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Animal Science Newsletter

**Animal Science** 

Fall 2018

### ANSC, Fall 2018

University of Arkansas, Fayetteville. Department of Animal Sciences

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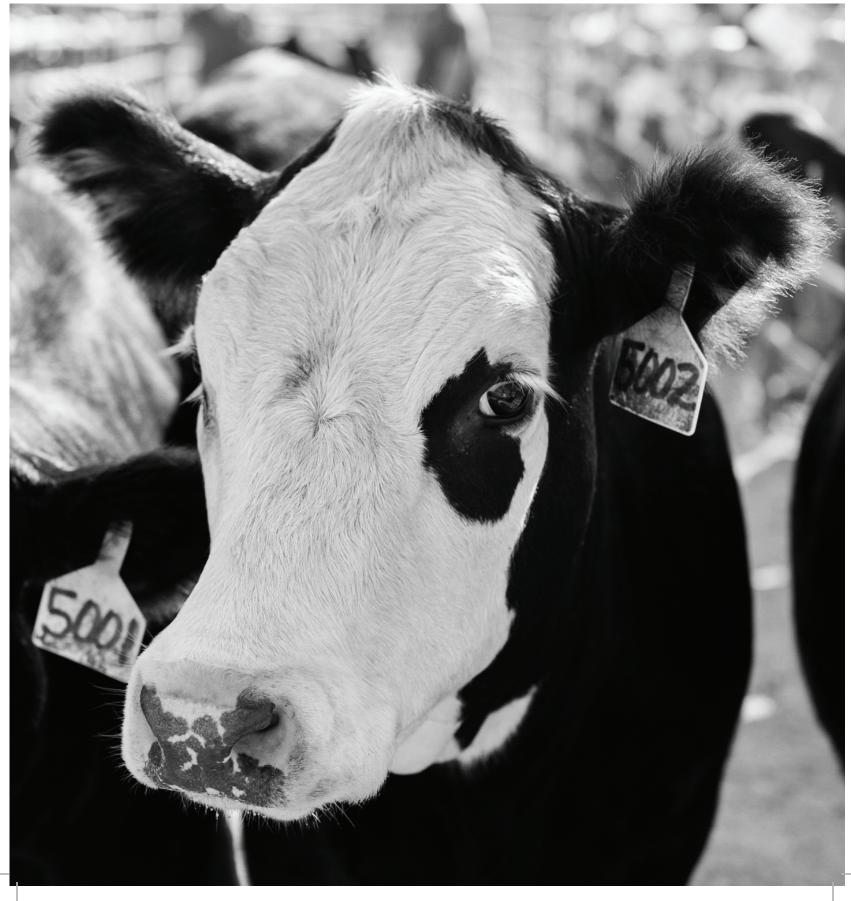
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fall 2018



#### **Animal Science Faculty**

#### Name/Specialty

Looper, Michael Department Head Apple, Jason Meat Science Coffey, Ken Ruminant Nutrition Gadberry, Shane **Beef Nutrition** Huang, Yan Muscle Biology Jogan, Kathi Equine Jennings, John Forage Systems Kegley, Beth **Ruminant Nutrition** Kimbrough, Chelsey Specialty Livestock/Youth Edu. Kutz, Bryan Livestock Judging Looney, Charles Cattle Improvement Maxwell, Charles Swine Nutrition Philipp, Dirk Forage Nutrition Pohlman, Fred Meat Science Powell, Jeremy Veterinarian Rorie, Rick Repro Physiology Rosenkrans, Charles Repro Physiology Russell, Mark Equine Thomas, Lauren Animal Health

Ward, Heidi Veterinarian Yazwinski, Tom

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# In the Loop

Happy

of

The

mester"

finals

from the Department

grades is done. It has

been a busy fall semes-

ter as you will discover

in the following pages.

Briefly, our fifth annu-

Animal Science!

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and posting

stress of

Holidays



Michael Looper Department Head

al Animal Science Day was the biggest yet with over 900 attendees from the University and surrounding community; the Department hosted alumni from the Arkansas Cattlemen's Young Cattlemen's Leadership Class (YCLC); and in collaboration with the King Visiting Scholar Program, we hosted Dr. Steve Stice, a world-renown expert in stem cell biology to campus.

Faculty have been busy conducting research through the summer and fall semesters. Please take time to read in the following pages about Drs. Coffey, Huang, Maxwell, Philipp, and Zhao's novel research. Congratulations to several faculty that have received much deserved research funding this past year! Your efforts were recognized and are greatly appreciated.

The Department thanks Daniel Potter for three great years elevating our equine program, specifically the UA Ranch Horse Team. We wish Daniel the best as he moves to the private sector where we all know it will involve horses! In January, we will welcome Jordan Shore (Missouri State University) to campus as he will assist in teaching the equine courses and coaching the Ranch Horse Team. The Department is blessed with great people that give their all for our research, teaching, and Extension programs. Thanks to Todd Cole (30 years), Chris Tucker (25 years), Robert Story (25 years), Dianna Watson (25 years), Jeannie Hornsby (20 years), and Robert Rhein (20 years) for their outstanding service to this Department. This group was all recognized by the University, this semester, for their dedicated service. Congratulations to Connie Stewart; and Drs. Apple, Jogan, and Kimbrough for receiving peer-nominated awards! Again, it is not surprising when our students and stakeholders communicate accolades for Departmental faculty and staff.

A big welcome to Dr. Charles Looney, Professor and Cattle Improvement Specialist located at the Southwest Research and Extension Center in Hope; Darren Bignar, Pauline Whitaker Animal Science Arena Manager; Michael Pruden, Program Technician, all in Fayetteville, and to Megan Maulden, Administrative Specialist, working with Little Rock faculty.

Recently, teams of four undergraduate students competed for the chance to represent the Department at the Southern Section, American Society of Animal Science (ASAS) meetings in Oklahoma City. The Southern Section Academic Quadrathlon is a yearly competition featuring teams of undergraduate students from universities in the southern United States. Congratulations and good luck to the team consisting of MacKenzie Overstreet, Gage Dixon, Ted Chambers, and Katie Thoden. They will be representing Arkansas in January at Southern ASAS meetings.

As part of the U of A International Education Week, the Animal Science Graduate Student Association (ASGSA) hosted a colorful and fun international banquet complete with over 20 dishes ranging from Chinese black mushrooms to Mexican chicharron salsa verde. We are proud to be a diverse and welcoming department with scholars from many corners of the world. The ASGSA also had a breakfast fundraiser to aid those that lost so much in the California wildfires. This group truly inspires all of us. Thank you.

I hope you have time this busy holiday season to spend with friends and family. I appreciate your sincere interest and support of this Department. Please let us know if we can help you. As always, feel free to contact me [looper@uark.edu; (479) 575-3745] or stop by and visit when you are in Fayetteville.

1 2 Concer

Michael Looper Department Head

2 Animal Science Newsletter

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Cover Photo by: Lauren Husband



### Support Animal Science Department Scholarships By buying a chairback in the Pauline Whitaker Animal Science Center

You can support scholarships for Department of Animal Science students and receive permanent recognition by purchasing a chairback in the Pauline Whitaker Animal Science Center. Purchases are tax deductible and can be made in the name of an individual, a business, or in honor or memory of a loved one or friend. If you are a former judging team member and would like to purchase a seat in honor of your judging team, contact Bryan

#### Kutz at 479-575-4337.

Chairbacks are available for a minimum donation of \$500, although many individuals have donated more.

If you would like to help with scholarships by purchasing a chairback, fill out the form to the right and mail it with a check made out to Agricultural Development Council, with a notation of Arena Chairback to the address on the form at the right.

Chairback Order Form			
Please use separate page if needed.			
Donor Information Name: Address:			
Phone: Email:			
Please list information desired on chairback:			
Make checks payable to:			
University of Arkansas Foundation			
Please make a notation: Arena Chairback			
Mail to: Connie Stewart University of Arkansas 1120 W. Maple Dept. of Animal Science Fayetteville, AR 72701			
fall 2018			

## Student Activities

# M.S. Student Finds Niche in Youth Education Outreach

Sarah Shelby, an Animal Science M.S. student studying under Dr. Yan Huang, spent her fall semester providing outreach to various student organizations in Northwest Arkansas. Shelby focused her efforts on elementary and middle school-aged populations.

"I am quickly finding that children make the absolute best audience for Animal Science learning," said Shelby. "They are engaged, inquisitive, not shy about voicing their opinions, openly ask questions and are so happy to learn-- especially when there are real animals involved. The connection you can make between the concepts they learn in school and real life applications is easier when they are so engaged."

Events that Shelby participated in this semester included a visit to an agriculture education class at Central Junior High in Springdale, where she brought various farm animals and products for the students to learn about; a presentation for a Washington County 4-H Cloverbud program titled "Wool, Meat, and Milk...Oh My!," where she talked about the many different breeds of sheep, as well as their many uses and products; hosting a Girl Scout troop at Dancing Sheep Ranch, where the Scouts learned about the many uses and benefits of small livestock and how to care for them; a workshop for West Fork 4-H members, which included a lesson on human and animal cardiovascular health; and many other outreach and education efforts.

"We always talk about the disconnect people currently have with where their food comes from, how farms operate, and the misinformation surrounding the care of our food animals," said Shelby. "In the near future, today's children will be making not only buying decisions as consumers, but also influencing and shaping public response in our industry."

Shelby plans to continue her outreach efforts throughout her studies.

"By bridging this gap early on in a child's life," said Shelby, "we can look forward to more well-informed adults." }



Sarah Shelby shows students the inside of a real bovine rumen at the CMASE Summer STEM Camp.

# Ph.D. Student Selected to Attend Borlaug Summer Institute

Valens Niyigena, a PhD student specializing in ruminant nutrition in the Department of Animal Science, was selected along with 40 other students across all U.S. universities to attend the 2018 U.S. Borlaug Summer Institute on Global Food Security from June 3rd through 16th at Purdue University.

The Borlaug Summer Institute was launched in 2012 and is organized annually. The Institute's main objective is to bring together graduate students from different



Valens Niyigena gives his presentation at Borlaug.

areas of study to collaborate and develop an understanding of the challenges surrounding global food security. This program is funded by the U.S. Government's Feed the Future Initiative. It provides a working knowledge of these issues, with a focus on cross-disciplinary problem solving of real-world development challenges.

During the two-week learning program, students participate in lectures, panel discussions, field trips and interdisciplinary projects. Lectures are given by experts in varying fields related to food production and consumption. The participants are engaged in panels discussing the current and future global food security situation and ways in which their current research can be applied to solve food insecurity problems. Group discussions and field trips give attendees new skills to develop a multidisciplinary approach toward a sustainable goal. Based on their interests and expertise, students are assigned a specific country to develop a multidisciplinary project addressing food security challenges.

Niyigena and his team developed the Solar Utilization for Nutrition (SUN) with the objective of helping Ethiopia use solar energy for drying vegetables while reducing postharvest loss and malnutrition in women and children.

Niyigena's current academic research focuses on enhancing sustainability of forage-based ruminant production systems by improving N-use efficiency and decreasing Nitrogen emissions. His advisor is Dr. Ken Coffey.

"Attending the summer institute gave me an opportunity to meet and share knowledge and experience with people from other fields of study," said Niyigena. "I will be using the information I gained at the Borlaug Summer Institute to improve my ongoing study. I will continue collaborating with scientists from other fields of study to develop an integrated and sustainable project that will address food security challenges in Arkansas." }

## **Student Activities**

## Animal Science Graduate Students Host International Banquet

In celebration of International Education Week at the U of A, the Animal Science Graduate Student Association (ASGSA) hosted a colorful and fun international banquet on the evening of November 16th at the Pauline Whitaker Animal Science Center. The event was led by Rwandan Animal Science Ph.D. student Valens Niyigena.

Animal Science graduate students, faculty, and staff gathered for a night of new foods and cultural expression. Each attendee brought a dish from their home country or region, which included over 20 specialties ranging from Chinese black mushrooms to Mexican chicharron salsa verde to Louisiana gumbo. During the banquet, students



Chinese student Jingsi Tang wears traditional dress.

and faculty gave presentations about their homeland. Rwandan families wore traditional dress, a German professor hosted a German trivia game, an Indian student decorated the floors with stunning rangoli art, and an Iranian family brought traditional Baklava to share.

Animal Science is proud to be a diverse and welcoming department with scholars from many corners of the world. The Department looks forward to celebrating International Education Week again next year, as well as growing its diverse faculty, staff, and students. }

# Students Visit Australia to Study Ecology and Wildlife

Thirteen students had the opportunity to travel to Australia from August 8 to 18th for the faculty-led study abroad trip "Trekking Australia: Animals, Aborigines, Rainforests, and Reefs." The trip was facilitated by equine science instructor Dr. Kathi Jogan. While in Australia, the group spent time in Brisbane, Townsville, Magnetic Island and Hidden Valley. The students documented their daily activities on a blog, which can be viewed at www.uarkaustralia2018.wordpress.com.

Before they departed, the students wrote anticipatory blog posts. "I am excited to see a platypus, especially at Hidden Valley where we will have a chance to observe them in the wild" said Poultry Science Graduate Assistant Lesleigh Beer. "I also look forward to learning about wildlife and environmental management practices utilized on the Great Barrier Reef. I hope to enhance my decision making capabilities and become a more con-



Lesleigh Beer and Justin Hamm hike the Fort Trail.

fident international traveler."

The experience was packed full of activities, education and travel. The group visited the Lone Pine Koala Sanctuary, the University of Queensland, the Geckoes Wildlife Show, the James Cook University School of Biomedical Veterinary Science, and Billabong Sanctuary, among numerous other places, as well as experienced a guided rainforest walk, went wild platypus spotting, went snorkeling in the Great Barrier Reef, and so much more. Each day had at least one to two major educational activities on the itinerary.

"Seeing a platypus swimming in the wild, learning to throw a boomerang from the Aborigines, taking a selfie with a kangaroo, seeing the largest crocodiles have lunch, becoming friends with koalas, and of course snorkeling the Great Barrier Reef are the examples of a lifetime of fun we had in just under two short weeks," said biomedical Engineering student Olga Brazhkina. "Because of this trip I was able to bond with classmates from a wide variety of backgrounds, which really pushed me personally."

Many students specifically expressed excitement at the opportunity to hold a koala and spot platypus in the wild. The unusual and close-up animal experiences were a major highlight for many students who went on the trip.

"I wish it could've lasted longer," said Animal Science student Noah Black-Ocken. "This study abroad trip was the best de-



Olga Brazhkina feeds a kangaroo at Lone Pine Sanctuary.

cision I have ever made. I had a chance to learn so many new things about animals that were completely foreign to me. I was very surprised with how many of the animals we were allowed to hold and actually get to experience hands on.

Many students also mentioned the diversity of academic backgrounds of those who went on the trip. Students' majors ranged from mathematics to biomedical engineering to animal science, with many others in between.

"My peers and I differed greatly in our first observations of new animals and settings, in the questions we wanted to ask, and in the connections we made between our existing knowledge and the new ideas presented to us," said mathematics student Emily Gentles. "I am grateful to have had such a diverse experience and am happy to have made new friends." }

# Student Activities

# Animal Science Day Hosts Almost 900

Almost 900 people attended the fifth annual Animal Science Day on Wednesday, Oct. 31. Although it was a rainy Halloween, the Department was more than happy to give the community a dry place to trick-ortreat, as well as a host of other activities to keep parents, kids and dogs entertained.

The event, hosted by Departmental faculty, students, staff and volunteers, was held at the Pauline Whitaker Animal Science Center. The night featured a livestock "cutie corral" for people to interact with and learn about farm animals, the Pie-A-Professor fundraiser, costume contests for both kids and dogs, a haunted house presented by ASGSA, trickor-treating and education stations hosted by Animal Science clubs, games and more.

The annual event gives the department a chance to educate and celebrate animal science with students, children, alumni and the community. }



Animal Science Day attendees pet a horse at the "cutie corral."

## **ASGSA Fundraises**

The Animal Science Graduate Student Association held a pancake breakfast fundraiser on December 6th to support those affected by the recent wildfires in California. One-hundred percent of the proceeds were donated to wildfire relief efforts. The students also held a holiday dessert sale to raise funds. All baked items were made and donated by Department of Animal Science faculty, staff and students.

"We found it important to help out because it's related to our field — agriculture," said association member Laine Zammit. "So many people's livelihoods were destroyed by the fires, and it's especially bad for farmers. They've lost so much."

"So many people have nothing right now, and we want to give them everything we can," said association member Callan Lichtenwalter. "We're just trying to help any way we can." }

### Animal Science REPS

The Animal Science REPS had a successful semester coordinating events, visiting local high schools, and recruiting at various events. The students have been touring local schools in an effort to educate about animal science, veterinary medicine and the University of Arkansas.

The function of the ANSC REPS is to promote animal science, provide student perspectives to future students, and educate about the department. This year's REPS members are Amy Frank, Zoey Smith, Bailey Carpenter, Holley Herndon, Annalee Parker, Kelsey Johnson, Colleen Kennedy, Mersady Redding, Shannon Leonard, Elle Rottman, Kaylee Chambers and Sophia Mauldin. }



Left to right: Mersady Redding, Sophia Mauldin, Colleen Kennedy, Bailey Carpenter, Holley Herndon, Zoey Smith and Annalee Parker.

#### An Action-Packed Fall Semester for Pre-Vet Club

Fall semester was packed full of activities for the Pre-Vet Club. Activities included promoting pre-vet at Razorbash and the Carnival of Clubs, collecting canned foods for Fayetteville Animal Services, hosting a guest speaker from Spay Arkansas and participating in the Philosophy Club's "Clash of the Clubs: An Animal Rights vs. Animal Welfare Debate," among others.

Most notably, Pre-Vet Club officers established a new scholarship for outstanding club members. Available now, the annual \$500 scholarship will be awarded to one student per semester.

The club is now preparing for upcoming Spring activities. Some events to look forward to are the "Christian Veterinary Mission's Real Life: Real Impact Weekend" at Oklahoma State and the American Pre-Veterinary Medical Association Symposium at Ohio State. }



Pre-Vet Club officers fundraise by selling Pre-Vet shirts at the Carnival of Clubs.

#### Livestock Judging Team Competes in Nebraska

The Livestock Judging Team has had a busy competition season. The team had a notably successful trip to Nebraska on September 30th to compete in the Aksarben Intercollegiate Livestock Judging Contest.

At Aksarben, the team, coached by Bry-

an Kutz, finished third in swine, fourth in sheep/goats, fifth in cattle and reasons, and fourth overall. Lacy Barrett finished as the third high individual in swine and ninth overall. Baxter Harrod finished fifth high individual in cattle.

## **Departmental Activities**

# **Animal Science Hosts Young Cattlemen's Leadership Class**

The Department of Animal Science hosted the third session of the Arkansas Cattlemen's Young Cattlemen's Leadership Class (YCLC) from October 29th through 31st in Fayetteville. Participants gained an under-



Tim Johnson and Jason Apple fabricate meat carcasses.

standing of the processes their beef product undergoes from the harvest to plate. In understanding those processes, they will be better educated to relay the industry story in any situation, whether it be working in retail at the meat case, through an online blog, or at conferences with other cattle and beef professionals.

The program focused on beef cuts and the processes necessary to provide retail meat case products. Members of the class participated in a mock auction to purchase beef steers, processed the steer that they purchased and then consumed some of the end product during a sensory and tenderness demonstration.

Our gratitude is extended to our meat sci-

entists Drs. Jason Apple and Janeal Yancey and Tim Johnson (Manager, UA Division of Agriculture Red Meat Abattoir) for coordinating this event. This program was funded by the Arkansas Beef Council. }



Janeal Yancey discusses meat quality at YCLC.

## Expert in Stem Cell Biology and Cattle Cloning Visits Animal Science

Dr. Steven Stice, director of the University of Georgia's Regenerative Bioscience Center, provided two seminars on campus in October.

In addition to directing the Regenerative Bioscience Center, Stice is the Georgia Research Alliance Eminent Scholar endowed chair, DW Brooks Distinguished Professor and co-founder of several biotech start-ups, including ArunA Biomedical; the first company to commercialize a stem cell product used to facilitate approval of Pfizer's current cognitive enhancing pharmaceuticals.

His first seminar was sponsored by the Department of Animal Science King Visiting Scholar Program. His talk was titled "Animal induced pluripotent cell for gene modifi cation, vaccine production, and evolutionary selection in a dish."

Stice also spent the afternoon talking with Dr. Yan Huang's Muscle Growth and Development class. A round table-style visit, the students discussed muscle growth and were given the opportunity to ask in-depth questions about Stice's research. After the seminar, animal science graduate students were invited to meet with Stice for a comprehensive industry Q&A.

A 30-year veteran researcher in bio-manufacturing technologies and regenerative medicine, Stice is world-renowned for developing



Steven Stice visits with Dr. Yan Huang's Muscle Growth and Development class before his seminar.

the first human pluripotent stem cell (hPSC), which has led to 16 U.S. patents in stem cells, cloning and regenerative medicine, including the first U.S. patent on animal cloning and therapeutic cloning from adult animal cells. Stice continues to add to his first-to-market innovations. Working in collaboration with his startup, ArunA and RBC researchers, he is currently developing a new Exosome treatment for stroke that has shown to reduce brain damage and accelerate the brain's natural healing tendencies, in two divergent animal species and two stroke types.

Stice is the UGA academic lead in a research consortium, based in Atlanta; Engineering Research Center for Cell Manufacturing Technologies, which was recently funded \$20 million by NSF. Most recent honors include election to NAI Fellow status, the highest professional distinction accorded solely to academic inventors, and the 2017 Georgia Bio Industry Growth Award. }

## Departmental Activities

# Forage Research Seeks to Reduce Nitrogen Emissions

In a collaborative project between the Department of Animal Science and the Department of Crop, Soil and Environmental Sciences, the two departments are working together to reduce nitrogen leaching in ruminant production systems through a series of diet trials on sheep.

The research, titled "Enhancing sustainability of forage-based ruminant production systems" is holistic and interdisciplinary, with hopes of being an economical and sustainable solution for animal farmers with ruminants. Involved in the research are Dr. Ken Coffey, Dr. Dirk Philipp, Dr. Jiangchao Zhao and Ph.D. student Valens Niyigena from Animal Science, and Dr. Mary Savin and M.S. student Sam Park from Crop, Soil and Environmental Sciences.

"We are trying to retain nitrogen in the animal for better health and productivity," said Savin. "Once the nitrogen is retained in the animal and transformed through digestion into feces, we are looking for the nitrogen to be retained in the soil, instead of leaching into the water supply, for better plant uptake and a better systems approach to nitrogen retention and cycling."

To do this, the researchers are feeding the sheep diets high in tannins. Tannins are often found in higher concentrations in broadleaf plants adapted to warm climates and have



Dirk Philipp carves out research plots at the North Farm.



Sam Park takes nitrogen samples from research plots at the North Farm.

been shown to reduce bloat, internal parasites, and nitrogen excretion in ruminants.

"When a ruminant ingests its diet, a lot of the protein gets broken down in the rumen, and then it produces ammonia, which goes into the bloodstream and then turns into urea," said Park. "Once that oxidizes and hits the ground, that volatizes as ammonia gas and nitrous oxide really quickly."

To mitigate the effects of nitrogen leaching, the team is supplementing the sheeps' current alfalfa diets with two plants that are high in tannins—*Sericea lespedeza* and *Lablab purpureus*. The research will consist of two trials; Lespedeza is being supplemented right now during the fall 2018 trial, and the second trial will use Lablab in spring of 2019.

For each trial, the team is feeding the high-tannin forage to the animals at different proportions to find the optimal level, and then collecting the feces and urine, measuring their nitrogen levels, and applying the urine and a mixture of urine and feces (slurry) to grass plots at the North Farm. After applying the slurry, the team will measure each plot for gas emissions and nitrogen leaching from the bottom of the plots into the soil.

"We have ten different treatments and four replications of each treatment with manure from various supplemental high or low tannin diets," said Park. "The plots are sectioned off by sinking deep square metal perimeters into the ground. Anything that's not in our plots can't get in—it makes a mini microcosm for our research."

"That's where we find out if this hypothesis actually works," said Philipp. "It's where the rubber meets the road. Over a period of a few weeks, Mary and Sam will measure emissions and soil quality. Here in Animal Science we're looking at the microbiome of the animals to measure digestive health and productivity."

As for their decision to conduct the research on sheep, the team believes that sheep provide another opportunity for sustainability and efficiency. Because sheep generally graze broadleaf plants such as Lablab and Lespedeza while cattle graze grasses, co-mingling the two species can provide a symbiotic relationship for the animals and the farmers, as well as for the environment. Animal health could improve, inputs by farmers could be reduced, and greenhouse gas emissions could be decreased.

"We're very excited about the project because it covers areas from the soil microbiome to whole biological and agricultural systems," said Savin. "It's a USDA-NIFA [National Institute of Food and Agriculture] AFRI [Agricultural and Food Research Initiate] grant from the Sustainable Agricultural Systems program, and we've been working hard to have this funded. We're happy that it's been recognized, and we're looking forward to getting some important results." }

### Departmental Activities

### **Research Explores Evolutionary Origins of Vocal Communication Patterns**

Collaborative research entitled "The Evolutionary Origin of Infant-directed Vocal Communication" is looking to find a relationship between communication patterns in humans and non-human species. The research involves Drs. Yan Huang and Ken Coffey from the Department of Animal Science, as well as researchers from Human Environmental Science, Computer Science, Psychology and Music and was made possible by a University of Arkansas Provost's Collaborative Research Grant. The research is looking to examine whether sheep use a special register of vocalization when communicating with their offspring and if that special communication has socio-emotional and attentional effects on infant lambs.

"The research idea came from Dr. Weiyi Mar," said Huang. "His research area is infant-directed speech. As humans, when we talk to infants, we use a different voice. We use higher pitches, softer tones, and sometimes we repeat our words. This pattern is seen in all cultures and languages. So, we are curious about the origin of this infant-directed speech."

"There was research published several years ago that sheep can recognize human faces," said Huang. "Since they are able to recognize their companions and handlers, and there is also evidence that sheep can recognize voices within their flock, maybe they are also able to recognize and produce different tones of voice."

The team will first record a sheep's vocals when interacting with non-related adult sheep before conception. After lambing, they will voice record the same ewe to compare adult-directed vocalizations (ADV) to infant-directed vocalizations (IDV). After comparison, the team plans to play the ADV and IDV alternately to the lamb offspring.

"We will put them into individual pens

with a speaker that plays communications from ewes and compare the behavior of the lamb in response to the two communication methods," said Huang. "Do the lambs approach the speaker more closely when they perceive their mother to be communicating with them or not?"

Eventually, Huang hopes that animal science researchers will analyze how language can impact animal behavior, which may help to create a standard of principles for animal handing for increased animal welfare. }



The collaborative research seeks to understand communication between ewes and lambs.

# **Semester Snapshots**

One of the greatest things about Animal Science is the huge diversity of things you can do in the field!

This semester included (pictured left to right): a tour of the farm for Intro to Animal Science students, a STEM camp for kids, Academic Quadrathlon, lots of hard work by faculty and staff and an awesome haunted house by ASGSA. There's never a dull day in the Department of Animal Science. }











### Faculty & Alumni Awards



Dr. Jason Apple was honored as the overall Outstanding Honors Faculty Mentor at the Bumpers College Fall Faculty Reception.



Dr. Chelsey Kimbrough was honored for her teamwork, innovation and diversity with the Extension Excellence Award for Early Career-- State Extension Faculty.





Dr. Janeal Yancey was recognized for her work in the field of meat science as the Texas Tech University 2018 Meat Science and Muscle Biology Outstanding Alumni.



Dr. Kathleen Jogan was honored with the Outstanding International Education Award at the Bumpers College Fall Faculty Reception for her introduction of three new study abroad programs.



Drs. Jiangchao Zhao, Yan Huang and Charles Maxwell were awarded a \$500,000 USDA NIFA AFRI grant for their research on the effects of top soil exposure on swine gut microbiome.



Dr. Heidi Ward was awarded a \$95,000 USDA NIFA grant for her workshop series "Utilizing Extension to Provide Continuing Education for the Expansion of Veterinary Services in Shortage Situations." }



**BUMPERS COLLEGE** 

ALUMNI SOCIETY

How to Join:

You automatically become a member of the DBCAFLS Alumni Society when you become an active member of the Arkansas Alumni Association. Join online at http://www.arkansasalumni.org/ or call (479) 575-2801 to become a member today. In small and big ways, your gifts change lives. Increasing private gift support is critical to moving the University of Arkansas and the state of Arkansas forward. If you would like to join other alumni and friends to support the Department of Animal Science at the University of Arkansas, contact: Terry Bumgardner, Development Office, Bumpers College, E-108 AFLS, University of Arkansas, Fayetteville, AR 72701, 479.575.2270 or email: tbumgar@uark.edu

# Tell us about yourself!

You can also submit online under the Alumni tab at Animal-Science.uark.edu!

We would like to hear how and what you're doing. Please use this form to provide information about yourself that you would like to see in the Alumni news section of a future Animal Science Newsletter. Also, please let us know if you would like more information about the Animal Science Alumni Society.

Name: Address:			U of A Degree: B.S.  Year M.S.  Year Ph.D.  Year
Email: Phone: Would you like to receive our E-Newsletter? News:	Yes	No	Mail to: Newsletter Editor Department of Animal Science University of Arkansas AFLS B-114 Fayetteville, Arkansas 72701 or Fax to: 479-575-7294

# Grinding to Grilling: Students Learn the Hotdog-Making Process

This semester, students in the Intro to Animal Science Lab, taught by Dr. Lauren Thomas, learned the full hotdog-making process, from grinding to grilling. The students began



their journey at the University of Arkansas Abattoir at the North Farm, where they ground and seasoned a beef, pork, and goat mixture at the direction of Abattoir manager Tim Johnson. After grinding and casing the meat, Johnson pre-cooked the hotdogs for the students to grill the following week. The students rotated between three stations once the meat was ready to be grilled.

The students began at Dr. Janeal Yancey's station, where they learned tips for effective meat selection. They covered topics such as the various cuts of meat, how to understand the meat grading system, the purposes of various types of packaging, and how to transport meat home safely.

"We're just trying to give students useful knowledge that pertains to their degree but also can be applied to the real world," said Yancey. "Even the type of packaging the meat is in can make a difference." At the second station, Dr. Jason Apple discussed various meat cooking methods and food safety in the AFLS kitchen. "Today's students don't know as much about cooking meat as they used to, so we wanted to give them guidance through the whole process," said Apple. "We talked about cookery methods on different cuts of meat and how to make them palatable and safe to eat. Stuff they can use for the rest of their lives."

Once the students were sufficiently prepared, Johnson gave tips on how to effectively and safely start and use charcoal and gas grills. After getting acquainted with the Department's gas grill, the students grilled and ate the hotdogs they had ground and stuffed at the Abattoir the week before.

"Truthfully, a lot of people don't know what's in hotdogs, but these students got to be involved in the whole process, from start to finish," said Apple. "It was neat to see their faces before they took a bite, not knowing what to expect. They ended up really liking their creations. It's a little bit of science and a little bit of art, so it's a fun opportunity for everyone." }

#### Students fill and form hotdogs at the Abattoir.

American Junior Simmental Association South-Central Regional Classic

On June 15th, the American Junior Simmental Association (AJSA) held its South-Central Regional Classic at the University of Arkansas in Fayetteville.

The purpose of AJSA is to enhance youth potential for life success by instilling a comprehensive understanding of the beef industry while developing leadership, networking, and communication skills. AJSA is a youthbased organization, serving students from ages eight to 21 and is a branch of the broader American Simmental Association (ASA), which serves industry professionals.

AJSA has four Regional Classic contests throughout the United States: South-Central, North-Central, Eastern, and Western. Over 110 students from nine states attended the South-Central Classic this year.

Over the course of a week, the students compete in livestock judging, public speaking, sales talk, cattlemen's, and genetic evaluation contests. Students also learn showmanship techniques and conduct a cattle show.

"The livestock judging portion of the competition is set up by the University of Arkansas," said Chance Ujazdowski, the ASA Progress Through Performance Assistant for regional classics. "Animal Science faculty are officiating all of the scoring for the judging contest. We really appreciate that. We really enjoy Fayetteville."

"Some of these eight year olds are giving sets of reasons in the livestock judging contests that 20 year olds couldn't give," said AJSA Youth Assistant Kelsey Stimpson. "It really starts them out at a young age and develops them into future agricultural leaders, whom we need to serve in congress, run our farms, and work in corporations to keep our global economy sustained. We do these educational contests and cattle shows to get them ready for the real world." }



Students as young as eight years old prepare oral reasons before the livestock judging contest.



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