



Martin-Gatton

College of Agriculture,
Food and Environment

September, 2023

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On the web

<http://afs.ca.uky.edu>



<https://www.facebook.com/UKAnimalandFoodSciences>

Reconnect, Graze and Celebrate



"Under the Tent"

We hope you plan on attending the **2023 Animal and Food Sciences Reunion**. We'll gather "under the tent" on Friday night, **September 29** to reconnect with alumni, faculty and staff of the Department of Animal and Food Sciences.

Supper will be in the form of our traditional commodity tasting stations. You'll be able to graze your way through delicious smoked beef, lamb and pork served by some of your favorite faculty members. The culinary folks in the UK Meats Lab will also be serving one of their signature gastronomic surprises. In addition to the carnivore cuisine, we'll have mouth-watering dessert crepes served by the always entertaining poultry personnel and old-fashioned fruit cobblers topped with ice cream dished out by our equine folks. In between grazing and socializing, you'll have the opportunity to bid on some great items in the **Annual Silent Auction** to benefit the AFS Undergraduate Scholarship Program.

Our guest speaker this year is someone you'll want to get to know. **Dr. John "Scott" Radcliffe** assumed the role of chair of the Department of Animal and Food Sciences on July 1 (*see page 2*). He brings to us a strong history of working across the land-grant mission areas of teaching, research and extension. Dr. Radcliffe will share some of his plans for working with students, staff and faculty as well as enhancing collaboration with commodity groups and stake holders as the department moves forward.

The evening will conclude with presentation of the 2023 Distinguished Alumnus Award and induction of the 2023 Animal and Food Sciences Hall of Fame Member (*see page 7*).

So come join us "under the tent" to *reconnect, graze and celebrate*. It won't be a reunion without YOU!



Dr. John "Scott" Radcliffe

Please RSVP your intention to attend - details on last page.

Department Update

Note from New Chair

I am excited and honored to be the new chair of the Department of Animal and Food Sciences in the Martin-Gatton College of Agriculture, Food and Environment. I grew up on the eastern shore of Maryland and earned degrees from Virginia Tech, where I met my wife Meghan Wulster-Radcliffe in graduate school. I ended up on the faculty at Purdue University while my wife became CEO of the American Society of Animal Sciences. Meghan, our daughter Malia, and I are all enthusiastic about our move to Kentucky. My research has focused on swine nutrition and gastrointestinal health, but I have always joked that I work with pigs to support our horse habit, as everyone in our family rides. I have been blessed over the years to have phenomenal colleagues to work on various teaching, research and extension projects across all livestock species. The Department of Animal and Food Sciences has a strong history of award-winning teaching, high impact research and exemplary extension programming. My vision is to evolve and grow these strengths to meet the current and future needs of our students and stakeholders. Housing animal and food sciences in one department uniquely positions us to address teaching, research and extension

needs from farm to fork. My proudest accomplishments throughout my career have been through the successes of undergraduate and graduate students that I have taught and/or mentored. As a result, I am dedicated to making sure that we continue to maintain and build our relationship with alumni. I look forward to meeting you in the future.

John “Scott” Radcliffe



Scott , Meghan and Malia Radcliffe

2022 Award Winners



Distinguished Alumnus
Dr. Kimberly K. Ragland



Hall of Fame Inductee
Dr. Barbara P. Glenn

Retirement



Dr. Donna Amaral-Phillips

The following is an excerpt from a story posted by Kentucky Forage News on May 2 upon dedication of the 2023 Kentucky Grazing Schools to Dr. Amaral-Phillips, who retired this year after a long and award-winning career as Dairy Extension Specialist at the University of Kentucky.

Donna Amaral-Phillips is a co-founder of the Kentucky Grazing Schools and has been an integral part of every session since 1996. Her talk on 'Meeting Nutritional Needs on Pasture' has been a staple of the program since its inception.

Throughout her career, Donna's goal has been to educate dairy farmers, industry personnel, veterinarians and Cooperative Extension agents on the fundamentals of dairy nutrition and management. Her extension education program centered on applying sound, science-based nutrition recommendations for replacements and lactating dairy cows. She often used hands-on demonstrations and facilitated farmer-led discussion groups. She was the project leader for DAIReXNET, a national extension-driven dairy web resource, which provided dairy-related audiences with science-based, peer-reviewed materials and educational opportunities.

Her program has been recognized in many ways, including the Southern ADSA Honor Award and the UK Whitaker Award for Excellence in Extension. In 2020, she was awarded the prestigious DeLaval Dairy Extension Award by the American Dairy Science Association to recognize outstanding achievements in dairy extension.



Awards—2023

Dr. Jeff Lehmkuhler – American Society of Animal Science, Extension Award

Dr. Kyle McLeod – George E. Mitchell, Jr. Award for Outstanding Service to Graduate Students

Katherine Parsley Purvis – (M.S. Student with **Dr. Don Ely**) First Place, American Society of Animal Science, Southern Section Undergraduate 3-Minute Thesis Competition

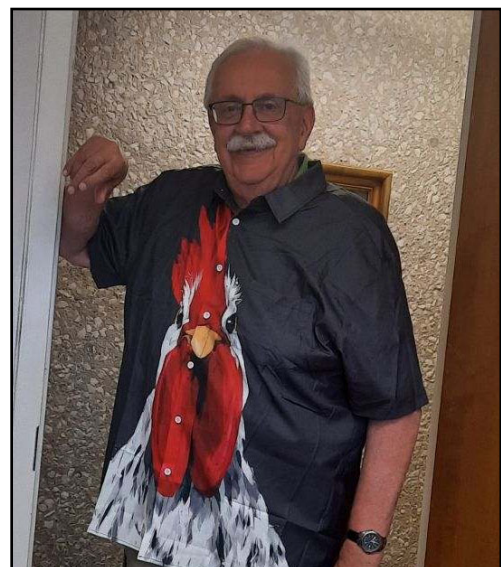
Dr. Gregg Rentfrow – American Society of Animal Science Animal Industry Innovation Award

Dr. Youling Xiong – University of Kentucky, Kirwan Memorial Prize

Dr. Ronald J. Trotta – (Postdoctoral Scholar with **Dr. David Harmon**) American Society of Animal Science, Wetteman Graduate Scholar in Physiology Award

Special Thanks

Dr. Tony Pescatore served as interim chair of the Department of Animal and Food Sciences from July 1, 2022 to July 1, 2023. In that role, he led faculty and staff in maintaining the department's excellence in the areas of teaching, research and extension.



Dr. Tony Pescatore

Many thanks are extended to Dr. Pescatore for fulfilling this role with dedication, expertise, patience and a sense of humor.

Around the Farms

UK Sheep Unit—Helping Advance the American Flock

National Sheep Improvement Program

The UK Sheep Unit, located on the C. Oran Little Research Center in Woodford County, is home to flocks of purebred Hampshire, Polypay and White Dorper sheep. These flocks are used for teaching, research and extension activities. All three breeds are enrolled in the National Sheep Improvement Program (NSIP), which aims to provide predictable, economically important genetic evaluation information to the American sheep industry by converting performance records into relevant decision-making tools.

Performance data recorded on UK sheep are submitted to NSIP and the Estimated Breeding Values (EBVs) that are returned are used to select breeding sheep that will drive genetic change within each of the three flocks. Those EBVs also drive genetic change in the flocks of producers who buy breeding stock from UK. One such opportunity occurred July 28-29, 2023 at the Center of the Nation NSIP Sale in Spencer, IA. Over 200 head of premium breeding stock were sold to be part of “America’s Genetic Foundation for a Profitable Sheep Industry.” Four Polypay sheep from the UK flock were part of this sale. It was the first time since joining NSIP that UK sold breeding stock through this national sale. Polypay Ram UK 22-2412, shown in the accompanying

of lambs born and number of lambs weaned, making him one of the best overall rams in the sale. UK Polypay ewes went to Taylor Made Polypays in Arlington, WI and P Squared Farm in Salem, MO. Since accuracy of within breed EBVs depends on genetic connectedness between flocks, sales like these help to drive genetic improvement of the entire breed.



Left to right, Dale and Lila Schmidt, Grandview Polypays, UK 22-2412, LeeAnn Jacks, Dr. Debra Aaron and Matthew Hamilton, University of Kentucky.

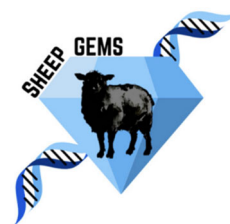


UK 22-2404 (Photo by Austin Johnson at A. Johnson Livestock Photography)

photos, was purchased by Grandview Polypays of Marshall, MN. Based on EBVs, he ranked in the top 5% of all 2022-2023 born Polypay sheep for weaning weight and post-weaning weight and in the top 25% for number

Innovation Flock

The UK Polypay flock is recognized as an Innovation Flock for its inclusion in the Sheep Genetics, Environment, Management and Society (GEMS) Project, which is directed by Dr. Ron Lewis, University of Nebraska-Lincoln. Sheep GEMS aims to enhance sustainability of these systems by genetically improving the robustness and climatic resilience of the national sheep flock. The goal is to build and evaluate large numbers of sheep with relevant genomic and performance data. As explained by Lewis, “Sheep GEMS is about joining together performance records collected on-farm with information at the DNA level in order to do a better job of evaluating our sheep. The structure of NSIP makes this possible.” Ultimately this project has the potential to create a paradigm shift in the U.S. sheep industry. The UK Sheep Unit is proud to be a part of that change.



Undergraduate Programs

New Degree Options for Departmental Majors

Animal Sciences—New and Updated Degree Options

Students interested in Animal Sciences come from varied backgrounds and their interests range from animal production and management to marketing and public relations; from public education and extension to graduate training in research, teaching and veterinary medicine.

New and updated degree options allow Animal Sciences majors to complete a program of study that best combines their animal interests with their desire for an exciting and rewarding career.

The **Animal Enterprises and Production** option allows students to focus their studies on animal care and management and allied areas such as agronomy, accounting, agricultural economics and business. This option prepares students to go directly into careers within the animal agriculture industries. Students can choose a food animal or equine specialization within the Animal Enterprises and Production option.

The **Pre-professional** option prepares students for applying to professional schools (such as Veterinary, Medical, Dental or Pharmacy), pursuing advanced graduate degrees in animal sciences related disciplines, and seeking careers in research or technical services related to animal production.

Students get hands-on experience with university herds and flocks in addition to meats and research laboratories. Internships, undergraduate research experiences, study abroad programs and faculty-led mentorship offer students opportunities to obtain a wide variety of experiences. Additionally, students can take advantage of various extracurricular activities including Block and Bridle Club, Avian Science Club, Dairy Club and Pre-Vet Club.

Food Biosciences—A New Name and New Degree Options

Food Biosciences, formerly Food Science, is the major where science and business meet food. Students are prepared to lead the ever-expanding global food and beverage industry. Food bioscientists play a vital role in ensuring the world's food supply is safe, delicious, healthy, plentiful and sustainable. Students study what occurs as food travels from the farm, field or water to human consumption.

Food biosciences encompasses many disciplines, including chemistry, biology, nutrition and business in an effort to create novel products and improve food quality and safety.

Food Biosciences majors can pursue specific interests by selecting one of three study options.

The **Research and Development** option focuses on preparing students for industry careers, graduate or professional school.

The **Distillation, Fermentation, and Beverage Sciences** option offers a multidisciplinary approach intended for students interested in the innovation and development of beverages, alcohol and fermented foods.

The **Food Business Management** option emphasizes business management, entrepreneurship, marketing and finance of food businesses.



Animal and Food Sciences Alumni Scholarship

Funds raised through the Animal and Food Sciences Reunion Silent Auction support the Animal and Food Sciences Alumni Scholarship. This year the scholarship was awarded to two individuals, **McKenzie Bell** and **Charity Moore**.

McKenzie Bell

The first recipient of the 2023-2024 Animal and Food Sciences Alumni Scholarship is McKenzie Bell, a senior from Monticello, Kentucky. McKenzie's enthusiasm for animal agriculture started at a young age as one of her earliest memories was helping nurse a bottle calf that was born during a cold, wet Kentucky spring day. She built upon that early interest throughout high school being involved in 4-H and FFA. When enrolling at the University of Kentucky, McKenzie took on the daunting task of pursuing dual degrees in Animal Sciences and Agricultural and Medical Biotechnology. This academic year McKenzie is serving as president of the Block and Bridle Club and is a member of Sigma Alpha and the Western Equestrian Team. After graduation in May 2024, McKenzie plans on attending veterinary school with the long-term goal of owning her own large animal practice in rural Kentucky.



McKenzie Bell

Charity Moore

The second recipient of the 2023-2024 Animal and Food Sciences Alumni Scholarship is Charity Moore, a sophomore majoring in Animal Sciences with an agricultural economics minor. Charity grew up on a grain farm in Germantown, Ohio and has been involved in the beef cattle industry since childhood. At a young age Charity was bitten by the livestock showing bug and began exhibiting cattle at shows through her involvement in 4-H and FFA. Today, in addition to being a college student, she shows beef cattle on various national show circuits. As a student at the University of Kentucky Charity is an active member of the Block and Bridle Club, Sigma Alpha, and Collegiate Farm Bureau. Upon graduation, she plans on having a career in the beef cattle industry. Eventually, Charity would like to own and operate her own purebred beef cattle herd.



Charity Moore



2023 Distinguished Alumnus

Jim Akers was born and raised on a small tobacco and cattle farm in Hardin County, Kentucky and graduated from West Hardin High School in 1982. After studying agriculture at the University of Kentucky he graduated with a B.S. in Animal Sciences in 1985. While at UK Akers was a member of the livestock judging team and President of the Block and Bridle Club.

Akers worked as a farm manager in Central Kentucky and then East Alabama for the next 15 years with involvement in purebred and commercial cattle, sheep, tobacco, feed grains, hay and timber production. During this period he served the industry as President of the Kentucky Sheep and Wool Producers Association.

In 2000, Jim made a career change and began working for UK as Beef Integrated Resource Management Coordinator. In this role, he was instrumental in the formation and operation of the Kentucky Beef Network and Southeastern Livestock Network.

In 2007, Jim made yet another career shift when he was tapped to serve as COO of the newly formed Blue Grass Livestock Marketing Group. Since that time he has helped grow the company and diversify its operation well beyond the operation of seven local/regional

livestock markets and an internet marketing business. Blue Grass is the largest livestock marketing firm in the Eastern US selling well over 500,000 cattle annually. He currently serves on the Kentucky State Veterinary Identification Advisory Committee and the National Livestock Marketing Association Government and Industry Affairs Committee.



Mr. Jim Akers

Akers, his wife Christine (DVM) and their two daughters, Elizabeth and Caroline, son-in-law Tylor Buckles and grandson Thomas James, live in Paris, Kentucky where Christine operates Paris Veterinary Clinic. The family also owns and operates The Local Connection inside the Blue Grass Regional Marketplace. In Paris, Jim serves on the Annunciation Church Parish Council. In addition, the family is active in 4-H and other youth related activities.

2023 Hall of Fame Induction

Walter "Roy" Burris received his B.S. from Tennessee Technological University and his M.S. and Ph.D. from the University of Kentucky. He started his career at Mississippi State University but spent most of his professional life as an Extension Professor at the University of Kentucky, stationed at the UK Research and Education Center in Princeton. Dr. Burris focused on beef cow/calf management, primarily in the areas of nutrition and forage utilization. He served as chair of the College's Beef Integrated Resource Management (IRM) Committee and has held leadership roles in the American Society of Animal Science Southern Section. Roy was a pioneer in the transition to Extension professionals securing their own funding to deliver programming; he was responsible for acquiring over \$5 million in external funding, with the majority directed at Extension programming. He received one of the first USDA grants targeting Extension to expand the Kentucky IRM program that is still going strong today. He coordinated the Certified Preconditioned for Health program, established a statewide uniform mineral program and was the driving force in implementing the Master Cattleman program. These programs have educated thousands of Kentucky cattlemen and returned millions of dollars to the Kentucky beef industry. Roy

received the Southern Section ASAS Extension Award (2001), the M.D. Whiteker Award for Excellence in Cooperative Extension Service Education by the Kentucky Association of Extension Professionals (2003), the American Society of Animal Science Fellow Award in Extension (2009) and the UK CAFE High Impact Extension/Research Award (2016). In 2018, he was named a Distinguished Agriculture Alumnus by Tennessee Tech University and was inducted into the Kentucky Cattlemen's Association Hall of Fame.

Dr. Burris and his wife Karen have three children and four grandchildren.



Dr. Roy Burris

Graduate Programs

Miranda Agbana, 2023 Outstanding MS Candidate

Miranda received her M.S. degree in May 2023. During her graduate program she worked with **Dr. Rachel Schendel**, conducting research on the characteristics of hempseed cell wall polysaccharides and the impact of ruminal fermentation on those characteristics.

Prior to graduate school, Miranda earned a B.S. in Equine Science & Management from UK with a minor in German. During her undergraduate studies, she assisted Dr. Morgan Pyles with a mare and foal study in Dr. Laurie Lawrence's lab where her interest in research was first sparked. While in Dr. Schendel's lab, Miranda traveled to the Karlsruhe Institute of Technology in Germany to learn new methods and conduct research with collaborators. She is a recipient of the Clair L. Hicks Food Science Scholarship and the Eli Lilly and Women Chemists Committee Travel Award. Additionally, Miranda served as vice president of the AFS Graduate Association.



Miranda Agbana

Sarah N. Carr, 2023 Outstanding Ph.D. Candidate

Sarah received her Ph.D. in May 2023. During her graduate program she worked with **Dr. Phillip Bridges** studying the effects of different forms of selenium on fertility in beef cows with focus on the relevant cellular mechanisms in the corpus luteum, endometrium and developing conceptus. Prior to coming to Kentucky, she completed a M.S. in Animal Physiology at West Virginia University.

While at UK, Sarah also completed Graduate Certificates in Applied Statistics and College Teaching and Learning. She was awarded a University of Kentucky Emeriti Fellowship and served as Vice President of the Graduate Student Congress and President of the AFS Graduate Association.

Finally, Sarah has been awarded an AFRI, NIFA, Postdoctoral Fellowship and will continue her research as a Post-doctoral Scholar at the University of Kentucky.



Sarah N. Carr



Animal and Food Sciences Reunion

September 29, 2023

6:00 p.m. Registration

6:30 p.m. "Grazing" Begins

7:30 p.m. Program

Purchase tickets at <https://alumni.ca.uky.edu/events/animal-food-sciences-reunion>

or RSVP by Monday, September 25 to Shawna Banks at 859-257-7508

or AFSAlumni@uky.edu

Tickets \$10 for adults, free for children under 12.