rehberg to UGA animal science professors. “So, it just made sense to go to UGA and join the UGA Livestock Judging Team,” he said.

By middle school, Caroline (Black) Lewallen (BSA – Animal Science, ’89; Ph.D. – Animal and Dairy Science, ’93) was also an active 4-H’er who showed cattle, and it was no surprise that she enrolled at UGA as an animal science major. The skills she picked up showing cattle still serve her today. "It's because of my meat- and livestock-judging background that I'm in the career I chose," she said. "Livestock judging programs taught me a lot in youth how to make sound decisions, and they have to defend their decisions with clear communication. It also teaches teamwork skills that translate to the workplace. Raising, caring for and exhibiting livestock gives young people the opportunity to learn so many life skills, including responsibility, work ethic, sportsmanship and compassion.”
Ozias-Akins named UGA Distinguished Research Professor

The University of Georgia Research Foundation named Peggy Ozias-Akins, UGA College of Agricultural and Environmental Sciences horticulture professor, a 2017 Distinguished Research Professor.

The coveted title is awarded to UGA faculty who are internationally recognized for fostering creativity in their discipline. Ozias-Akins applies advanced biotechnology and molecular biological tools, some of which she developed herself, to improve crops like peanuts. She is an expert on apomixis, the asexual production of seeds in plants. Studied for decades, Ozias-Akins pioneered the application of forward genetics, genetic engineering and genomics to the process. Her team was among the first to localize apomixis to a chromosomal region and find the first associated plant gene. Her work lays the foundation for research into the systematic application of apomixis in plant breeding, which could have an enormous impact on agriculture worldwide.

As director of UGA’s Institute of Plant Breeding, Genetics and Genomics, Ozias-Akins works with other institute faculty to create plant varieties that are higher yielding, more disease resistant, more nutritious or have greater ornamental value.

Working with the federally funded Peanut and Mysticorn Innovation Lab at UGA, Ozias-Akins and her colleagues search for genetic markers that indicate resistance to aflatoxin, a cancer-causing chemical produced by molds that grow in soil, which could impact the peanut industry. She also co-chairs the Peanut Genome Consortium, an extension of the International Peanut Genome Initiative. As a member of the initiative, she helped to sequence the commercial peanut, which will jump-start breeders’ ability to identify genes or forms of genes for specific traits, like disease resistance.

“The peanut is … a fascinating crop. It flowers above ground while it fruits below,” she said. “Growing peanuts, there are a lot of challenges from both foliar and soilborne pathogens.”

Her research at UGA has helped create peanut lines that are resistant to fungal contamination and produce fewer allergens. She has introduced several genes into peanuts, including one that reduces the allergens.

“Some of the proteins in peanuts can cause severe reactions in humans. We were able to knock down the production and, in some cases, almost eliminate those proteins,” she said. “Unfortunately, no companies want to push a genetically modified peanut because it takes a lot of money and years to get regulatory approval.”

A native of Tifton, Georgia, Ozias-Akins joined the UGA Tifton campus faculty in 1986.

• Sharon Dowdy Close

FARNER FIRST DAWG TO RECEIVE IARSLCE AWARD

The first representative of the University of Georgia to receive this award, UGA Cooperative Extension Program and Staff Development Specialist Kristi Farner was granted a 2017 Dissertation Recognition from the International Association for Research on Service-Learning and Community Engagement. Farner’s dissertation, “Institutionalizing Community Engagement in Higher Education: Case Study of Processes Toward Engagement,” was chosen by the association to receive the award because it “advances research on service-learning and community engagement through rigorous and innovative inquiry and has the potential for impact — including on the study of it, the practice of it, and the cultures and epistemes within which it is undertaken.”

As a co-author, Farner references her dissertation in a chapter for the “Cambridge Handbook of Organizational Community Engagement and Outcomes.” Farner was recognized by the association at a conference in September in Gainesville, Ireland.

She graduated last December with a doctorate in adult education from the UGA College of Education’s Department of Lifelong Education, Administration and Policy.

University of Georgia Regents Professor Michael R. Strand has received one of the highest honors a scientist can receive — election to the National Academy of Sciences.

Strand, who holds an appointment in the entomology department of the College of Agricultural and Environmental Sciences and an affiliated appointment in the genetics department of the Franklin College of Arts and Sciences, is UGA’s eighth member of the National Academies, which include the National Academy of Sciences, National Academy of Engineering and National Academy of Medicine.

“The University of Georgia commends Dr. Strand on this most prestigious recognition,” said UGA President Jer W. Morehead. “Dr. Strand’s influential research is representative of the high caliber of faculty at UGA and the strength of our growing research enterprise. It is an honor to have him represent this university in an organization of such tremendous national importance.”

Strand’s primary research interests are in the study of the interactions among insects, parasites and microorganisms. Applications of his work focus on insects that are important to agriculture and that transmit human diseases, such as malaria and Zika. His work has garnered nearly $28 million in external funding from agencies such as the National Institutes of Health, U.S. Department of Agriculture and National Science Foundation. He has published more than 220 research papers, and his findings have been cited at a level that places him in the top 1 percent of biologists.

“Dr. Strand’s work underscores the profound impacts that basic science can have on agriculture and human health,” said Senior Vice President for Academic Affairs and Provost Pamela Whitten. “He exemplifies the kind of world-changing research and instruction that make the University of Georgia one of the nation’s leading public universities.”

Strand’s expertise is sought around the globe. He has delivered seminars and symposia in nearly every department of entomology in the U.S. and at universities and conferences in Europe, Asia, South America, Africa and Australia. In Athens, he has taught undergraduate survey courses in entomology and has mentored more than 50 doctoral students and postdoctoral fellows who have gone on to careers in government, industry and academia.

Strand has earned several honors over the course of his career, including being named a Fellow of the American Association for the Advancement of Science and of the Entomological Society of America. In 2013, he was named Regents Professor, an honor bestowed by the Board of Regents of the University System of Georgia to distinguished faculty whose scholarship or creative activity is recognized both nationally and internationally as innovative and pace setting. He joined the UGA faculty in 1986.

• Sam Fahmy
MODERN AGRICULTURE IS A BEACON OF SCIENTIFIC ACHIEVEMENT.

Through the Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) organization and scholarships like the Broder-Ackermann Global Citizen Award, students gain the experience necessary to innovate in agriculture and in the larger international community. Academic opportunities like the Double Dawgs Program and the college’s partnership with the University of Padova in Italy equip students for roles in the global workforce. The college provides a range of academic and support programs to empower students to become the torchbearers of tomorrow’s agricultural industry.

CONTINUE A TRADITION OF EXCELLENCE AT CAES.

You can ensure that future students have experiential learning opportunities, like education abroad, internships, research and leadership programs, by giving to CAES today.

Give online at caes.uga.edu/alumni/gifts or by mailing in the attached envelope.

“CAES empowered me to commit to helping farmers around the world. CAES faculty had the vision to prepare me for opportunities to conduct applied research that directly impacts farmers worldwide. As I’ve implemented this knowledge to help farmers in Haiti manage yield-limiting diseases of peanuts, I can see the difference it makes in the success of their crops and in the success of their families. I’m very appreciative for the resources that allowed me to learn and conduct research in Tifton and abroad.”

ABRAHAM FULMER
BSA – Agriscience and Environmental Systems, ’09
Ph.D. – Plant Pathology, ’17

Learn more about Abraham’s amazing research on page 42.
CAES’S MANRRS STUDENT GROUP HAS SUPPORTED AGRICULTURE’S DIVERSE FUTURE.

For two decades, CAES’s MANRRS student group has supported agriculture’s diverse future.

Today, more than 60 percent of University of Georgia College of Agricultural and Environmental Sciences students are female, and about 20 percent identify as underrepresented minorities. Of the college’s living alumni, more than 1,500 reported they were a minority and 32 percent — more than 5,800 — are women, according to UGA’s Giving and Alumni Information Link System.

Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) brings awareness to the modern face of agriculture and the natural resource sciences. An organization that focuses on students from traditionally underserved and underrepresented backgrounds in agriculture and related sciences, MANRRS provides continuing education, peer and professional mentoring networks, and professional development to members in high school, college and higher education, and to those who’ve already started their careers.

This year, the UGA chapter of MANRRS celebrates its 20th year at the college, a milestone for a group that started when minority students made up only 10 percent of the UGA student body.

“Agriculture is something we should all be concerned about, regardless of who we are, especially in terms of the security of our nation,” said Don McLellan, former MANRRS faculty advisor. “We must make sure we’re all discussing food production, water quality and the environment. Those issues affect us all, and we must all be at the table.”

Continued on page 28.
“THIS IS A GOOD THING” Students at Michigan State University had one of the first experiences with MANRRS at UGA’s Athens campus to experience life as a college student, at CAES. "We were pretty much the face of the college of Ag," Troutman said. “Every event that happened on South Campus, we were there … We were everywhere, we did everything.”

BEYOND CAES There are currently 30 student members of MANRRS at UGA and around 2,000 nationwide. In addition to biweekly meetings, the student group continues to host professional development and networking events. Members attend regional and national conferences to connect with students, faculty and professionals from across the country.

“MANRRS plays a significant role in the academic and professional lives of its members by offering members opportunities to enhance leadership, organizational and public speaking skills, and to experience professional critiques in a rigorous but nurturing environment,” Associate Professor Shavannor Smith, current MANRRS faculty advisor, wrote in an email.

MANRRS alumni mentor undergraduate and graduate students who join the club. Mentors and their protégés share a major. “Students rarely join the club with an understanding of the depth and breadth of agriculture," said Victoria David, director of the CAES Office of Diversity Affairs. “We work to introduce students to agricultural industry leaders from all fields and help students see the full spectrum of employment and research opportunities out there.”

For many students, their time in MANRRS has defined their time at CAES and has helped them choose majors and foster connections that have aided them in landing their first internships and jobs. “The leadership positions I’ve held have been a huge part of my professional growth in ways I wouldn’t have otherwise experienced, and I’ve seen it do the same for others,” said Alexis Barnes (BSA – Food Industry Marketing and Administration, ’17), former MANRRS president and current John Dee marketing representative.

“I am sitting here on Independence Avenue in Washington, D.C., because of MANRRS. I got a lot of exposure through other organizations, but when it came down to employment, MANRRS sealed the deal for me,” said Troutman, MANRRS’s national secretary, a position she was elected to by MANRRS members. Troutman was recently selected to lead the U.S. Department of Agriculture’s efforts on (students) outside the college and graduate and doctoral students. 

Since its founding, MANRRS has defined their time at CAES and has helped them choose majors and foster connections that have aided them in landing their first internships and jobs. "Every event that happened on South Campus, we were there … We were everywhere, we did everything.”

BRIGHT FUTURES This is a good thing,” said Wilson, who is now a professor of food policy at Tufts University. “I saw that there were other students of color who were studying agriculture and that companies, industries and the government were interested in hiring people from diverse backgrounds. It was deeply encouraging to see other students and faculty with similar backgrounds and experiences studying agriculture."

The UGA chapter of MANRRS was established in 1997, and Professor Emeritus Robert Shewfelt, 2006 Josiah Meigs Distinguished Teaching Professor of Food Science and Technology, was the chapter’s first faculty advisor. There were about 10 MANRRS members then. Shewfelt helped the students with logistics and arranged for speakers for meetings.

“They had unique challenges to face and having an organization where they could sit down and talk to each other and share experiences was the most important thing about the organization,” said Shewfelt. McLellan, then—CAES director for the Office of Human Resources and Diversity Relations and Young Scholars Program director, acted as MANRRS faculty advisor from 2000 to 2007. MANRRS grew and chapter members encouraged another to join college programs, like CAES Ambassadors, and to apply for internships, scholarships and study abroad programs, said McLellan, now the lead senior diversity and inclusion specialist for the Federal Housing Finance Agency. Then—MANRRS member Tracey Troutman (BSA – Avian Biology, ’07; MAL – Agricultural Leadership, ’08) was one of the first CAES students to take advantage of an internship in Brussels. Members were also active in regional and national MANRRS conferences.

“We provided a strong base in supporting their work so that they do and feel the same way as any other student at UGA,” McLellan said. “College life is a defining part of an individual’s development, and we didn’t want anything other than positivity.”

By the mid-2000s, chapter membership grew about fourfold. The chapter started drawing in more undergraduates than graduate and doctoral students. “I brought in my friends, focused on (students) outside the college and opened it up to all majors,” said Troutman, who joined the chapter in 2005 and was named president in 2006.

The chapter offered students exposure to professional development, networking and job opportunities while growing ties to the university and Athens, Georgia, communities through service and engagement. Members worked concession stands, held canned food drives and volunteered to help at college events. MANRRS even hosted the inaugural Georgia Dairy, an event that brought underrepresented high school students to UGA’s Athens campus to experience life as a college student, at CAES.

“You were pretty much the face of the college of Ag,” Troutman said. “Every event that happened on South Campus, we were there … We were everywhere, we did everything.”

Students at Michigan State and Pennsylvania State universities started MANRRS in 1984 to build a community of support among minority agriculture and natural resources students and professionals. UGA’s first experience with the organization, however, came when student Norbert Wilson (BSA – Agricultural Economics, ’93) was asked to attend the MANRRS national conference by then-Associate Dean Wen Williams.

“I went to the conference, came back and told Dr. Williams, ‘This is a good thing,’” said Wilson, who is now a professor of food policy at Tufts University. “I saw that there were other students of color who were studying agriculture and
Alexis Barnes (BSA – Food Industry Marketing and Administration, ’17) believes the Young Scholars Program positioned her for success at the University of Georgia and the College of Agricultural and Environmental Sciences. "I met a lot of great people and got to know some of the faculty," she said of the program.

Through Young Scholars, high school students intern with CAES professors and researchers for the summer. Barnes participated in the program twice and decided early on to become a CAES student. "They (the faculty) weren’t just recruiting talent," Barnes said. "They really wanted to see us shine."

During her time in Young Scholars, Barnes learned about Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS). The organization empowers individuals of underrepresented and diverse backgrounds through continuing education, mentoring and advocacy. Barnes became the president of UGA’s chapter of MANRRS during her senior year of college. As a MANRRS member, she was both a mentor and a protégé. Barnes and the entire executive officer team hosted biweekly meetings and other networking events, which helped her grow professionally.

"We discussed problems that weren’t straightforward, so you learn to solve them while learning responsibility," Barnes said. "We learned that you can’t innovate without courage and you can influence without authority."

Barnes currently works as a marketing representative for John Deere. She was interviewed on the spot at a MANRRS national conference for an internship with the company and subsequently interned with John Deere twice prior to accepting her current position. As a representative on the tillage product line marketing team, she helps to develop new solutions for customers and assists with on-site trainings. "MANRRS really taught me how to lead people," Barnes said. During her time at UGA, the Decatur, Georgia, native also worked in the Office of Diversity Affairs and was a CAES Ambassador. She said the former opened her eyes to how best to carry out cross-collaborative initiatives and the latter matured her in social settings.

"Being a CAES Ambassador wasn’t just a resume booster," Barnes said. "It was a lot of work, and it taught me what it means to care about the big picture."

Barnes is eager to become involved with John Deere’s MANRRS team. It has been encouraging for her to meet other African-American men and women in the agriculture industry. "It’s almost scary to see how I’m one of those role models now, but I can’t wait to give back," she said. - April Bailey

"WE LEARNED THAT

YOU CAN’T INNOVATE WITHOUT COURAGE

AND YOU CAN INFLUENCE WITHOUT AUTHORITY."
The program enables students to earn both their bachelor’s and master’s degrees in five years or less. Fourteen colleges and schools within the university offer more than 100 pathways through UGA programs. The UGA College of Agricultural and Environmental Sciences is offering 16 pathways. Students apply to the Double Dawgs Program in their junior year, take graduate courses during their senior year, and enroll in one more year of graduate coursework. Previously, only select students, many of whom were in the university’s Honors Program, took graduate courses in their senior year.

“(The Double Dawgs Program) is open to CAES students with strong academic records,” said CAES Associate Dean for Academic Affairs Josef Broder. “This program will allow our top CAES students the opportunity to take graduate courses in their senior year and complete their bachelor’s and master’s degrees in five years.”

Beyond the advanced education gained, completing undergraduate and graduate coursework in five years saves a year’s worth of tuition costs — at least $12,000 — and a year of time. Through the Double Dawgs Program, the HOPE Scholarship could cover the cost of students’ first year of graduate school. Potentially, assistantships could pay for the second year of graduate school, also considered the fifth year of the Double Dawgs Program.

“For those of us in the millennial generation, it can be difficult to find a job,” said Mary Kate Bagwell, who is currently one of five students in her agriculture cohort pursuing undergraduate and graduate degrees. “She’s a fifth-year senior and second-year graduate student. “The ability to get bachelor’s and master’s degrees in five years, to have that extra skill set and add degree, better prepare me for the job market.”

Students may apply for entry into Double Dawgs pathways as undergraduates, then apply for admission to the graduate portion of their pathway, according to Broder. Students must meet the admission requirements of their respective graduate programs. Students admitted to the Double Dawgs Program follow a program of study approved by a departmental advisory committee. Many of these students are already doing research as undergraduates and simply expand that research into their graduate program.

“It all goes back to work ethic and time management,” Bagwell said. “If anyone has the opportunity to do it, I really think it’s something everyone should take advantage of. The fact that UGA’s College of Agricultural and Environmental Sciences is stepping up their game like this makes the college stand out.” — Kathryn Schiliro

Moore and his wife, Casey, moved to Italy in May and have settled in a small town outside Padova. “We live in an apartment just outside the town’s center and I take public transportation to Legnaro, Verona, Cittadella, Istrana or Castelfranco Veneto most days of the week, either working on my project or helping my co-worker with her project,” Moore wrote in an email. “Every day on the train or bus, I study the Italian language and improve my communication skills. I am not yet fluent, but I can communicate to a certain degree.”

The new program is the result of faculty relationships that date back two dozen years to when Francesco Morari, UNIPD associate professor of environmental agronomy, traveled to UGA–Tifton to conduct research. “Francesco and I became friends and, through the years, we’ve looked for opportunities to collaborate,” said George Vellidis, UGA crop and soil sciences professor. In 2015, UGA and UNIPD signed a memorandum of understanding to offer this dual graduate degree in sustainable agriculture.

The next year was spent studying all aspects of the programs at the two universities, from admissions requirements to required courses. Moore was accepted into the program at UGA in fall 2016. He is studying the brown marmorated stink bug, a relatively new pest in both Georgia and Italy that can cause millions of dollars in damage if not controlled. Moore is detailing the damage stink bugs cause to cherries and kiwis and determining the effects of the landscapes around orchards on stink bug infestations. By the time he returns to UGA next fall, Moore plans to have completed his research and defended his thesis.

“The University of Padova is a top-ranking institution in many areas of research, including agriculture,” Vellidis said. “By studying there for a year or more, our graduates will develop a global perspective and understanding of agriculture. They’ll also have had the opportunity to live and learn in a place that has different ways of doing things. Those experiences will prepare them to explore a far broader range of professional opportunities.”

Two Italian students arrived at UGA in August and are conducting research at UGA–Tifton with Professor Peggy Ozias-Akins and Assistant Professor John Snider. A second UGA student, Aaron Bruce from Lakeland, Georgia, will go to UNIPD in January 2018, and two more UGA students will follow in May 2018. - Denise H. Horton
In high school, Samaria Aluko — currently a senior studying biological science — was a sprinter, a passionate, intense, focused runner who could run the 200-meter dash in under 27 seconds. Now she channels that intensity and drive into improving and saving lives, and she maintains her laser-like focus on radical compassion.

“People are dying, here and outside the country,” said Aluko, from Acworth, Georgia, who plans to use her University of Georgia College of Agricultural and Environmental Sciences degree to launch a career in international medicine. “When you imagine becoming a doctor, it seems like a glamorous job: the white coat, bragging rights and an impressive paycheck. But the purpose of being a doctor is trying to save lives. If that requires me to go somewhere where it’s a little dangerous or less Instagram-worthy, I can do that. I want to do it.”

Aluko takes part in homeless outreach in Athens, Georgia, and works with refugee communities in Clarkston, Georgia. With her mentor, Professor Juliet N. Sekandi of the UGA College of Public Health’s Global Health Institute, Aluko participated in research to understand barriers to health care access in refugee communities in the U.S. and to effective treatment for tuberculosis in developing countries. Her drive to help isn’t born out of blind idealism. She’s learned about the world’s challenges and tried to chart a course to help solve them.

“My parents raised me in a Christian household, and I believe this calling is my way of being an example of Christ’s love,” Aluko said. “If I see something that’s wrong, I want to fix it. My life is worth nothing to me unless I use it for finishing the work assigned to me by the Lord.”

This spring, Aluko became the first recipient of the college’s Broder-Ackermann Global Citizen Award. CAES Associate Dean for Academic Affairs Josef Broder (BSA - Agricultural Economics, ’71) and his seven siblings endowed the annual $1,000 award in spring 2017 in honor of their parents, Hans Broder and Margrit Ackermann.

The Broders’ parents, who immigrated to the U.S. from Switzerland in 1952 to run a dairy in Stockbridge, Georgia, ensured that their children had an international mindset even as they grew up surrounded by rural Georgia farmland. The siblings wanted to recognize students who are driven to build international lives, either by working or studying abroad or by engaging with the international community in Athens and at UGA.

“We wanted to recognize (our parents’) not only for everything they did for us, but for being globally minded,” Josef Broder said. “Coming here opened doors for all of us, and we wanted to pay them back for the gift they gave to us.”

To hear the Broders’ story and learn more about the Global Citizen Award, visit https://pres.uga.edu/broder-ackermann.

More than two dozen students applied for the inaugural award, but Aluko’s ability to embrace local communities while keeping sight of the global community made her stand out.

“Samaria’s personal commitment to providing modern health care on a global scale is truly remarkable,” Josef Broder said. “She has devoted her studies to understanding different cultures and languages around the world. Her work with infant mortality in Uganda, communicable diseases in Peru and the homeless in the Athens area exemplify her passion for creating a healthier world for all citizens. Samaria’s hands-on efforts to advance health care and alleviate hunger and poverty across the world captures the true spirit of the Global Citizen Award.”

Aluko is the child of an immigrant. Her father is from Nigeria, and she’s one of seven children. Aluko’s parents emphasized the importance of reaching beyond her comfortable surroundings to help others. She also works with UGA’s African Student Union to share African culture with the broader university community and to constantly exploring new cultures.

She has studied abroad in Ecuador, where she strengthened her Spanish language skills, and Scotland, where she addressed food insecurity and agricultural education. She’s currently learning to speak Korean and Yoruba.

In addition to her CAES degree in biological science, Aluko is earning an Undergraduate Certificate in Global Health through the College of Public Health. Through UGA student group MobileHealth@UGA, she is developing an app to equip pregnant women and mothers with the information they need to have healthier pregnancies. MobileHealth@UGA is also collecting old cell phones to redistribute to women without a smartphone can use the app.

Uganda has one of the highest maternal mortality rates in the world because women often do not have access to prenatal or postnatal health care or self-care information. But at least 65 percent of adult Ugandans have access to a smartphone, according to a Pew Research Center study, and apps, like this one through MobileHealth@UGA, are a reliable, low-cost way to deliver the information mothers need to protect themselves and their children.

When Aluko graduates in May 2018, she plans to spend a year working with a medical clinic operated by Hands on Peru before attending medical school. • Merritt Melkonian
SIXTY YEARS OF THANKS

Jo Phillips (BSA – Horticulture, ’66) is the horticulture manager for Hills & Dales Estate. Phillips resides in Warm Springs, Georgia.

Paul B. Tillman (BSA – Biological Science, ’80; MS – Poultry Science, ’84) started his own consulting company, Poultry Technical Nutrition Services, in 1996. He received the Poultry Science Association’s USPOLEY Distinguished Poultry Industry Career Award at the association’s 2017 annual meeting in Orlando, Florida, for his more-than-30-year career in animal agriculture. Tillman resides in Buford, Georgia.

Cristian Lopez (BSA – Agricultural Economics, ’81) retired from his position as a telecommunications technician. Lopez resides in Brookhaven, Georgia.

Bill Reynerson (BSA – Ornamental Horticulture, ’83) is the owner of The Green Depot in Lawrenceville, Georgia.

W. Franklin Evans (BSA – Entomology, ’64) is the ninth president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming this position, he was the interim president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming this position, he was the interim president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming this position, he was the interim president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming this position, he was the interim president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming this position, he was the interim president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming this position, he was the interim president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming this position, he was the interim president of Voorhees College in Denmark, South Carolina. Prior to accepting this position, he was the interim president of South Carolina State University. Prior to assuming...
CLASS NOTES

1980s (continued) Mark Tribby (BSA – Biology, ’84) is the owner of Hill High Animal Hospital with his father and fellow veterinarian, David Tribby. Both are graduates of the University of Georgia College of Veterinary Medicine. They opened their latest veterinary hospital in Augusta, Georgia, this year. Mark Tribby resides in Augusta.

Manjir Chowdhury (Ph.D. – Entomology, ‘88) is the CEO of SAFENET Bangladesh. Chowdhury resides in Dhaka, Bangladesh.

Jean Bertrand (Ph.D. – Avian and Dairy Science, ’97), the associate dean for undergraduate studies at Clemson University’s College of Agriculture, Forestry and Life Sciences, received the 2017 Distinguished Educator Award from the North Carolina Association of Teachers of Agriculture organization.

Johnny Bryan (MS – Agricultural Economics, ’97) is the market president of Colter Bank. Bryan resides in Sylvester, Georgia.

David Golden (MS – Food Science, ’87; PhD. – Food Science, ’91) was named the executive assistant to the president at the University of Georgia College of Agricultural and Environmental Sciences. Golden, who has been in the position since 2013 as dean of the College of Agriculture and Environmental Sciences, has held various roles at the university, including director of the College of Agricultural and Environmental Sciences.

Joanne Sullivan (BSA – Animal Science, ‘01) is the southeastern sales manager for Evolve Biologics. Sullivan resides in Raleigh, North Carolina.

Catherine (Collett) Williams (MS – Dairy Science, ’91) is a professor and curriculum coordinator at the Louisiana State University School of Animal Sciences. Williams resides in Baton Rouge, Louisiana.

Stanley L. Bradley (BSA – Ornamental Horticulture, ’68) was promoted to landscape management supervisor for the Athens-Clarke County, Georgia, Department of Agriculture.

A financial analysis of the economic impact of the Apple HUB (Health Unit Structure) on the local economy was conducted by the Athens-Clarke County, Georgia, Department of Agriculture. The analysis found that the Apple HUB has had a positive impact on the local economy, with an estimated economic impact of $11 million in grants for various projects over the past year.

Anita Ricci Camargo (MG – Food Science, ’99) is a senior quality assurance manager at Panera Bread. She resides in Richmond Heights, Missouri.

2000s

Brian Lucas (BSA – Environmental Soil Science, ’10) is the owner of Lucas Soil Evolutions. Lucas resides in Winyah Hall, Georgia.

Daniel Singletary (BSA – Plant Pathology, ’01), an experienced plant pathologist, has been promoted to a master’s degree in product design and development management from Northern University’s McCormick School of Engineering and the Kelley Design Institute in June. Oker resides in Chicago.

Jessica Eubank (BSA – Animal Science, ’06; MED – Agricultural Education, ’10) is the 4-H Youth Development and Family and Consumer Sciences agent for University of Georgia Cooperative Extension in McPherson County. She previously taught undergraduate and high school science classes. Eubank resides in Washington, Georgia.

Amanda Freeman (BSA – Agriculture, ’10) is the policy director at the Georgia Department of Agriculture. Freeman resides in Macon, Georgia.

Paula (Wall) Luy (BSA – Animal Science, ’10) is a nurse practitioner in Emory Healthcare’s cardiovascular intensive-care unit. Luy resides in Locust Grove, Georgia.

Brad Merry (BSA – Agriculture, ’10) is the owner of Merry Lumber Company and its sister company, Everdale. Merry resides in Augusta, Georgia.

Drew Benson (BSA – Poultry Science, ’06; Ph.D. – Poultry Science, ’10) is an assistant professor in the University of Georgia College of Agricultural and Environmental Sciences Department of Poultry Science. Benson was responsible for teaching “Avian Anatomy and Physiology,” “Introductory Poultry Science” and “Avian Biomedical Techniques” courses. He also conducts research on poultry reproductive physiology.

Rishuan Caldwell (MFT – Food Science, ’11) is a senior microbiologist at PAR Pharmaceutical. Caldwell resides in Huntsville, Alabama.

Carin Boehr (BSA – Food Science, ’01) graduated with a master’s degree in the mid-1970s. Justins Schmidt (Ph.D. – Entomology, ’77) didn’t set out to catch the evolution of eusociality, high-level societal organization by a group of animals. But about 40 years later, he’s become known as “The Connoisseur of Pain” by The New York Times magazine or, more commonly in his field, as “The Man Who Stung for Science.”

Looking to apply his interest in chemistry to agriculture, Schmidt was curious about how the pain of snake and other venomous insects compared to insect stings. In science, we can’t just translate words into meaningful comparisons for scientific analyses, he said. “How do we do that? Everything is pretty much digital. It’s got a number, a plus or a minus, a ‘1’ or a ‘0’… So I concluded that we can actually rate (the stings) on a scale comparing the numbers of how much they hurt.”

Enter the Schmidt sting pain scale on which puts the strength of various insect stings on a scale. Schmidt described honeybees as the most common sting and a sort of baseline when compared to a host of other insects, like fire ants, sweat bees, tarantula hawks or bullet ants. “My hypothesis was that the reason they could become social and deter things like possums and skunks and raccoons they had a sting that was very effective,” he said. “How can you measure that?” That was the genesis of the sting pain scale.

The College of Agricultural and Environmental Sciences alumni has experienced 3 different types of stings as part of his research and developed the scale from below 1 to 4, with 4 being excruciatingly painful. Still, Schmidt doesn’t see himself as having a high pain tolerance and said, because it’s subjective, there’s no way for different people to truly compare pain.

Schmidt explained that, in the mid-1970s in his field, much of the research was centered on mathematical and genetic theories about insect social evolution. It was a time when insects were considered eusocial. He dismissed the description of himself as a pioneer or trailblazer.

“The story of the Wild,” that he described as a pioneer or trailblazer. To future generations of students who have a love of science and as a tool to help people and insects get along. Schmidt was the keynote speaker at a fundraising event for The Friends of the Georgia Museum of Natural History in October and plans to offer more seminars in UGA.

“I was just a poor graduate student,” he said. “I was thinking I wanted to get my degree and go off, get a job and do science. I was thinking, ‘How do we measure this? ’There hadn’t been anything before, and it was simply a tool that I sort of thought of as a solution.”

In May 2016, Schmidt, currently an adjunct professor at the University of Arizona, published a book, “The Sting of the Wild,” that he described as something to pass down
Donya Lester pioneered agricultural alumni relations at UGA and Purdue

For Donya Lester (BS – Animal Science ’85), key relationships formed at the University of Georgia helped launch a three-decade career that’s become influential in the field of agricultural alumni relations across the country.

Lester has worked at Purdue University in alumni relations for 27 years. She is currently the executive director of the Purdue Agricultural Alumni Association and director of public engagement for Purdue Agriculture, part of a career that began at UGA 35 years ago.

In 1986, Lester became the first development officer at the UGA College of Agricultural and Environmental Sciences. In 1990, she was hired at Purdue, the first woman in her position at the agricultural alumni association and the first person from the National Agricultural Alumni Development Association (NAADA) to be hired in alumni relations at a college of agriculture that she didn’t attend.

The groundwork for these opportunities came from Lester’s relationship in the mid-1980s with Louis Boyd, an assistant to the dean who headed UGA’s animal sciences department when Lester was a student. Boyd told Lester that the university was decentralizing development and that a development officer for CAES would soon be hired.

Lester landed the job and eventually found herself working in a role that would become more prominent with Mauri Williamson, a dean who was working at Purdue. Because of Williamson,她说，Lester was able to join the team and contribute in a class by itself in terms of an institutional commitment to alumni and stakeholder relations. Lester became Williamson’s hand-picked successor.

Lester ultimately found her passion in alumni relations. She said the job at Purdue has been the best way to contribute, advance a land-grant university and help solve the world’s problems. However, as someone who didn’t grow up in the livestock world, Lester credits professors at UGA, who took extra time and exposed her to new and different things, with her experiential learning and broader view of agriculture.

— people who know you the best know what you can do,” she said. “Lawrence Bensheyk (former CAES animal and dairy sciences department head) and Calvin Alford (former Extension animal scientist who worked with 4-H youth livestock programs) saw potential in me as a 4-H’er (in Polk County, Georgia,) and, later, as a UGA student and made sure that I knew what opportunities existed and how to access them. They helped me see a world beyond where I grew up, where I lived, and to see how other people did things.

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people in developing countries. It is something I feel pretty on more of an international role, in continuing to work with involved, whether it’s volunteering a few weeks a year or taking

row spacing trials, but he focused on finding a disease-resistant partners. Part of his work involved fungicide, fertility and seed college students and coordinated research among PMIL

leaf spot. “These farmers truly grow peanuts organically. better understanding and managing peanut diseases, including study the disease there. As part of UGA’s Peanut and Mycotoxin Haiti for three or four months for each of the last three years to

and which disease will be predominant. This is important for nature and behavior of these diseases to learn whether growers

Abraham Fulmer’s study of foliar disease Fulmer is currently fielding multiple job opportunities within The lab funded Fulmer’s research in Haiti while he mentored

Fulmer worked on this project for seven years and traveled to “What I’ve done is take a lot of the factors that we know contribute to the risk in a field — rotation, planting date, varietcy being used — and tracked how both diseases develop year after year,” Fulmer said. “My results show that we can use a lot of this information to predict when each disease will start and which disease will be predominant. This is important for growers as there appears to be an opportunity to refine our fungicide timings for prescription programs based on which disease is in the field.”

Fulmer worked on this project for seven years and traveled to Haiti for three or four months for each of the last three years to study the disease there. As part of UGA’s Peanut and Mycotoxin Innovation Lab (PMIL), he assisted Haitian peanut farmers in better understanding and managing peanut diseases, including leaf spot. “These farmers truly grow peanuts organically. Unfortunately, this results in major yield losses each year due to heavy disease pressure,” Fulmer said.

Justin Hand (BSA – Agribusiness, ’12) is a regional sales manager for Advanced Manufacturing Technology Inc., a company based in Marietta, Georgia. He was also accepted into the Institute of Food Technologists’ Emerging Leaders Network. Walker resides in the greater New York area.

Jenna (LeVine) O’Sullivan (BSA – Food Science, ’12) is a regional sales manager for PERC Coffee Roasters. O’Sullivan resides in Atlanta.

Emily Pence (BSA – Agribusiness, ’12) is a relationship manager and assistant vice president at AgGeorgia Farm Credit. Pence resides in Perry, Georgia.

Breanna Courtoy (BSA – Agricultural Education, ’13) is the director of student and employer engagement for the University of Georgia College of Agricultural and Environmental Sciences. Courtoy resides in Athens, Georgia. Marjie Dickey (BSA – Food Industry Marketing and Administration, ’13) was tapped by Georgia Gov. Nathan Deal to be the agriculture water project manager for the Georgia Environmental Protection Division. Dickey resides in Atlanta.

Sara (Spinks) Hand (BSA – Agricultural Communication, ’13) joined the Georgia Museum of Agriculture and Historic Village at Abraham Baldwin Agricultural College in January as the assistant director and education/interpretation outreach manager. Hand resides in Tifton, Georgia.

Taylor (Kenny) Walker (MS – Food Science and Technology, ’13) is a project manager for Advanced Manufacturing Technology Inc., a company based in Marietta, Georgia. She was also accepted into the Institute of Food Technologists’ Emerging Leaders Network. Walker resides in the greater New York area.

Kerri (Fisher) Mikulazek (BSA – Food Science, ’14) is a scientist 8 at the Coca-Cola Co. Mikulazek resides in Atlanta.

Alec Shephard (WS – Agricultural Business, ’14) is a business analyst for the University of Georgia College of Agricultural and Environmental Sciences. Shephard resides in Athens, Georgia.

Achton Engele (BSA – Food Science, ’15) is a technologist at Tuber, Georgia-based CDM Bakery Solutions. Engele resides in Flowery Branch, Georgia.

Andrew Ferreri (BSA – Agricultural and Applied Economics, ’15) is an account executive with AGBARA. Ferreri resides in Charlotte, North Carolina. Sarah Harrison (BSA – Poultry Science, ’15) was hired to perform a complete environmental manager at Tyson Foods. Harrison resides in Aseawman, Virginia.

Sarah Laughingtale (NAL – Agricultural Leadership, ’15) is the University of Georgia Cooperative Extension livestock specialist, based in Athens, Georgia, housed in the College of Agricultural and Environmental Sciences’ Department of Animal and Dairy Science. She works with junior livestock and livestock judging programs. Prior to this position, she was an agricultural education instructor in the Union County, Georgia, school system.

Brittany Taylor (NPPM – Poultry Production and Post Management, ’15) is a technical sales specialist with SePRO Corporation, where she works with the pre-emergence cotton herbicide, Blye, across the Southeast. Taylor is the University of Georgia’s precision agriculture specialist. Taylor resides in Tifton, Georgia.

Helping Sunbelt Shine Chip Blalock promotes agribusiness through the Sunbelt Expo

The Sunbelt Agricultural Exposition in Moultrie, Georgia, in mid-October boasts more than 1,200 vendors and exhibitors, a 600-acre farm, and thousands of attendees looking to learn about the latest agricultural and related research and equipment. Expo Executive Director Chip Blalock (BSA – Animal Science, ’87) — aptly nicknamed “Mr. Expo” by some — has been at the helm of the event for two decades. Originally from Athens, Georgia, Blalock got his start running the University of Georgia Block and Bridge Club’s Great Southland Stampede Rodeo. He was chairperson of the event during his senior year at the UGA College of Agricultural and Environmental Sciences.

“It taught me skills like teamwork, the importance of committees and having good committee chairs to do their thing without micromanaging them,” he said. “Just being a 22-year-old kid exposed to exposing a game of showmanship knowing that if we didn’t come through, it had my name on it, that taught me a lot of responsibility early on that I carry to this day. After working as a UGA Cooperative Extension agent, then in sales for a few years, Blalock was hired as the assistant director for the Sunbelt Expo by Ed White in August 1997, but ended up the executive director two months later when White suddenly passed away a week before the doors opened. The best advice Blalock received came from...
Flavor of Georgia

Jaime Foster’s nutty idea paid off with win

When Jaime Foster (BSA – Animal Science, ’99) arrived at the University of Georgia, her plan was to become a veterinarian and to save every animal that walked through her door. “Little did I know that many of the classes that I was required to take, that had zero relevancy to becoming a veterinarian in my young mind, would be so valuable to my career in food manufacturing and the nut butter industry,” Foster said.

Those classes covered agribusiness, food science and plant production, and they have since played an important role in the success of Foster’s blossoming business.

Foster’s career path veered away from veterinary medicine.

“Using my grandfather’s recipe from the 1970s, the Fosters expanded the manufacturing facility from 1,000 square feet in 2017 to 2,400 square feet in 2018. They refined the production process and launched Georgia Grinders with their first product, Georgia’s statewide production of simple nut butters. Experts in the field took notice, and the Fosters were named the grand prize winners of UGA’s 2017 Flavor of Georgia contest, organized by the UGA Center for Agribusiness and Economic Development.

The winning product was their Georgia Grinders Pecan Butter. Jaime Foster called it an honor, and the recognition has helped sales quadruple since the win.

Georgia Grinders is a corporate sponsor of the Night of Hope Gala, an event to celebrate and support amyotrophic lateral sclerosis, or ALS, research at Emory University. Jaime Foster’s mother recently passed away from ALS, and she said her mother’s 2013 diagnosis opened her eyes to life’s fragility. “Watching the quality of her life rapidly decline acted as a catalyst for leaving corporate America to follow my dreams of launching my own business,” said Jaime Foster. “There is no guarantee that the sun will shine tomorrow and life is way too short to live complacently.”

Georgia Grinders also supports DeKalb County Schools and its community-based vocational training program as well as The Giving Kitchen.

- Keith Farner

CLASS NOTES

Clayton Temple (BSA – Agricultural and Applied Economics, ’15) works as a graduate research assistant in the Georgia 4-H state office. She was accepted to the University of Georgia educational theory and practice doctoral program. Temple now resides in Monee, Georgia.

Brian Weyl (WAL – Agricultural Leadership, ’15) is a research professional with Georgia Crop and Soil Sciences’ Statewide Variety Testing. He resides in Milledgeville, Georgia.

Amanda (Willis) Wooditch (BSA Agricultural Education, ’15) is an agriculture teacher at Atkinson County High School in Pearson. Georgia’s Wooditch resides in Pearson.

Erik Burnett (BSA – Agricultural Communication, ’16) is a creative projects specialist for the Georgia Department of Agriculture. She is pursuing a master’s degree in agricultural and environmental education from the University of Georgia College of Agricultural and Environmental Sciences. Burnett now resides in Atlanta.

Michael Corbin (BSA – Poultry Science, ’16) is a broiler breeder flock supervisor for IJBS-Piglet’s Corbin resides in Nashville, Georgia.

Victoria (Weaver) Corbin (BSA – Animal Science, ’16) is a University of Georgia Cooperative Extension educator in Atkinson County. Corbin resides in Nashville, Georgia.

Joshua Grant (WS – Entomology, ’17) is an Agricultural and Natural Resources agent with University of Georgia Cooperative Extension in Crisp County. He resides in Arabi, Georgia.

Jeremy Long (BSA – Biological Science, ’16) is a veterinary student at Mississippi State University. Long resides in Shannon, Mississippi.

Daniel Moore (BSA – Poultry Science, ’16) is a production superintendent for Pilgrim’s Pride. Moore resides in Gainesville, Georgia.

Tate (Izzy) O’Reake (WAL – Agricultural Leadership, ’16) is the commercial and industrial marketing representative for Jackson Electric Membership Corporation. The resides in Gainesville, Georgia.

Ashley Sapp (BSA – Agricultural Education, ’16) is an agriculture teacher for the Eufaula County, Georgia, Board of Education. Sapp resides in Springfield, Georgia.

Brittany Spald (BSES – Entomology, ’16) is a research assistant in the University of Georgia College of Agricultural and Environmental Sciences. Spald now resides in Atlanta.

Shay Tang (WMS – Horticulture, ’16) is a graduate research assistant at Virginia Tech. Yang resides in Virginia Beach, Virginia.

Kayla Ward (BSA – Animal Science, ’17) is a research specialist at Emory University’s Yerkes National Primate Research Center. Walz resides in Athens, Georgia.

Maren McGurl (BSA – Agricultural Communication, ’17) is a communications manager for the Southeast United Dairy Industry Association. She resides in Gainesville, Georgia.

Allex Alward (BSB – Agribusiness, ’17) is an Almond Board representative for California’s Department of Food and Agriculture. Alward resides in Sacramento, California.

Mara McGurl (BSES – Environmental Economics and Management, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps volunteer.

Alex Historic (BA – Agriculture and Applied Economics, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps Environmental Education, ’17) is a Peace Corps volunteer.

- Merritt Melancon

Farmer of the Year

Everett Williams recognized for his dairy industry advocacy

For 39 years, Morgan County, Georgia, dairy farmer Everett Williams (BSA – Dairy Science, ’75) has helped to chart a path for all the state’s dairy farmers.

New technologies and constant innovation have allowed the Williams family to grow the size and productivity of their herd while making W Dairy, just outside of Madison, Georgia, a model for stewardship and sustainability in the dairy business.

In March 2017, when Georgia Gov. Nathan Deal recognized Williams as “Georgia Farmer of the Year,” he emphasized Williams’ dedication to agriculture and innovation.

“It’s a big honor to be chosen,” Williams said. “I just think this is a great program because it helps to spotlight agriculture in the state of Georgia.”

Lucy Ray, University of Georgia Cooperative Extension coordinator for Morgan County, nominated Williams because of his family’s commitment to the county’s agriculture, their family’s agricultural legacy and the land.

Both Everett and Carol Williams (BSA – Animal Science, ’75) are strong advocates for the dairy industry. They spend time talking to civic and youth groups about the impact of Georgia’s dairies and offering tours of their dairy to anyone interested. He currently serves as president of the Georgia Milk Producers, and she serves as president of Georgia Dairy Youth Foundation and helps to lead other organizations.

“I feel that Everett is an ideal Farmer of the Year,” said Ray. “He’s got one of the most technologically advanced dairies in the state. Also, Everett is very community minded, and the entire family is involved with the agricultural community statewide.”

As Farmer of the Year, Everett Williams represented Georgia at the Sunbelt Agricultural Exposition in Moultrie, Georgia, in October. This also placed him in the running for Swisher Sweets/Sunbelt Expo Southeastern Farmer of the Year, an award given at the Sunbelt Expo.

Everett Williams’ father, John Williams, converted the family’s land in Morgan County from a cotton farm to a dairy in 1958. Everett Williams remembers his father working to milk 50 cows a day. Today, the farm milks 1,700 cows daily.

As Farmer of the Year, Everett Williams (BSA – Dairy Science, ’75) received recognition for his achievements in the dairy industry. Williams has been involved in the farm throughout their lives, and both Justin and Daniel Williams have returned to Morgan County to take W Dairy into its third generation.

- Merritt Melancon
In moving to a director position within the University of Georgia College of Agricultural and Environmental Sciences Office of Development and Alumni Relations, Mary Ann (Davis) Parsons (BSA – Agricultural Communications, ’02; MAL – Agricultural Leadership, ’06) feels her career has come full circle.

As a CAES graduate student, Parsons worked in the college’s Office of College Advancement as an alumni and development specialist in 2002. She accepted a full-time position with Georgia 4-H in 2005, most recently acting as the executive director of the Georgia 4-H Foundation. There, she managed a team that, last fiscal year, put the foundation 164 percent over its fundraising goal. She was named assistant director of the CAES development office in 2011, then interim director in 2013.

As of August, she’s returned to the college, to the same office — it’s now called the “Office of Development and Alumni Relations” — and, as the senior director of development, she has a vision of engagement.

“Moving into this role, I’m excited because the university’s in a capital campaign and our college has an opportunity to increase the donor base with alumni and other supporters and for them to see the value of what we do through instruction, research and Extension.”

Parsons sees her role, and that of her team, as one of fostering connections. By engaging stakeholders, she hopes to continue increasing alumni involvement and giving to meet the goals of the dean and the needs of the college.

“(We) should be seen as a connector and trusted resource to connect their [stakeholders’] passions to priority needs of the college,” Parsons said. “In turn, that will open doors for us.”

Parsons grew up in Bainbridge, Georgia, on a cotton and peanut farm. She raised swine beginning in fifth grade — she sold that farm. She was actively involved in Georgia FFA as state vice president from 1998 to 1999, was a Georgia FFA Southern Region Star Farmer and National FFA Prepared Public Speaking finalist. She earned her American FFA degree in 2000.

Parsons entered UGA as a sophomore — she stayed in Bainbridge her freshman year while she was a state FFA officer — and was immediately approached about starting an agricultural sorority on campus. She became the charter president of Sigma Alpha that fall. Parsons belonged to numerous other CAES and South Campus organizations during her time as a student.

Since receiving her graduate degree, she’s served on CAES Alumni Association, Sigma Alpha, National Association of Extension 4-H Agents, and National Agricultural Alumni and Development Association boards and committees. She’s been presented with awards by the some of the same organizations and was a part of Georgia Trend magazine’s 40 Under 40 in 2012.

Parsons started in her new position on Aug. 1 and is available at parsonsm@uga.edu. - Kathryn Schiliro

Five University of Georgia College of Agricultural and Environmental Sciences alumni are part of the UGA Alumni Association’s 2017 40 Under 40. The association’s annual 40 Under 40 list recognizes young UGA graduates who plan to maintain a lifelong commitment to the university and impact lives through their professional and personal endeavors.

1. Travis Moore (BSA – Food Science, ’13) is a senior brewmaster for Anheuser-Busch InBev in Kirkwood, Missouri. His philanthropic efforts at the brewery include involvement in the United Way and the Anheuser-Busch Emergency Drinking Water Program in partnership with the American Red Cross.

2. Marcus Jones (BSES – Environmental Resource Science, ’09) is the president of the Detroit Training Center. Through the center, he provides vocational, skilled-trades training, which creates jobs for Detroit residents who have difficulty finding gainful employment. To date, more than 7,500 people have been trained through the center, which is currently expanding to Flint, Michigan, to create jobs around replacing that community’s old, lead pipes.

3. Lauren Griffeth (BSA – Agricultural Communication, ’05) is an administrative director in the UGA CAES Department of Agricultural Leadership, Education and Communication in Athens, Georgia. She draws inspiration from the strong female mentors she’s found in Georgia 4-H, UGA Cooperative Extension and the UGA Women in Agricultural Leadership Initiative. She is penning a book about the role women will play in agricultural leadership as the world’s population increases.

4. Sam Watson (BSA – Agricultural Education, ’02) is the representative for Georgia State House District 172 and is a partner in Chill C Farms and Moultrie Melon Company in Moultrie, Georgia. At Chill C Farms, Watson manages the production of 500 acres of vegetables and coordinates sales to produce buyers. He decided to run for state house in 2011.

5. Casey Bethel (MS – Agronomy, ’05) is the 2017 Georgia Department of Education Teacher of the Year and is based at New Manchester High School in the Douglas County School System. In an effort to bring the needs of Georgia’s students and their families to the attention of the federal government, he’s met with President Donald Trump, Secretary of Education Betsy DeVos and Georgia’s senators.

To see the full 40 Under 40 list, visit alumni.uga.edu/40u40. - Kathryn Schiliro
This fall, students taking courses at the University of Georgia Teaching Dairy are better equipped to learn thanks to recent renovations to the dairy’s classroom space. Updates included an increase in the footprint of the classroom — capacity grew from 25 to 30 students — air conditioning, a new roof, new furniture and technology. A demonstration window in place between the classroom and milking parlor that let too much moisture into the classroom was walled up. Until this spring, the dairy hadn’t seen any student-related facility upgrades in about 40 years. The most recent renovations to the facility were to the barn and milking parlor.

“Now, to us, it’s not just a building and a pretty facility, and we have nice, clean chairs to sit in now,” said UGA College of Agricultural and Environmental Sciences Assistant Professor Jillian Bohlen (BSA – Dairy Science, ’03, MS – Animal Science, ’05), who teaches courses at the dairy. “To the students, it meant that we cared about this farm again.”

The dairy currently houses a variety of courses — basic animal practicum, dairy production and management, dairy cattle evaluation and applied animal reproduction classes — that have a hands-on component. Student workers and interns, some of whom are pre-veterinary students gaining dairy knowledge, are constantly involved in the dairy’s everyday tasks, like milking the herd and feeding calves.

In addition to classroom upgrades, a designated space for the dairy’s office was re-established. Until the renovations, the dairy’s single classroom also functioned as an office space where dairy records were kept and student workers clocked in and out. Space for a break room and an area for students to congregate and do group work were also added as part of the renovations. Bohlen plans to incorporate a display featuring the history of the farm to the walls of that area.

“The general dairy industry in this state, they’re proud that the university’s invested in this dairy as well (and) excited to see that maybe this will bring even more student interest to the farm, which is a positive for them as we look for the next generation to enter the industry,” Bohlen said.

UGA’s dairy, established in the 1800s, moved into a new barn in 1935 with a herd of Jersey and Holstein cows. That barn, now the Four Towers Building, currently houses the UGA Visitors Center and the college’s Office of Development and Alumni Relations, activity center, and Department of Agricultural Leadership, Education and Communication. The dairy was moved to its current location in Winterville, Georgia, about 10 miles from the Athens campus, in 1974.

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Agriculture Abroad Photo Contest

Between the camera and the cowboy

The sun sets on the backs of two Uruguayan gauchos on horseback. Hooves stomp and cattle stampede through the field as the gauchos carefully herd the cattle out from the ranch and into a pen.

Photographer Caroline Williams, a senior majoring in agricultural education at the University of Georgia College of Agricultural and Environmental Sciences, was studying abroad in Uruguay. She was participating in a program with that country’s National Institute of Agricultural Research and had the opportunity to witness a cow-calf operation when she snapped the photo that won CAES’s 2017 Agriculture Abroad Photo Contest.

“It takes you back in time to see all of (the gauchos) on horseback and to see what they wear,” Williams said. “They all wore chaps and berets or some kind of cowboy hat. It was pretty cool.”

Williams said that it was humbling to see many people using horses and other animals to help with farm work. Reflecting on age-old traditions of farming and herding, she pointed out the differences between Uruguayan and American agricultural practices.

“We’re so much more mechanized,” Williams said.

Williams enjoyed studying the gauchos’ work with the cattle and the Uruguayan way of life and agriculture. Throughout her study abroad experience, she said she was reminded of the peaceful, historic methods that were, and are, used to tend livestock and was impressed by the passion these producers have for their work. • Erica Cooke