

COWPOKE

NEWS

*Department of Animal & Food Sciences
Oklahoma State University
Spring 2022*



COWPOKE NEWS

Welcome to the Spring 2022 Edition of Cowpoke News! We hope you enjoy reading about the Oklahoma State University Department of Animal and Food Sciences.

Cowpoke News is published multiple times a year. We strive to keep students, alumni and friends of the department informed about our activities and successes. Cowpoke News is distributed through both e-mail and mail and is available online at <https://agriculture.okstate.edu/departments-programs/afs/about/cowpoke-news.html>.

To subscribe, e-mail us at cowpokenews@okstate.edu or mail in your request. Please give us your full name and either your e-mail or mailing address.

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On the Cover:

Madelyn Scott, Outstanding Senior for the OSU Department of Animal and Food Sciences, is on the cover of this edition. Read more about our banquet award recipients on page 22.



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Richard Coffey to lead OSU Department of Animal and Food Sciences

Richard Coffey has been selected as the new head of the Oklahoma State University Department of Animal and Food Sciences within OSU Agriculture. The Oklahoma A&M Board of Regents approved the action at its meeting on March 25. He is expected to begin his role on July 1.

Coffey most recently served as chair of the Department of Animal and Food Sciences in the College of Agriculture, Food and Environment at the University of Kentucky. A native Oklahoman who grew up in Jones, Coffey earned a bachelor's degree in animal science and a master's in swine nutrition from OSU before completing a doctorate at UK in swine nutrition with a minor in biochemistry in 1994.

As an Extension professor at UK, he was instrumental in working directly with producers to design and manage swine facilities, address environmental issues related to operations and provide nutrient management plans. Coffey's 17 years of experience at one of UK's experiment stations — including two years as its director — opened the door to his administrative career, ultimately preparing him for his new role at OSU.

Thomas G. Coon, vice president and dean of OSU Agriculture, said Coffey's vision for OSU animal and food sciences aligns with the division's strategy to advance every area of the land-grant mission.

"We want to build on the reputation and success of our undergraduate experience while recruiting students from all over the country; increase, expand and strengthen our research programs through collaboration; and

ensure our Extension programs are as relevant today as they were 30 years ago by connecting with people through online content," Coon said.

A national contender

The OSU Department of Animal and Food Sciences is home to more than 1,000 undergraduate students and makes up 45% of undergraduate enrollment in the Ferguson College of Agriculture. Rich in history and known worldwide for its competitive awards, the OSU livestock judging team has won 21 national championships, more than any other university in the country. Also, the OSU horse judging team earned the national championship, and the OSU meat judging team was named reserve national champion, both in 2020.

"OSU Agriculture is such a big driver for the university, and the department's organized and active alumni association is a huge benefit," Coffey said, adding the proximity of OSU farm units on campus is critical to undergraduate student involvement and research, and the success of OSU's judging programs is a great calling card as well.

OSU alumnus Randy Renbarger, who worked at the swine barn alongside Coffey when they were undergraduates, said Coffey has always demonstrated the potential to be a leader in the animal science industry.

"The purebred centers are important to me because they provided hands-on experience with the financial help that I needed when I was going to school," Renbarger said. "He was always very

focused and trustworthy. I'm proud of him and glad that OSU was able to hire someone like Richard."

In addition to the swine facility, OSU's beef facilities have served as a launching pad for some of today's most brilliant and successful beef scientists and ranchers.

"Our beef research and Extension is pivotal because it's an important part of Oklahoma's agricultural industry," Coon said. "Beef research is certainly tied to our livestock judging program and reflects our department's commitment to students and learning by experience."

The next era

The Ferguson College of Agriculture's close relationship with the OSU College of Veterinary Medicine also attracts students nationwide to OSU's animal and food sciences program.

Many students who apply to vet school at OSU or other prestigious programs around the country begin their academic journey with an animal and food sciences undergraduate degree from OSU. With support from the office of OSU President Kayse Shrum, Coon and OSU Agriculture are equipped with additional resources to help continue the department's history of excellence.

"We're going to fill some positions in the next couple years that will determine what the department looks like long term," Coffey said. "I'm a firm believer that at a land-grant university, a department needs to be strong in all three of its missions. Our alumni base can provide important input on

where we want to go, how we teach and how we fill gaps in our Extension and research programming.”

Coffey is also known nationally for his service on the board of directors for the American Society of Animal Science, and he was named an administrative fellow with the organization in 2018. He received the Advanced Degree Graduate of

Distinction award from the OSU Department of Animal and Food Sciences in 2019 and was named a member of the Kentucky Pork Producers Association Hall of Fame in 2015.

Coon said he is confident in Coffey’s abilities to represent the department as a supportive alumnus and knowledgeable animal science

specialist while providing the kind of modern leadership that will carry the program into another competitive era.

“I want to make sure the department is positioned for whatever lies ahead in the next 20 to 30 years,” Coffey said. “It’s just a great place to be.”

Written by Gail Ellis





OSU research examines how to improve cattle selection practices

Oklahoma State University researchers have hopes of offering future insight to cattle producers regarding selection practices.

What could this mean for the cattle industry?

“We’re hoping this will be the first steps in being able to find some selection criteria for immune response and robustness traits, along with the growth, carcass and feed efficiency traits that are currently being emphasized in selection,” said Paul Beck, animal and food sciences associate professor and OSU Extension specialist for beef nutrition.

Beck said that while ranches with high quality management and production practices report an increase in milk production as well as improved growth and carcass traits, they are also seeing more cattle deaths toward the end of their finishing period.

“When you move cattle from cow-calf or stocker production systems to placing them in a feedlot, you

expect the change in environment to start showing increases in bovine respiratory disease in the first 35 days,” Beck said.

But producers are seeing an increase in death rates much later in the finishing period with cattle from reputation herds known for excellent breeding and management.

“The economic problem with that is you have a whole lot of time and money tied up in the animal by the time it dies. If it dies earlier in the feeding period, you at least don’t have all that feed put into it,” Beck said. “What we’ve seen in other plant and animal species, such as poultry and corn, is that if we select for economic traits – growth, performance, yield – the species don’t thrive in a harsher environment.”

Producers choose cattle based on economic traits like milk production, carcass value and growth rate because those traits can be easily measured.

“We’re looking at measuring stress and immune responsiveness,

behavior and temperament, and thus, subsequent robustness to stressors and health challenges. It’s looking at the whole gamut of immune response – responses to vaccines, to different challenges within their environment – and using those as a proxy to try to pick out which animals would be more robust in response to disease pressures,” Beck said.

For example, OSU researchers are comparing the immune responses of cattle selected for high growth versus moderate growth or high milk rate versus low milk rate in both spring and fall calving herds. Their analysis will determine if cattle selected for certain traits have a higher immune system function than cattle selected for different traits when exposed to environmentally stressful conditions, such as extreme heat or cold and nutritional deficiencies.

“With the populations selected for the research and selection criteria in place, researchers should be able to key in on differences in immune phenotype



(the expression of the animal's genetics for immunity) for different cattle," Beck said. "If we can find an easy way to measure immune function, we can find a way to select for it more effectively, and hopefully, this will make the animals more adept at responding to environmental and health challenges. That would give them a better outlook on life for the time that they're here."

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Written by Alisa Gore



In addition to receiving the Early Career Award for Excellence in Teaching, Adel Pezeshki received the 2022 Tyler Award from the OSU Department of Animal and Food Sciences.



Pezeshki honored with Award for Excellence in Undergraduate Advising and Mentoring

Adel Pezeshki, assistant professor in the OSU Department of Animal and Food Sciences, was recognized with the Early Career Award for Excellence in Teaching at the Ferguson College of Agriculture Scholarship and Awards Banquet.

Pezeshki joined the department in 2016. He has taught a variety of classes, including Principles of Animal Nutrition, Basic Nutrition for Pets, Nutritional Physiology and Metabolism, and Macronutrient Nutrition and Volume Intake. In addition to his teaching and research appointments, Pezeshki serves as a mentor to eight undergraduate Wentz scholars and three undergraduate honors projects.

“Dr. Pezeshki has performed exceptionally well in his teaching and research position and is a strong member of the animal and food sciences faculty,” said Gerald Fitch, interim department head. “He is a model citizen in the department and has excelled in all areas. He has taken advantage of the tools provided and has attended more than 40 workshops and seminars to continually improve his teaching and mentoring skills.”

Pezeshki believes his excitement about animal science helps students focus on his lectures. He also likes to bring real-world examples to the classroom to help students better relate with the concepts discussed in class.

“I believe if students connect with what is taught to them in the class, it will lead to improved interest and motivation for success in their future

career,” he said. “It is important for me to make sure my students understand the link between the coursework and their future goals.”

Pezeshki is involved with the North American Colleges and Teachers of Agriculture and received the NACTA Young Educator Award in 2020 for excellence in teaching in higher education and agriculture. Fitch said the award reflects Pezeshki’s efforts to continually strive to improve his teaching skills, as well as his drive to help undergraduates learn in a variety of ways.

Pezeshki has a passion for teaching, mentoring and advising of undergraduate students. He notes that his favorite part of teaching is seeing the spark of interest in his students at the end of each lecture.

“It is very rewarding for me to watch my students’ growth and development over the course of the semester,” Pezeshki said. “It is an incredibly satisfying feeling to see that my efforts as a teacher have an impact on my students’ personal and professional lives.”

Those efforts are appreciated by his students and advisees.

“Dr. Pezeshki is an enthusiastic professor and respected researcher,” said Cynda Clary, associate dean for academic programs. “His passion for his subject is contagious, and he is an incredibly positive and uplifting influence on his students in and out of the classroom.”

Written by Jami Mattox

Beef Cattle Business is Big In Oklahoma



For more than 50 years, Oklahoma State's Range Cow Research Center has been an integral part of the research, teaching and Extension programs within the Department of Animal and Food Sciences.

The work produced at the Center, located west of Stillwater near Lake Carl Blackwell, directly influences how ranchers in Oklahoma do business. The overall research goal of the center is to improve the efficiency and profitability of the cow/calf segment of the industry and contribute to sustainable beef production systems. With emphasis on improving beef cow efficiency. This should result in less grazing acres per cow, lower winter feed costs, less greenhouse gas emissions per pound of weaned calf, improved fleshing ability, and improved fertility.

The university is seeking private support to establish the Range Cow Research Center Program Endowment and the second phase of upgrades and research equipment needs.

The Range Cow Research Center Program Endowment will serve the Center in perpetuity to allow for consistent budgeting for critical equipment, student support and research projects. Through their ongoing generosity to the improvement of facilities and research, Dr. Dennis and Marta White have generously committed up to \$50,000 in matching funds to be utilized for support of the Range Cow Research Center Endowment at a rate of 1:1. They hope to encourage donors and alumni to join alongside them in bridging the gap on financial constraints and research support to the Center. This opportunity will allow you to maximize your gift and grow your legacy at Oklahoma State while sustaining the future needs of the Range Cow Research Center.

By enhancing the Center's research flexibility and capability, staff and students will utilize both new and established technology to generate cutting-edge, timely and useful research information. Serving as an outdoor classroom, the Range Cow Research Center provides students and cattle producers hands-on experience working and managing cattle. The

upgraded facilities and research equipment will expand applied cow-calf research and student training capabilities at the Center.

Research achievements at OSU illustrate the value of Extension programs led by the Division of Agricultural Sciences and Natural Resources and also identify Oklahoma State as an ideal research partner for industry giants like John Deere. "We Hope to establish a world class cow-calf research center to benefit students and the beef cattle industry for today the next generation." Said Dr. David Lalman, Harrington Endowed Chair, Professor in Animal & Food Sciences and Extension Beef Specialist for Beef Cattle.

Students involved in the studies get hands-on learning experience and can leverage their knowledge as they begin careers leading Oklahoma's largest segment of agriculture. Additionally, the Center is commonly used with Extension programs including Master Cattleman, Oklahoma Beef Quality Assurance program, SUNUP television broadcasts and the Oklahoma Quality Beef Network. Updates will be visible and help demonstrate OSU's innovation to programs.

For more information about the matching fund opportunity, contact: Megan Smith, Assistant Director of Development, OSU Foundation at mesmith@osugiving.com or 405.747.1977.



OSU Agriculture names Glenn Zhang 2021 Sarkeys Distinguished Professor Award recipient

Oklahoma State University's Glenn Zhang has been named the 2021 recipient of the Sarkeys Distinguished Professor Award by the OSU Division of Agricultural Sciences and Natural Resources.

The annual Sarkeys award recognizes outstanding academic leadership and contributions to the agricultural industry through teaching, research or Extension efforts. The award was established by the Sarkeys Foundation in 1980 to honor Elmo Baumann, an agronomist who worked with the foundation after his retirement from OSU.

Zhang is a professor in the OSU Department of Animal and Food Sciences and holds the Ralph F. and Leila W. Boulware Endowed Chair. His accomplishments in research, teaching, student mentoring and professional service made him a strong candidate for the award, said Thomas G. Coon, vice president and dean of OSU Agriculture.

"Dr. Zhang is not only a leader in research but also an accomplished teacher, mentor and advisor," Coon said. "He has gained international respect as a leader in animal health, and his research has potential to transform livestock production practices through the development of innovative antibiotic-free technologies."

Antimicrobial resistance has become a major health crisis worldwide, and

Zhang's program is filling a critical need for novel, effective antibiotic alternatives in the animal industry, he added.

Zhang's research group has discovered several classes of dietary compounds with a strong ability to boost animal immunity and disease resistance, and the technology has potential for commercialization.

An OSU faculty member since 2002, Zhang has received more than 45 grants totaling nearly \$6.9 million. His research has been funded continuously through the U.S. Department of Agriculture's National Institute of Food and Agriculture, National Institute of Health, Oklahoma Center for Advancement of Science and Technology and numerous other industry organizations.

Zhang has authored or co-authored 87 peer-reviewed publications.

"Dr. Zhang received the Sarkeys Distinguished Research Award for developing an internationally recognized molecular immunology program at OSU," said Chris Richards, interim head of the OSU Department of Animal and Food Sciences. "His primary focus has been studying the innate immunity of the gut and associated microbiota using poultry models. This research is successfully developing management techniques and non-antibiotic compounds that enhance poultry health and production efficiency."

In addition to his research, Zhang teaches classes related to biotechnology and animal molecular biology and has mentored nearly 30 graduate students and a number of undergraduate research scholars, many of which have gone on to early career successes. In the last five years alone, two of his graduate students were awarded nationally competitive predoctoral fellowships from the USDA, and two undergraduate research scholars received prestigious Goldwater scholarships.

Zhang said he was thrilled to be considered for the Sarkeys Distinguished Professor Award.


"The Sarkeys award will further boost my scholarly activities at OSU," he said. "I pledge to provide strong leadership to support and promote various research and teaching programs in the OSU Department of Animal and Food Sciences and OSU Agriculture as well."

Zhang earned a bachelor's degree in animal science and master's degree in nutritional immunology from China Agricultural University in 1993 and 1995, respectively. He earned his doctoral degree in immunophysiology from Kansas State University in 1999 and worked as a postdoctoral fellow in molecular immunology at the Yale University School of Medicine from 2000-2002.

Written by Mandy Gross

Glenn Zhang is a professor of molecular immunology and Boulware Endowed Chair in the Department of Animal and Food Sciences at Oklahoma State University. He enjoys research, teaching, student mentoring and training future scientists.



The background of the entire page is a close-up photograph of parched, cracked soil. The cracks are deep and irregular, forming a network of polygonal shapes across the brown, dusty ground. The lighting is natural, highlighting the texture and shadows of the fissures.

Drought raises questions about when, how to cull cattle herds

As current drought conditions in western Oklahoma worsen past what they were in 2010 and 2011, cattle producers across the state are faced with making difficult herd management decisions.

Culling is a routine practice used to manage the stocking rate on the ranch and maintain a productive, healthy and problem-free herd. In fact, cull cows account for approximately 20% of the gross income for a commercial cow operation. While regular culling of lower producing cows is not uncommon, a lack of grazing land and resources caused by widespread drought requires additional culling consideration.

According to Oklahoma State University Extension beef cattle specialist David Lalman, producers should always plan to destock (reduce stocking rate) sooner rather than later. Lalman advises to market livestock before sale prices in the drought region become depressed.

“The profit from culled cattle can be vital in keeping the rest of the herd fed during a dry season,” Lalman said. “Which is why it’s important to ensure your cattle are in the best condition possible when they go to market.”

Emaciated cattle garner less revenue for the producer due to poor red-meat yield. These cattle are also more susceptible to bruising, excessive carcass trim, increased condemnations and are more susceptible to disease as a result of poor nutrition.

Regional Drought Conditions

The Oklahoma Mesonet continues to report extremely hot and dry conditions in the western half of the state, and cattle producers are already feeling the effects.

Beckham County Agriculture/4-H Educator, Greg Hartman said the dry fall and spring have caused producers to consider additional culling.

“People still remember the 2010-2011 drought,” Hartman said. “It’s fresh in producers’ minds because there were quite a few who had to liquidate everything.”

Hartman said there are a lot of variables involved in drought-related culls. His advice is to make the easy culls as soon as possible to stretch the resources that are currently available.

After several months of abnormally dry conditions, Hartman predicts that there will likely be some level of liquidation throughout the summer in western Oklahoma. He advises producers to make their culling decisions now, even if cattle are sold prematurely.

“The best thing that can happen when you cull too early is that the grass gets a rest during a dry year,” Hartman said.

When to Cull

According to livestock marketing OSU Extension specialist Derrell Peel, the ultimate factor in deciding to cull an animal is its physical condition in relation to its productivity. When a cow becomes too old or lame to continue as a breeding

animal, it must be culled. However, there are economic reasons why a producer may cull a younger or more productive animal.

If the cow herd has already been culled for old and unproductive cows, then one might give serious consideration to marketing heifers retained as replacements, Lalman said.



“While these replacement females should represent an operation’s best genetics,” Lalman said. “They will require the greatest amount of time to generate revenue and will be the most difficult to breed back once they calve for the first time.”

Culling replacement heifers is a tough decision, but it might be the most economical choice for the producer. According to Lalman, these animals have a high potential to generate excellent market value in a separate part of the country not affected by drought.

Written by Hunter Gibson

OSU Extension Fact Sheets

Management of Cows with Limited Forage Availability

<https://extension.okstate.edu/fact-sheets/management-of-cows-with-limited-forage-availability.html>

Drought Management Strategies

<https://extension.okstate.edu/fact-sheets/drought-management-strategies.html>

OSU's new ranch horse team competes at nationals

This year, Oklahoma State University blazed new trails with the first ever Ranch Horse Team in OSU history, which competed at the 2022 National Intercollegiate Ranch and Stock Horse Association National Show in Amarillo, TX. Our students competed amongst 115 riders, representing 14 different universities and colleges across the country.

At the conclusion of the show, our riders earned a fifth overall placing in the D2 Team division out of nine teams. In addition, Amy D'Epagnier received 6th Overall Novice Rider.

Megan Newlon, student president of the Ranch Horse Club at Oklahoma State University, was a member of this year's team.

"Representing Oklahoma State in our first ever collegiate ranch horse national championship was such an honoring experience," Newlon said. "All the members have worked tirelessly both in and out of the arena to build this team from the ground up."

Outside of the show pen, an opportunity was available for one freshman competitor to receive a \$6,000 scholarship sponsored by the Fort Worth Stock Show and Rodeo. In addition to an interview, this recipient was chosen based on the horse show judges' observations of how the student represented themselves and their respective school. JT Danielecki, a member of the 2022 OSU team, was selected to be the recipient of this scholarship.

This event was supported by Hughes Trailers, 20 major sponsors and was highlighted on both the Cowboy Channel and News Channel 10 in Texas.

"I'm looking forward to watching this team grow, and I'm excited to see what the future has in store for us," Newlon said.

The team, coached by Marissa Chapa, included Kathryn Moore, JT Danielecki, Sierra Walter, Amy D'Epagnier, and Vivienne Sander.

Written by Marissa Chapa
and Rebekah Alford



Successful calving begins now with sound spring breeding

Many cattle ranchers are turning bulls in with their cows and heifers this time of year, and Mark Johnson, beef cattle breeding specialist for Oklahoma State University Extension, has some tips for a successful breeding season.

“It’s always a good idea to do breeding soundness evaluations on bulls prior to breeding season,” Johnson said. “BSEs are a general rule of thumb and good management practice.”

Once bulls are determined sound, ranchers should focus on bull-to-female ratios: yearling bulls should be able to cover a cow for about every month of their age. At 2 years old, bulls should be able to breed around 25 females. From age 2 to 6, Johnson said

bulls can successfully cover 25 to 35 cows in a breeding season.

“Cattle breeding season should be as short as possible,” Johnson said. “A time frame of 45 days is better than 60, and 60 days is better than 90.”

A short breeding window ensures calves are born within a tight range of time the following year.

As for when to expect the first calves of the season, it depends on the rancher’s preference. Producers should turn in bulls about nine months before cows begin calving.

“Last year, we had a lot of people decide to start calving later than usual after that brutal stretch of cold in February,” Johnson said. “If you want

early January calves, bulls should be turned out the beginning of April.”

Bulls turned in with cows in May will result in a later calving season in late February and March. Learn more about cattle breeding timing and how to detect heat in cattle with Johnson on the agricultural television show SUNUP.

Written by Gail Ellis



OSU Alumnus named as 2022 Fulbright Alumni Ambassador

The Fulbright U.S. Student Alumni Ambassador Program has named Oklahoma State University graduate Sydney Stewart as a Fulbright Alumni Ambassador.

Stewart — who earned a bachelor's degree in animal science in 2017 and an animal science master's degree in 2020 — will serve as a representative, recruiter, and a voice for the Fulbright Program.

Stewart studied agriculture in Germany as a Fulbright grantee in 2017. Her research included various biosecurity and husbandry strategies of local livestock producers responding to federal regulations and negative consumer perceptions. While in

Germany, Sydney consulted on several projects on herd health, animal welfare and food safety.

Upon her return from Germany, Sydney transitioned into the field of emergency management consulting and currently works as an analyst for a nonprofit research and analysis firm based in Arlington, Virginia. There, she specializes in emergency management, public health, and safety and infrastructure resilience.

The Fulbright U.S. Student Alumni Ambassador Program identifies and trains about 20 alumni each year to serve as representatives. They are selected through recommendations and come from a worldwide array of different socioeconomic backgrounds,

institutions, fields of study and economic backgrounds.

Fulbright Alumni Ambassadors provide testimonials about their experiences at conferences and campus presentations and offer application tips in written articles, video and podcast interviews, webinars and at special events throughout the United States.

Ambassadors play a key role in assisting potential applicants, explaining what a Fulbright grant is like and all the challenges that may occur. Most importantly, they play a significant role in increasing knowledge about Fulbright opportunities.

Media Contact: Lyn Putnam



Markey and Wileman receive national graduate scholarship

Jazmin Markey and Caitlyn Wileman, animal science graduate students, were each awarded a \$3,000 graduate student scholarship through the national Targeting Excellence organization.

This scholarship was created to support students with a proven commitment to completing their education in food animal agriculture, and who have shown potential to have promising careers in this industry. The scholarship is intended to help students reach their educational goals and can be applied toward education-related costs, such as textbooks, lab fees and any other fees associated with their studies.

This is Jazmin Markey's second consecutive year to receive the scholarship. Jazmin is pursuing her Ph.D. in animal science with a focus in ruminant nutrition. She is advised by Blake Wilson.



Caitlyn Wileman is pursuing her master's degree in animal science with a focus in swine nutrition. She recently graduated and will be pursuing a Ph.D. in swine nutrition at Iowa State University.



OSU Draft Entry

Oklahoma State University's Draft Entry. His pedigree reads: Bone Up (No Mas x Bear 52) x Never Before x Hillbilly Bone.

For questions about the boar, please contact Clay Zwilling, Mickey Bellamy or Jim Coakley.



Whiteman Research Award

Melanie Whitmore, Anna Goldkamp, and Frank Kiyimba presented their research at the 2022 Whiteman Award Competition and received first, second, and third place, respectively. They were each recognized at the 2022 Animal and Food Sciences Scholarship Banquet.

The Whiteman Award for outstanding graduate student presentations was established after Dr. Whiteman's retirement (1983) to encourage clarity and excellence in the manner of reporting results of thesis research.

First place: Melanie Whitmore

Synergy between histone deacetylase inhibitors and DNA/ histone methyltransferase inhibitors in enhancing host defense peptide gene expression.

Advisor: Glenn Zhang

Second place: Anna Goldkamp

Global assessment of translational regulation within bovine tissues.

Advisor: Darren Hagen

Third place: Frank Kiyimba

Dark-cutting beef mitochondrial proteomic signatures reveal increased biogenesis proteins and bioenergetics capabilities.

Advisor: Ranjith Ramanathan



2022 Seniors of Distinction

Nine students from our department were recognized as 2022 Seniors of Distinction by the Oklahoma State University Ferguson College of Agriculture. Leslie Smith was also named the 2022 Louis and Betty Gardner Outstanding Senior by the college.

Kaylyn Branen - animal science and agricultural communications

Kinzie Burtrum - animal science

Cameron Catrett - food science and animal science

Jade Edwards - animal science

Emily Gerstenkorn - animal science and agricultural communications

Jack Palla - animal science and agribusiness

Madelyn Scott - food science

Leslie Smith - agribusiness and animal science

Xin Mei Teng - food science

Animal and food science students recognized at research symposium

Our department had students participate in the 2022 OSU Food and Agricultural Product Center Research Symposium on March 8. They did a great job with their presentations. Below are the students majoring in animal science or food science that placed in the competition.

Graduate Student Oral Presentation

First place: Caitlin Karolenko

Evaluation of non-pathogenic surrogate organisms for validation of biltong (dried beef) process lethality
Advisor: Peter Muriana

Second place: Morgan Denzer

Effects of high-pressure processing and filtration method on color attributes of sarcoplasmic extract
Advisor: Ranjith Ramanathan

Third place: Cole Reesman

Effects of high-pressure processing on dark-cutting beef color
Advisor: Ranjith Ramanathan

Graduate Student Poster Presentation

First place: Frank Kiyimba

In silico bioinformatics analyses reveals the structural and functional characterization of protein G3NOVO differentially abundant in dark-cutting beef
Advisor: Ranjith Ramanathan

Second place: Sitong He

Isolation and identification of bacteriocin-producing lactic acid bacteria from fresh produce that are inhibitory to multiple pathogenic bacteria
Advisor: Peter Muriana

Undergraduate Student Awards

First place (oral): Jade Wilkinson

Bacterial viability of freeze-dried cultures compared to freshly grown cultures used as surrogate inocula for biltong process validation
Advisor: Peter Muriana

Second place (poster): Kaylee Rumbaugh

Evaluation of *Lactobacillus acidophilus* strains for acid and bile tolerance and inhibition of *Escherichia coli* O15:H7
Advisor: Divya Jaroni

Departmental Banquet Awards

Each year, the OSU Department of Animal and Food Sciences presents awards to students, faculty and alumni. The awards for students and faculty are presented at the Animal and Foods Sciences Scholarship Banquet. The alumni awards are now presented at the ASAA Reunion Gala. The recipients for 2022 are listed below.

Advanced Graduate of Distinction

Jeff Hensley
Clay Lents

Graduate of Distinction

Claude Bess
Jim Whitt
Matt Culbertson

Distinguished Service

Fred Slater
Patsi Nix Smith

Tyler Award

Adel Pezeshki

Outstanding Ph.D. Student

Parniyan Goodarzi

Outstanding Masters Student

Jeff Robe

Senior Leadership Awards

These students excelled in leadership positions within various organizations and activities throughout their time at OSU. In addition to the Senior Leadership Awards, Madelyn Scott was named the 2022 Outstanding Senior and Leslie Smith received a Merit Award from the OSU Department of Animal and Food Sciences.

- Kinzie Burtrum
- Cameron Catrett
- Jade Edwards
- Macey Goretska
- Kelsey Gray
- Mamie-Cate Haydon
- Mattie Haynes
- Kathi LaPoint
- Hunter McConnell
- Hailey Obradovich
- Phoebe Rogers
- Madelyn Scott
- Leslie Smith

Learn more about our student award winners on pages 23 - 37.



Parniyan Goodarzi

Outstanding Ph.D. Student

Parniyan Goodarzi is a third year Ph.D. candidate in the Oklahoma State University Department of Animal and Food Sciences. Parniyan obtained her bachelor's and master's degrees in animal science and animal physiology from Shiraz University in 2015 and 2017, respectively.

As an undergraduate and graduate student at Shiraz University, Parniyan was selected as valedictorian. Parniyan has been working in Adel Pezeshki's lab since 2019 as a doctoral research and teaching assistant. Her research is focused on the effect of dietary (large) amino acids on growth performance, glucose and lipid metabolism of young pigs.

In 2021, Parniyan received several research awards, such as Williams

Council award (OSU), H. Allen Tucker Appreciation Club Graduate Student Travel Scholarship (ASAS-CSAS-SSASAS Annual Meeting and Trade Show, Louisville, Kentucky) and Research Materials Grant Award (Graduate and Professional Student Government Association, OSU).

During her master's program, she published the results of her thesis as a first author in Poultry Science journal. As a Ph.D. student, she has published four papers and nine abstracts as first author and coauthor in peer-reviewed journals and national/international conferences, respectively. Parniyan has presented the results of her research as oral and/or poster in several scientific meetings.

She has been a teaching assistant for Principles of Animal Nutrition and Pet Nutrition classes and has mentored six undergraduate research students. Parniyan is a current member of American Society of Animal Science and American Society for Nutrition and has served as an ad-hoc reviewer for journals such as Scientific Reports and Livestock Science.



Jeff Robe

Outstanding Masters Student

Jeff Robe is a master's student in the OSU Department of Animal and Food Sciences conducting research in vaccination strategies in growing beef calves. He also works as the coordinator for the Oklahoma Quality Beef Network where he oversees the execution of the day-to-day operations, producer education and scheduling of the value-added certified calf sales in the fall.

Jeff grew up in north central Arkansas on a small commercial cow/calf operation. He currently lives in Stillwater with his wife, Jenny, and their daughter, Charlie. Jeff graduated from the University of Arkansas with a bachelor's degree in animal science. He was twice the recipient of the American Society of Animal Science Scholastic Achievement and received the highly regarded Brandon Burlsworth Memorial Scholarship. He served as a founding board member for the Arkansas

Collegiate Cattlemen's Association and represented the University of Arkansas at the National Cattleman's Beef Association Convention and Trade Show on three separate occasions.

Jeff began his academic and research career at Oklahoma State University in 2019. He received a full assistantship for his master's program under the direction of Paul Beck. His research examines the effects of vaccine type and timing in pre- and post-weaned beef calves on BVD and BRSV serum neutralizing antibody titers and IgG immunoglobulin concentration and body weight. Jeff is also the 2022 recipient of the John Hughes Distinguished Graduate and the Dr. Gerald Horn Graduate Scholarships.

As the coordinator for the Oklahoma Quality Beef Network, Jeff has played multiple roles. Some of those duties have included managing producer enrollments, scheduling the fall OQBN sales, verification of calf health records and on-ranch audits of calves and the distribution and analysis of post-sale seller surveys. In addition to administrative duties, he has provided multiple written contributions for publication in *The Cowman Magazine*, *Progressive Rancher* and the *Cow/Calf Corner Newsletter*, as well as a number of appearances on SUNUP TV discussing the benefits of preconditioning calves and upcoming sales.

Talking to producers about preconditioning calves is one of Jeff's favorite roles and finds this aspect of job to be highly rewarding. His presentations extend from county extension meetings for both cattle producers and in-service training for extension educators, *Cow/Calf Boot Camp*, *Extension Research Field Days* and the *Eastern Ag Farm/Ranch Show*. Jeff has also been a guest on radio and podcasts such as *Coffee Shop* and the *Extension Experience*.

Jeff is planning to graduate this summer with a master's in animal science. Post-graduation, he has been accepted to the Oklahoma State University College of Veterinary Medicine program.



Madelyn Scott

Outstanding Senior Award

Senior Leadership Award

Madelyn Scott was born December 2, 1999, and is the eldest child of Tony and Nichole Scott of Central High, Oklahoma. She grew up alongside her two younger brothers, Riley and Jamison, raising and exhibiting livestock. While she has spent time as a resident in Nebraska, Oklahoma and Texas, Madelyn spent the majority of her childhood in Nebraska where she became involved in agriculture through local 4-H and FFA programs.

In an effort to be closer to extended relatives, she and her family made the move back to Oklahoma in 2015. Madelyn continued to stay involved in agriculture through 4-H and FFA. Her involvement in

Oklahoma agriculture and its youth programs led her to pursue a bachelor's degree in food science with an emphasis in meat science at OSU.

As an undergraduate, Madelyn was involved in the Undergraduate Research Scholars Program in the OSU Department of Animal and Food Sciences under the direction of Ranjith Ramanathan. She began working in his lab as a research scholar her freshman year and was named a 2020-21 Wentz Research Scholar. Her primary focus through her research has been investigating the impacts of common retail settings on non-enzymatic metmyoglobin reduction in-vitro in hopes to extend the color stability of meat products.

Madelyn has explored several different career options in the food and meat science industries through participating in summer internships. Namely with Simmons Foods in Van Buren, Arkansas, where she served as a quality assurance intern. Additionally, she was a research and development intern for Tyson Foods in Springdale, Arkansas.

While at OSU, Madelyn was a member of the Leaders of Excellence in Animal & Food Sciences, a member of the 2020 Reserve National Champion OSU Meat Judging Team and was selected as a member of the Oklahoma Agricultural Leadership Encounter Class XVII. Her time in OALE allowed her to gain extensive knowledge of the agricultural industries in each region of Oklahoma, assist behind the scenes in running the Oklahoma Youth Expo and travel to Costa Rica and Panama to learn firsthand about their cultures and agricultural practices.

Madelyn served as the president of both the OSU Meat Science Association and Food Science Club. She is actively involved in the American Meat Science Association through research poster presentations at the annual Reciprocal Meat Conference and has been selected to attend several AMSA Student Training and Education Programs, the most recent being the Smithfield Foods Integrate Conference in Smithfield, Virginia, and the Tyson Foods Beyond Fresh Meats Short Course in Downers Grove, Illinois.

Madelyn thinks of her time in the department as nothing short of transformative. She credits OSU and the Cowboy Family for leading her to such an impactful support system within the department and believes she would not be the young person she is today had their paths not crossed.

Madelyn will continue her education here in Stillwater. She will begin pursuing a master's degree in meat science at OSU under the guidance of Morgan Pfeiffer in hopes of working in the food and meat science industries.



Leslie Smith

Award of Merit

Senior Leadership Award

Leslie Smith was born October 11, 1999, to Kevin and Gina Smith in Oklahoma City, Oklahoma. Leslie grew up in NW Oklahoma near Mutual on her family's four-generation farming/ranching operation. It was on this operation she gained a strong passion for agriculture and came to the realization that agriculture was the industry she wished to pursue. In the fall of 2018, Leslie began her collegiate career at OSU, pursuing a bachelor's degree in agribusiness with an option in farm and ranch management. Shortly after her sophomore year at OSU began, she added an animal science major with an option in production, a minor in agricultural real estate appraisal and a certification in equine enterprise management.

Leslie was an undergraduate research scholar in the OSU Department of Animal and Food Sciences beginning her sophomore year where she assisted with research within the feedlot cattle sector with a focus on ruminant nutrition. The research opportunity allowed her to gain expertise in collecting proper data samples, as well as analyzing those results to determine things such as stress levels and correlations to feeder cattle sicknesses.

Leslie explored many different careers and paths through jobs and internships. The summer before attending OSU, Leslie began a credit internship at Farm Credit of Western Oklahoma in Woodward, Oklahoma, where she learned the basics of ag lending and running a financial institution. She also interned with Luthi Farms Pig Production in Fargo, Oklahoma, and The A Bar Ranch in Claremore, Oklahoma. Leslie also held various jobs during her collegiate experience, including being a student worker in the OSU Department of Agricultural Economics as an assistant in the Oklahoma County Training program from her freshman through senior year; a stable hand at Oak Ridge Farms from her freshman to first-semester junior year; and as a ranch hand for Wilson Ranches from her second semester junior year through the end of her senior year. Leslie has also held multiple teaching assistant positions at OSU.

Leslie is currently the president of the Block and Bridle Club and competed on the 2021 Intercollegiate Horse Judging Team. In addition, she has been heavily involved throughout the department and the university through Greek life where she has served as an officer for her sorority since freshman year and served as the Vice President of Education on the Panhellenic Executive Board her sophomore year, through being a Greek 100 and Ag1011 mentor, a career liaison for the Ferguson College of Ag, and members of the OSU Spirit Rider team, Horseman's Association, and Collegiate Cattlewoman's Association.

Being a student at OSU and within our department has been an absolute eye-opener for Leslie, as she is appreciative of all experiences and opportunities she was given throughout her time here. Upon graduation in May, Leslie plans to further her education by pursuing a master's degree in the field of ruminant nutrition with a focus on feedlot cattle. Leslie would like to become an animal nutritionist within the industry.



Kinzie Burtrum

Senior Leadership Award

Kinzie Burtrum was born on June 9th, 2000, to Clay and the late Tina Burtrum of Stillwater, Oklahoma. She grew up on a commercial Black and Red Angus cow-calf operation with her twin sister, Karly, and her sister Avery. Her involvement in agriculture began at a very young age with feeding and working cattle with her father, one of her favorite activities to this day. She was very involved in FFA and was the president of her local chapter her senior year of high school. In the same year, she made the Oklahoma Youth Expo Sale of Champions with her steer, Iceman

While at OSU, Kinzie served as both the president and the reporter of the Oklahoma Collegiate Cattlewomen's Association (OCCW). In her term as president, Kinzie led a food insecurity awareness campaign after learning that 43 percent of students on campus considered

themselves to be food insecure. In collaboration with the Student Government Association and the Oklahoma Beef Council, OCCW sought to combat this issue by hosting a social media drive to discuss food insecurity while simultaneously promoting the value of beef. The collaboration led to a donation of 2,500 one-dollar beef sticks from the Oklahoma Beef Council to the campus food pantry in the Student Union. This campaign led to an interview, video and feature article "30 in 2030: Planning for the Future" by TIME Magazine.

Kinzie is currently a member of the Leaders of Excellence in Animal and Food Sciences and meets with prospective students interested in the department. Last fall, she also served as an undergraduate teaching assistant for Applied Animal Nutrition. She served as a career liaison for the Ferguson College of Agriculture in her sophomore year. She is a member of the Alpha Zeta Honor Fraternity, Phi Eta Sigma Honor Society, Oklahoma Cattlemen's Association, Oklahoma Cattlewomen's Association and the National Cattlemen's Beef Association. She has certifications in both Beef Quality Assurance and Masters of Beef Advocacy.

Kinzie completed a joint internship with the National Cattlemen's Beef Association and the Public Lands Council in Washington, D.C., during the summer of 2021. She spent the summer advocating for beef ranchers across the country as well as western landowners and their affiliates. During her freshman and sophomore years at OSU, Kinzie was an intern for the Animal Science Alumni Association where she made many genuine connections with students, faculty and alumni.

Kinzie obtained her bachelor's degree in May. She will be continuing her education by accepting a full-ride scholarship to attend Washburn University School of Law. Her main goal is to make a career out of advocating for the agriculture industry as an agricultural attorney to support farmers, ranchers and their agricultural way of life that fuels and feeds the entire world.



Cameron Catrett

Senior Leadership Award

Cameron Catrett is the younger daughter of Perry and Ashley Catrett of Luverne, Alabama. She started developing a passion for the beef cattle industry on the family farm with her sister, Cassidy, as soon as she was tall enough to work gates. This resulted in Cameron's desire to improve livestock production efficiency and sustainability leading her to pursue dual degrees at OSU in Food Science and Animal Science. She has also further developed her knowledge of agriculture by working as a necropsy lab technician at the Oklahoma Animal Disease Diagnostic Laboratory and as a customer service representative at a Farmers Cooperative.

As a President's Distinguished Scholar, she is an academically driven, service-oriented student. Cameron is a member of the highly regarded Mortar Board Honor Society where she was named a Top Ten Freshmen

Woman in 2019. Cameron is an active member of Chi Omega Fraternity where she engaged in varied leadership roles including serving on the executive council as house manager. In this role, Cameron was responsible for the 83 residents and maintaining chapter facilities. These experiences evolved after early opportunities extended to serve on the Student Government Association's Freshman Representative Council, the College of Agriculture's Student Council and as a Ferguson College of Agriculture Ambassador.

At OSU, Cameron is a member of the McKnight Scholars Program where she served as a Class X mentor. Cameron is a member of the Oklahoma Agricultural Leadership Encounter Class XIX where she networks with industry professionals and obtains knowledge to better support agriculture locally and internationally. She also currently serves as a second-semester teaching assistant for Animal Breeding and has contributed to four undergraduate projects resulting in publication.

Cameron competed on both the 2020 and 2021 Intercollegiate Meat Judging Teams. During her judging career, she broke a long-standing record and is the current American Meat Science Association Intercollegiate Meat Judging Overall Highest Scoring Individual. She further developed her passion for meat science serving as an intern for the inaugural "Meat with Mafi" virtual judging workshop and was the vice-president of the Oklahoma State Meat Science Association.

As an Undergraduate Admissions campus tour guide and scholar recruitment scheduler, Cameron has shared her love for the university with hundreds of prospective students. Sharing her immense love and appreciation for the Cowboy Family is something she is eager to continue as an alumna.

Cameron has accepted a graduate assistantship at the University of Georgia where she will pursue a master's in animal and dairy sciences with a focus in meat science and muscle biology. She feels that Oklahoma State has prepared her well for this opportunity and looks forward to providing science-based solutions to aid in the efficiency and sustainability of agriculture.



Jade Edwards

Senior Leadership Award

Jade Edwards was born August 25, 2000, to D.J. and Arlene Edwards of Hamilton, Kansas. She grew up in the Flint Hills of Kansas working on her family's stocker calf operation. Jade has been involved in the agriculture community for as long as she can remember either through 4-H, FFA or working at home.

Deciding to pursue a degree in agriculture was an easy decision and she found her home in the animal and food sciences department at Oklahoma State University. Jade graduated in May with a degree in animal sciences with an emphasis in livestock merchandising and a minor in Food Science.

As an undergraduate, Jade has been a member of the Leaders of Excellence in Animal and Food Sciences, the treasurer of the Block and Bridle Club, the treasurer of the Meat Science Association, a member of

the Sigma Alpha professional sorority and an AG 1011 Student Academic Mentor.

Jade was on the 2021 OSU Intercollegiate Meat Judging Team and helped coach the 2022 team. Her judging career was highlighted with multiple Top 10 individual placings and her team was named the High Team at the 2021 Cargill High Plains Contest in Hereford, Texas. Additionally, Jade also competed in April on the 2022 Meat Animal Evaluation Team.

While at OSU, Jade has worked in the Food Science/Meat Science Research Lab assisting the graduate students with ongoing projects. During the summer she serves as the executive director of YGB Livestock camps, traveling the country to advance the youths knowledge of not only showmanship but of God's love.

Jade has loved her time at OSU so much that she will be continuing her education here in the fall in the pursuit of a master's degree in meat science with plans for a doctorate. Once completed with school she hopes to become a professor of meat science at a land grant university.



Macey Goretska

Senior Leadership Award

Macey Goretska was born December 25th, 1999 and is the oldest of Tracy and Mandi Goretska of Abilene, Texas. She grew up in Southern Iowa raising and exhibiting cattle on a local, state and national level. Her involvement in agriculture started at a young age and after her extensive involvement in 4-H, FFA and production agriculture, she was motivated to pursue a degree in animal science with the goal to continue to be involved in the agriculture industry.

Macey began her college career at Redlands Community College in El Reno, Oklahoma. During her time at Redlands, she was a competitive member of their livestock judging team and was immersed in many duties as the vice president of the RCC Aggie Club. Macey was also selected as a participant in the NASC Applied Research Program at Redlands where she and fellow participants researched presence and

growth of freshwater sponges in different environments across Oklahoma. After receiving her associate's degree in animal science from Redlands, Macey felt the longing to continue her education in Oklahoma and transferred to Oklahoma State University.

While at OSU, Macey was a member of the Leaders of Excellence in Animal and Food Sciences, secretary and member of the Block and Bridle Club, member of Oklahoma Collegiate Cattlewomen, and an undergraduate teaching assistant in Animal Breeding. Furthermore, she was chosen to be a member of the Oklahoma Agriculture Leadership Encounter Class XIX where she has traveled to various regions in Oklahoma learning about regional agriculture, assisted with the Oklahoma Youth Expo, visited Washington D.C. and will travel to Europe this summer.

Outside of Macey's academics and extracurricular involvement, she was a member of the 2021 OSU National Champion Livestock Judging Team. She was named an All-American and was the fourth high individual at the North American International Livestock Exposition Livestock Judging Contest. She continued her involvement with the livestock judging team by serving as the assistant coach.

Macey will be continuing her education here at Oklahoma State University. She looks forward to pursuing a master's degree in meat science with an interest in small ruminant nutrition.

Macey is extremely thankful for the opportunities and connections she has made while being a part of the cowboy family, and she looks forward to using all of the professional and personal skills she has gained to give back to the people that have invested so much to her.



Kelsey Gray

Senior Leadership Award

Kelsey Gray was born May 26th, 1999, in Tulsa, Oklahoma and is the daughter of Tommy and Mardi Gray. She grew up in a suburban lifestyle, playing softball and started racing micro sprint cars at the age of 13. She began getting involved with agriculture when she decided to enroll in an agriculture class and join the Broken Arrow FFA her freshman year of high school. She was involved in showing pigs and lambs, range judging and was a member of the officer team. Her senior year of high school, she obtained her State FFA Degree and was a part of the third overall range judging SAE in Oklahoma, along with the third high individual at that same contest. After high school, she went to Tulsa Community College for a year, then transferred to Oklahoma State University in 2018 to double major in animal science and agricultural communications.

While at Oklahoma State, Kelsey has been an active member in the OSU Swine Club and held the Jackpot coordinator position on the officer team for the past two years. While in the OSU Swine Club, she has traveled to many shows across the state of Oklahoma, including Tulsa State Fair, Oklahoma Youth Expo and the Oklahoma Bred Swine Exposition to serve as ring assistance. She also was a part of a group that traveled with Rusty Gosz to help at the National FFA Livestock Judging contest this past October. In the summer of 2021, Kelsey was one of two interns that designed and put together the Oklahoma FFA Calendar that goes out to all of their sponsors and FFA Chapters across the state of Oklahoma.

She was also a part of the 2021 Oklahoma Pork Council Pork Industry Group that spent the last eight weeks of the semester learning about every aspect of the commercial swine industry and hearing from industry leaders from all over the United States. During her time in the Pork Industry Group, she also got to travel to Hanor Farms and attend a luncheon before touring their facilities to have a closer look at what goes on inside of these farms daily.

Kelsey is on track to graduate in December of 2022 with a bachelor's degrees in animal science and agricultural communications. Following graduation, Kelsey has plans to find a career within the agriculture industry and hopefully within the swine industry.



Mamie-Cate Haydon

Senior Leadership Award

Mamie-Cate Haydon grew up on a sixth-generation commercial cattle operation in Weatherford, Texas, where agriculture and livestock production were not only a passion instilled within her family but is their way of life. After seeing the direct role in which the livestock industry plays in the agricultural world and the surrounding community, she knew she wanted to take part in continuing its legacy and learning to enhance its methods.

In pursuit of such knowledge, she decided to obtain a degree in animal science with a pre-veterinary concentration, as well as a minor in agricultural economics and agribusiness. While in the undergraduate animal science program, she supplemented her academics by having participated as a member of the 2020 Oklahoma State University Meat Judging Team where she and the team saw many

successes. Through invaluable mentorship and coaching, she was named an All-American on a Reserve National Champion team and was tenth high individual at the International Intercollegiate Meat Judging Contest. Mamie-Cate also actively engaged as a member of the OSU Block and Bridle Club, OSU Ranch Horse Team and OSU President's Leadership Council. She was an OSU Freshman in Transition living and learning resident, as well as an OSU-Ferguson College of Agriculture professor's assistant. Currently, she is an active member of the OSU and American Meat Science Association. Through such activities, she has not only been able to expand her education and become a more well-rounded individual, but she has been able to immensely grow her friendships and industry connections as well.

Furthermore, Mamie-Cate recently completed an internship on the R. A. Brown Ranch in Throckmorton, Texas, where she was able to gain a deeper understanding of another facet in the production industry. By obtaining greater insight into various seedstock procedures, she feels she better understands the opportunities and challenges of producing high-quality beef that will help fulfill the desires of consumers, while also revolutionizing and renovating the production of high-quality, genetically proficient and sustainable animals within the industry.

After achieving her undergraduate degree, she hopes to pursue a career in the animal health field to better serve producers and consumers by assisting them in a way that will not only benefit the animal's overall health and well-being but will create a better and more profitable product for the industry. She believes these experiences, opportunities and relationships will substantially make her better equipped in doing so.

Mamie-Cate is humbly honored to have the immense support of both the faculty and alumni of the animal and food science department and proudly looks forward to serving the department and the industry as an Oklahoma State alum.



Mattie Haynes

Senior Leadership Award

Mattie Haynes was born May 30, 2000, to Matt and Jana Haynes of Jay, Oklahoma. Growing up on a stocker calf operation in northeast Oklahoma, her roots of agriculture, family and faith ran deep. She was actively involved in 4H and FFA and competitively exhibited sheep, goats and swine. Mattie first received her associate's degree from Northeastern Oklahoma A&M College and graduated as the Agriculture Department's Graduate of Distinction. She then transferred to Oklahoma State University to dual major in animal science and agribusiness with an emphasis in business and an agricultural economics minor.

While at OSU, Mattie has been a member of the Leaders of Excellence in Animal and Food Sciences, Collegiate Farm Bureau, and the Honors College from which she has received the General Honors Award. Mattie

is a proud member of the 2021 National Champion Livestock Judging Team and was named an All-American. She also competed on the Meat Animal Evaluation Team. Furthermore, she was chosen as a member of the Oklahoma Agriculture Leadership Encounter Class XIX where she has traveled to various regions in Oklahoma learning about regional agriculture, assisted with the Oklahoma Youth Expo, visited Washington D.C. and will travel internationally this summer.

Throughout her time as an undergraduate, Mattie has explored different career opportunities. Currently, Mattie works as the project manager for Bio S.I. Technology, striving to promote soil-borne microbials for more sustainable agricultural practices. In addition, she has been front desk support for OSU Department of Animal & Food Sciences and a summer intern for the Delaware County District Attorney's Office. Actively involved across campus, Mattie was on the Ferguson College of Agriculture Freshman Transfer Council and is also a member of the Phi Kappa Phi Honor Society and the Tau Sigma Honor Society. She has continuously been on the President's Honor Roll and has completed numerous community service hours with various local philanthropic organizations in which she is involved.

Mattie claims she knew "God led her by stillwater" for a reason, but she could have never imagined the blessings in store. She is grateful for the relationships and opportunities provided by Oklahoma State University and is eager to give back to the department that has given so much to her.

Upon graduation in May, Mattie plans to work at a local law firm. She looks forward to pursuing a juris doctorate soon with the goal of zealously advocating for her clients and the agricultural industry.



Kathi LaPoint

Senior Leadership Award

Kathi LaPoint was born May 18, 2001 to Darla and Barry LaPoint, along with her twin sister Kaysi. She was raised in Evans, Colorado, though her involvement and love of agriculture was found at the family farm and ranch in Lamar, Colorado. Each opportunity to visit the farm and ranch only deepened her love for production agriculture, the people behind it and the hard work, character and persistence required to obtain success in the industry.

The majority of Kathi's agricultural involvement growing up came through work experience. After high school, she decided to pursue a degree in animal science and agriculture business at Laramie County Community College in Cheyenne, Wyoming. While in her first year of college, she competed in the Wyoming Farm Bureau Collegiate Discussion Meet and, after winning the state competition, went on to rank as a Semi-finalist in the National Farm Bureau Collegiate Discussion Meet Competition.

Seeking more academic opportunity, adventure and farming than she felt Wyoming could offer, Kathi transferred to Oklahoma State University after her first year in community college to pursue a more precise degree in animal science with a business concentration and a double minor in agriculture business and economics and agronomy.

In her two years at OSU, Kathi has continued to chase various career and networking opportunities within animal science, agriculture business and agronomy. Her work experience from high school to present has provided opportunities ranging from a business internship with a dairy to her most recent summer internship with Crop Quest.

Throughout her college career, she has been pleased to gain exposure to careers in animal reproduction, agriculture sales, agronomy, seedstock production, agriculture finance and agronomy through generous individuals who were willing to accept an inquisitive job shadow student.

Kathi has also pursued opportunities for involvement in student clubs and organizations across campus. In her first year at OSU, she obtained the Cattlemen of the Year award as a member of the Oklahoma Collegiate Cattlemen's Club and the AggieX Outstanding New Member award. She served as a member of the Leaders of Excellence in Animal and Food Sciences and vice president of the Oklahoma Collegiate Cattlemen's Club, as well as the educational vice president of the AggieX Club. Off campus, Kathi also serves as a volunteer at Turning Point Therapeutic Riding, where she hopes to help individuals with varying challenges build productive futures through skills gained by horseback riding.

Kathi is extremely grateful to the individuals that have donated their time, consideration and knowledge to help her chase her goals and allowed her more opportunities than she feels she could deserve. As much as possible, she hopes to be able to give back to those at Oklahoma State who have impacted her along the way.

Upon graduation in December, Kathi hopes to stay in the state of Oklahoma. She plans to enter the workforce and continue to grow in her knowledge of animal science, plant science and agribusiness while contributing the understanding she has gained while at Oklahoma State.



Hunter McConnell

Senior Leadership Award

Hunter McConnell was born on November 24, 2000, and is the eldest child of Dana and Gilbert McConnell of Owasso, Oklahoma. Her first exposure to animal agriculture was when she joined the FFA in middle school. Her experiences in the FFA helped her decide she wanted to pursue a research career in animal genetics. The first step to this goal was attending Oklahoma State University and pursuing a bachelor's degree in animal science with an emphasis in animal biotechnology and a minor in microbiology.

Hunter's time in the OSU Department of Animal and Food Sciences is best chronicled through research. She began working as an undergraduate student worker in the spring of 2020 with Andrew Foote in his ruminant nutrition lab. She then joined the Animal and Food Sciences' Undergraduate Research Scholars Program the following

fall. In both 2020 and 2021, she received OAES/Ferguson College of Agriculture Undergraduate Research Scholars Grants. Then for the 2021-22 school year she was selected for both the Niblack Research Scholars Program and the Wentz Research Scholars Program. She chose the Niblack Research Scholars Program to continue her research. Her research has centered around the impact various metabolites have on gene expression in growing and finishing beef cattle.

In addition to her research at OSU, Hunter gained experience as an intern with the USDA. During the summer of 2021, she completed the U.S. Meat Animal Research Center Undergraduate Research Internship Program in Clay Center, Nebraska. She was supervised by Oklahoma State University Animal Science alumnus, Clay Lents. This experience exposed her to another discipline as well as species for research. During the same summer, she competed in the Undergraduate Poster Competition at the 2021 National Meeting of the American Society of Animal Science and placed first.

While at Oklahoma State University, Hunter was chosen to serve as an institutional nominee for both the Harry S. Truman Scholarship and the Barry Goldwater Scholarship. She joined the Honor Society of Phi Kappa Phi and was a member of the Biochemistry Club. For the 2021-22 school year she was also a member of the Leaders of Excellence in Animal and Food Sciences. In 2022 Hunter competed with the Animal Science Academic Quadrathlon team. Her team became the quiz bowl champions at the Southern Section Competition.

Hunter has learned a great deal in her time at OSU, both in and out of the classroom. She hopes to continue to represent the department well as an alumna. Following graduation in December, she will continue her education by pursuing a master's degree and subsequent Ph.D. in animal genetics. She then plans to pursue a career in animal genetics research.



Hailey Obradovich

Senior Leadership Award

Hailey Obradovich was born February 4th, 2000, in Los Angeles, California. She grew up in Southern California and enjoyed riding horses from a young age. Pursuing her passion for horses opened her eyes to many issues the agriculture industry often faces. This motivated her to continue her education and find herself a place within agriculture, more specifically in the equine industry. She decided to obtain a degree at Oklahoma State University and majored in animal science with an emphasis in production, as well as an Equine Enterprise Management Certificate.

While in the undergraduate animal science program, Hailey was an intern and student employee at the OSU Cline Equine Teaching Center. During her time, she learned about all aspects of equine management in a breeding setting. In addition to this, she learned valuable business and marketing strategies specifically relevant to the horse industry.

During the summer, she worked with equine professionals in various sectors of the industry to further build upon her skills. She worked various National Cutting Horse Association Shows and was responsible for the care of over 20 equine athletes. In addition to this, she also broadened her species knowledge while working at a cattle and horse ranch in the Big Horn Mountains.

While at OSU, she also was an undergraduate research assistant for a graduate research equine nutrition trial. During her time, she worked on studying the impacts of various feedstuffs on growing yearling horses.

Hailey served as the president of the Horsemen's Association, a board member on the OSU Ranch Horse Team, an assistant teacher for equine behavior and handling, an employee at the Cline Equine Center and competed on the 2021 Intercollegiate Horse Judging Team.

Choosing to go to OSU has provided limitless opportunities for Hailey. Her time here has equipped her with mentors as well as professional skills and contacts. She is excited to represent OSU within the equine industry and give back to the department however possible.

Hailey is eager to enter the equine industry. She has not yet decided which specific sector of the industry she will enter but is confident that OSU has equipped her with the skills necessary to thrive in whatever occupation she chooses.



Phoebe Rogers

Senior Leadership Award

Phoebe Rogers was born on July 5, 2000, and is the eldest daughter of Justin and Shawna Rogers, now of Sonora, Texas. Phoebe grew up in southwestern Oklahoma where her family raised and showed pigs and sheep. Early on, she knew she wanted to follow in the footsteps of her parents, so she joined 4-H as a nine-year-old, and eventually went on to join the FFA. This is where she got involved with things like public speaking and competitive events. Her early involvement in agriculture is what helped her to shape her future career goals and led her to pursue a degree in animal science, which would allow her to be directly involved in agriculture.

Phoebe started her undergraduate degree at South Plains college in Levelland, Texas. While there, she obtained an associate degree in agriculture studies and was a member of the livestock judging team.

In Levelland, she was able to explore many potential careers in agriculture and gained hands-on experience in veterinary medicine while working at West Plains Veterinary Hospital.

After her time at South Plains College, Phoebe was drawn to the vast history and tradition at Oklahoma State University and started her attendance in August of 2020. While at OSU, she was able to meet many friends and mentors that have encouraged her academically and have helped to shape her career goals.

Phoebe was a member of the 2021 OSU Livestock Judging Team where her team took home high honors and a record-setting national championship title. Phoebe was also the high individual of their national contest in Louisville, Kentucky. She has continued her involvement in livestock judging as she assists with the 2022 team.

Phoebe will be continuing her education as she obtains a master's degree in swine nutrition here at Oklahoma State University. Her ultimate goal is to graduate with a Ph.D. and work as a nutritionist in the swine industry.

Being a part of the community at OSU, and specifically the Ferguson College of Agriculture, has allotted numerous opportunities for Phoebe. She looks forward to using the life skills and knowledge that she has gained at her time here to help serve as a mentor to others. Phoebe wants to thank her parents, professors, leaders within the OSU Department of Animal and Food Sciences and the Lord for her OSU experience.

Our Faculty

Beck, Paul - Beef Cattle Nutrition

Research & Extension

Carter, Scott - Swine Nutrition, Waste Mgt
Research, Teaching & Graduate Coordinator

Cooper, Steven - Equine
Teaching, Scholarship Coordinator

Crosswhite, Justin - Clinical Instructor

Crosswhite, Mellissa - Clinical Instructor

DeSilva, Udaya - Molecular Genetics
Research & Teaching

Fitch, Jerry - Interim Department Head, Sheep
Teaching & Extension, Teaching Coordinator

Foote, Andrew - Ruminant Nutrition
Research & Teaching

Gosz, Rusty - 4-H Youth Livestock
Extension

Hagen, Darren - Animal Genomics
Research & Teaching

Henley, Parker - Teaching & Extension

Hiney, Kris - Equine
Research & Extension

Jadeja, Ravi - Food Safety
Teaching & Extension

Jaroni, Divya - Meat Safety
Research & Teaching

Johnson, Mark - Animal Breeding
Teaching & Extension

Lalman, Dave - Beef Cattle Nutrition
Research & Extension

Mafi, Gretchen - Meats
Teaching & Research

Moraes, Joao - Physiology, Research, Teaching

Muriana, Peter - Food Microbiology
Teaching, Research & Extension

Pezeshki, Adel - Monogastric Nutrition
Teaching & Research

Pfeiffer, Morgan - Food Science
Research, Teaching

Ramanathan, Ranjith - Meat Science
Teaching, Research & Research Coordinator

Reuter, Ryan - Range Beef Cattle Nutrition
Teaching & Research

Richards, Chris - Interim Department Head
Research & Extension

Salak-Johnson, Janeen - Animal Behavior & Well-Being
Research & Teaching

Spicer, Leon - Reproductive Physiology
Research & Teaching

Stein, Dan - Livestock Production
Teaching & Extension

Wilson, Blake - Beef Cattle Nutrition
Teaching & Research

Zhang, Guolong - Animal Molecular Biology
Research & Teaching

Emeriti Faculty

Buchanan, David - Animal Breeding, Teaching Coordinator

Gill, Don - Beef Cattle Nutrition, Extension

Horn, Gerald - Beef Cattle Nutrition

Kropp, Bob - Beef Cattle Nutrition, OBI

Selk, Glenn - Reproductive Physiology, Extension

Teeter, Robert - Poultry Nutrition

Wagner, Don - Department Head

Wettemann, Bob - Reproductive Physiology

**Thank you to Drs. Jerry Fitch and Chris Richards
for serving as interim department heads for the
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