

COWPOKE

Department of Animal & Food Sciences
Oklahoma State University
Fall 2024

NEWS



Cowpoke News

Welcome to the Fall 2024 Edition of Cowpoke News! 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. We hope you enjoy reading about the Oklahoma State University Department of Animal and Food Sciences.

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On the Cover

The late Jarold Callahan, OSU alumni, previous Board of Regents Chair, 2023 Saddle & Sirloin Club inductee, and cattle industry leader is on the cover of this edition. Read more about his story and the legacy he left on the agriculture industry on page 30.

Letter from the Department Head

Greetings alumni and friends! I hope this message finds you well. I apologize that it has been a while since you have received Cowpoke News. The person that coordinated putting this newsletter together for the department left for a new job and it has taken a while to get things back on track. We hopefully have things in place so that we can get back to providing this important communication to you on a regularly scheduled basis.

On the cover of this Cowpoke News edition is the late Jarold Callahan, a recent inductee into the prestigious Saddle & Sirloin Club who passed away this past December. Jarold was a former member of the department's faculty and with his passing we not only lost an icon in the beef cattle and agriculture industries, but also someone who was a true champion, advocate, and supporter of the department. He embodied "riding for the brand" and will be missed.

The Fall semester has started here on campus, and we welcomed a record enrollment of 1,141 undergraduate students. The undergraduate population represents students from 41 different states, with about 57% from Oklahoma and about 43% from out-of-state. The department also has 64 graduate students of which 37 are working towards their MS degree and 27 are working towards a PhD degree. We are fortunate to be the school of choice for so many students.

As you thumb through the pages of Cowpoke News you will notice that we have added several new faculty and staff. It is exciting to bring new people on board to give some much-needed help to the department's teaching, research, and outreach efforts, as well as to our animal unit operations. Stop by the next time you are in Stillwater to meet these new additions. You will also learn about some of the awards and honors our students, faculty, and alumni have received over the past year. We are truly blessed with outstanding and talented people.

I hope you enjoy reading about the successes all our competitive teams achieved over the past year, as well as how the department's Undergraduate Research Scholars Program provides an impactful learning experience for students. As you know we take great pride in offering a variety of extracurricular activities and educational opportunities that help students grow academically and gain important life skills.

You will also find in this edition a listing of the department's Major Sponsors who provide invaluable support to our department's animal units. Their support is critical to the operation of these units and is much appreciated. If you or someone you know would like to learn more about the Major Sponsor program, please reach out to me or Dr. Rany Perry (randy.c.perry@okstate.edu). Dr. Perry is the Farm Operations Coordinator who provides oversight of the animal units.

Finally, if you or someone you know would like to receive a hard copy of the Cowpoke News or would like to be added to our e-mail list, please contact Taylor Epperson (taylor.fent@okstate.edu). And please do not hesitate to reach out to me if I or the department can ever be of support or service to you.

GO POKES!

Richard Coffey
Head, Department of Animal and Food Sciences



DEPARTMENT OF
ANIMAL AND FOOD SCIENCES

Our Faculty

Coffey, Richard - Department Head

Amorim, Sabrina - Quantitative Genetics & Genomics, Research & Teaching

Beck, Paul - Beef Cattle Nutrition, Research & Extension

Carter, Scott - Swine Nutrition, Waste Management, Teaching & Research

Cooper, Steven - Equine, Teaching

Crosswhite, Justin - 4-H Youth Livestock, Extension

Crosswhite, Mellissa - Reproductive Physiology, Teaching

DeSilva, Udaya - Molecular Genetics, Teaching & Research

Fitch, Jerry - Sheep, Teaching & Extension, Teaching Coordinator

Foote, Andrew - Ruminant Nutrition, Teaching & Research

Hagen, Darren - Animal Genomics, Teaching & Research

Henley, Parker - Teaching & Extension, Livestock Judging

Hiney, Kris - Equine, Teaching & Extension

Iqbal, Khursheed - Reproductive Biology, Research & Teaching

Jadeja, Ravi - Food Safety, Teaching & Extension

Johnson, Mark - Animal Breeding, Teaching & Extension

Lalman, David - Beef Cattle Nutrition, Research & Extension

Mafi, Gretchen - Meats, Teaching & Research, Advising Coordinator

Messman, Riley - Reproductive Physiology, Microbiome, Teaching & Research

Meyer, Meaghan - Poultry Science, Animal Welfare & Behavior, Teaching

Moraes, Joao - Physiology, Teaching & Research

Muriana, Peter - Food Microbiology, Research, Teaching, & Extension

Pezeshki, Adel - Monogastric Nutrition, Teaching & Research

Pfeiffer, Morgan - Meat Science, Teaching & Research, Scholarship Coordinator

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

Reuter, Ryan - Range Beef Cattle Nutrition, Teaching & Research, Graduate Coordinator

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

Stein, Dan - Livestock Production, Teaching & Extension

White, Jason - Dairy Cattle Science, Teaching

Whitworth, Barry - Food and Animal Health, Extension, BQA State Coordinator

Wilson, Blake - Beef Cattle Nutrition, Teaching & Research

Zhang, Glenn - Animal Molecular Biology, Research & Teaching

Emeriti Faculty

Berry, Joe - Poultry, Extension

Buchanan, David - Animal Breeding, Teaching Coordinator

Freeman, Dave - Equine, Extension, Extension Coordinator

Gill, Don - Beef Cattle Nutrition, Extension

Horn, Gerald - Beef Cattle Nutrition, Graduate Coordinator

Kropp, Bob - Beef Cattle Nutrition, OBI

Maxwell, Charles - Swine Nutrition

Owens, Fredric - Animal Food Products, Extension

Selk, Glenn - Reproductive Physiology, Extension

Spicer, Leon - Reproductive Physiology, Research & Teaching

Teeter, Robert - Poultry Nutrition

Wagner, Don - Department Head

Wettemann, Bob - Reproductive Physiology

New Hires

Faculty



Dr. Sabrina Amorim
Quantitative Genetics
& Genomics, Research
& Teaching



Dr. Khursheed Iqbal
Reproductive Biology,
Research & Teaching



Dr. Riley Messman
Reproductive
Physiology,
Microbiome, Teaching
& Research



Dr. Meaghan Meyer
Poultry Science,
Animal Welfare &
Behavior, Teaching &
Research

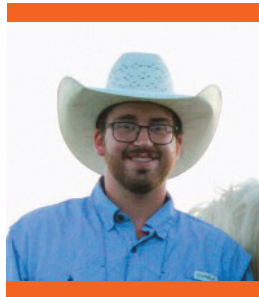


Jason White
Dairy Cattle Science,
Teaching

Staff



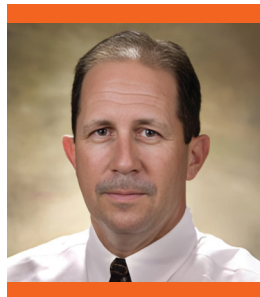
Dakota Heidt
Assistant Herd
Manager
Purebred Range



Isaac D. Manley
Assistant Herd
Manager
Bluestem



Gregory Perdue
Assistant Herd
Manager
North Range



Dr. Randy Perry
Coordinator Farm
Operations



Micayla West
Senior Herd Manager
Bluestem

OSU's Competitive Teams Ride High

2023 & 2024 Contest Results

The Oklahoma State University **Livestock Judging Team** has etched its name in the archives of competitive excellence, under the guidance of Coach Dr. Parker Henley.

The 2023 team was comprised of members Shawn Agar, Baxter Blair, Caden Church, Luke Daniels, Ty Drach, Caleb Edens, Kasey Johnson, Alexis Lake, Pace Mittelstaedt, Kloie Nation, Kade Pendley, Easton Ray, Eric Schafer, Riley Scott, and Jentry Squires, as well as assistant coach Phoebe Rogers. They were named the National Champion Team and claimed top honors at prestigious contests such as Louisville, American Royal, National Western, and Cattlemen's Congress. Their success was further highlighted by Alexis Lake and Jentry Squires, who earned Academic All-American distinctions for their scholarly achievements.

The OSU Livestock Judging Team continued their winning streak into 2024. Team members included Clay Brillhart, Kale Campbell, Hailey Coggins, Emma Eldridge, Emma Farmer, Parker Fleming, Anna Hannon, Ryan Hegland, Kye Heldermon, Delaney Hemann, Doug Hewitt, Blake Hopkins, McKenzie Layton, Shaylee Maddox, Ashlyn O'Brien, Jed Sidwell, and Braylon Spears, along with assistant coaches Ty Drach, Pace Mittelstaedt, and Eric Schafer. They earned the title of Champion Team at Cattlemen's Congress, National Western, and Dixie National, as well as winning Reserve Champion at San Antonio.

As they look ahead, the OSU Livestock Judging Team remains poised to uphold their tradition of dominance, promising continued achievements and further contributions to the field of livestock evaluation on the national stage.





The **Meats Judging Team** at Oklahoma State University continues to carve out a reputation for excellence and has consistently demonstrated their dedication across significant competitions in 2023 and 2024.

In 2023, led by coaches Dr. Gretchen Mafi and Jade Edwards, the team

achieved placements including Third Place at the International competition, Fourth Place at Cargill, Second Place at the American Royal, and Fourth Place at the Eastern National. Team members included: Grace Bryson, Nicholas Mull, Blake Robbins, Raeden Schon, Cal Schultz, Hailey Spray, Jessica Stroup, and Kelby Tostenson. Grace Bryson's exceptional performance earned her recognition as a 1st Team All-American, highlighting her outstanding contributions to the team's success.

The 2024 team comprised of Kate Donaldson, Erika Grum, Allison McNamara, Eric Quisenberry, Riley Slowensky, Laney Stephens, Kaylea Taylor, and Kristian Thralls. They were coached by Dr. Gretchen Mafi and Grace Harris. They finished Fifth Place at the National Western contest, Seventh Place at Southwestern, Second Place at South Plains (where Allison McNamara earned High Individual honors), and Seventh Place at Houston.

Oklahoma State University's **Academic Quadrathlon Team** continues to make significant strides under the leadership of coaches Dr. Blake Wilson and Jazmin Markey.

The Spring 2023 team, comprised of Evan Briguglio, Rhiannon Curley, Rylan Jordan, and Victoria Waits. They earned First Place in Quiz Bowl, Second Place in the Written Exam, and finished Fifth Place overall.

The Spring 2024 team members were Keaton Herrmann, Hannah Jimenez, Carson Murray, and Benjamin Roberson. Their achievements included placing second in Quiz Bowl, third in the Written Exam, and Fourth in Practicum, ultimately placing them at third overall.

The achievements of OSU's Academic Quadrathlon Team emphasize the university's commitment to fostering a culture of academic excellence and intellectual skill.



Guided by coaches Dr. Steven Cooper and Megan Newlon, the Oklahoma State University **Horse Judging Team** has excelled with standout members Kendall Haas, Amy Hoffmann, Renee McCray, and Piper Turner.

At the All-American Quarter Horse Congress, they triumphed as Champion Team Overall. They secured Reserve Champion titles at the Spring Sweepstakes, APHA Lonestar competition, and the AQHA World Show.

Individual members Amy Hoffmann and Renee McCray also earned Academic All-American honors. Under their coaches' mentorship, the team



embodies dedication, teamwork, and a commitment to excellence, upholding OSU's tradition of success in equine evaluation.

Although a relatively new addition to the university's roster of competitive teams, Oklahoma State's **Ranch Horse Team** has quickly made a name for itself in the 2023-2024 season. This team is coached by Marissa Chapa and team members include: Megan Newlon, Stephanie Gripp, Dustyn Parr, Sydney Van Pelt, Cassidy Allen, Ashlyn Igo, Kendall Haas, Allison Sharp, Lindsey Temple, and JT Danielecki.

During their competitive season, they earned notable team placements including D2 Team Champions at the Stock Horse of Texas Guns Up Show and D2 Third Place Team at the National Intercollegiate Ranch & Stock Horse Association Show.

Individual riders also showed significant accolades. At the SHTX World Show &

Derby, Allison Sharp was 3rd Overall Go 1 and 9th Overall, and Ashlyn Igo was 9th Overall Go 1 and 10th Overall, both in the Collegiate Novice Division. Megan Newlon was Champion Overall in Collegiate Ltd Working Cow, as well as 2nd Overall Go 2, 3rd Overall Go 1, and 2nd Overall in the Collegiate Ltd Division. Allison Sharp also earned a Top 10 spot as 7th Overall Individual and Cassidy Allen claimed the title of Reserve Champion Overall in the Novice Division at the NIRSHA Show.

As the team continues to grow and achieve, they are setting high standards for future riders in the OSU collegiate equestrian community.

Written by Taylor Epperson



Call for nominations:

Minnie Lou Bradley Trailblazer Award

The Minnie Lou Bradley Trailblazer Award aims to recognize a younger alum who has used their degree to advance animal agriculture and agriculture through their career and seen success along this path, with a requirement they are a graduate of the department of animal and food sciences at OSU.

It is recommended the individual be at or about the age of 40 or younger and/or graduated in the past twenty years with their BS, MS or PhD.

Nominations are due December 15 online or by sending a nomination statement to the OSU Animal Science Alumni Association at osuanscialumni@gmail.com.



For questions or more information contact Megan Smith at osuanscialumni@gmail.com.



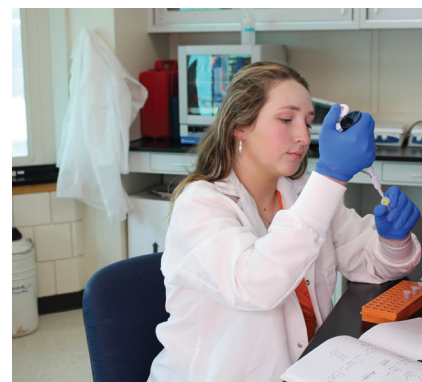
Upcoming ASAA Events & Activities

- ASAA Holiday Auction | November 8-12, 2024 visit www.asaaholiday.givesmart.com
- ASAA Cowboy Football Tailgate | November 23, 2024
- 2025 OSU Animal Science Weekend | April 4-6, 2025
- 2025 ASAA Gala Reunion | April 5, 2025



**ANIMAL SCIENCE
ALUMNI ASSOCIATION**

Undergraduate Research Scholar Program Impacting in Many Ways



The Undergraduate Research Scholar Program in the Department of Animal and Food Sciences at Oklahoma State University offers undergraduate students an unparalleled opportunity to engage in scientific research, fostering personal and professional growth while contributing to the broader animal and food sciences field. In 2023-2024, 27 students participated in this program and got hands-on research experience. These students worked on real-world research projects to gain a deeper understanding of animal and food science concepts and their practical implications.

Morgan Patterson, who worked with Janeen Johnson, said, "I cannot express how grateful I am for this amazing opportunity. In these past four years,

I have learned more from Dr. Johnson and her team of graduate students than I ever thought possible. I look forward to the next chapter but am hopeful that I can continue to contribute to research as I continue with my career in veterinary medicine." Morgan will start DVM at the University of Missouri College of Veterinary Medicine this fall.

One of the key features of the program is its emphasis on mentorship. Experienced faculty members guide students through the complexities of research design, data collection, and analysis. Both faculty and graduate students play an important part in helping students develop a strong foundation in scientific methodology, critical thinking, and problem-solving skills. Moreover, it provides students with a

valuable network of professional contacts, which can be instrumental in their future careers.

The students involved in this program are paid through department funding. The creation of the Endowment for the Undergraduate Research Scholar Program, supported by emeriti faculty and alumni, has allowed us to cover some of the costs associated with undergraduate research. This year, four faculty members – Darren Hagen, Adel Pezeshki, Joao Moraes, and Khursheed Iqbal – received financial assistance, which can be used for the purchase of chemicals, publication costs, or travel to attend national conferences. This Endowment also gives scholarships to outstanding students in this program. This year, three students received scholarships: Faith Howe, Lauren Chancey (Darren Hagen mentored both students), and Kate Buckmaster (mentored by Joao Moraes) for their sustained excellence.

The undergraduate research program attracts high-caliber students to Oklahoma State University. Through this program, the department and college demonstrate their commitment to academic excellence, innovation, and the development of the next generation of scientific leaders.

Written by Dr. Ranjith Ramanathan

A Night of Recognition Annual Departmental Banquet Highlights

The annual Animal and Food Sciences Scholarship & Awards Banquet was a remarkable event, celebrating the achievements of both undergraduate and graduate students. This year, the department awarded over \$500,000 to approximately 215 deserving students.

The scholarships and awards recognize the hard work, dedication, involvement and academic excellence of our outstanding student population. These financial awards not only provide significant support for their educational journeys but also encourage them to continue striving for excellence outside the classroom through various avenues of competitive teams and departmental programs.

A heartfelt **thank you** goes out to the generous donors whose contributions made these scholarships and awards possible. Their support is invaluable in fostering the growth and success of the next generation of leaders in animal and food sciences.

The event was a testament to the strong alumni and friends of the OSU Animal and Food Sciences department, and their commitment to investing in the next generation of leaders.

Congratulations to all the recipients!

Written by Dr. Morgan Pfeiffer

Award winners from this year's banquet are featured on the following pages.



Photos by Kathy Castre



Senior Leadership Awards

Kyra Elliott



Outstanding Senior

Kyra Elliott was born on April 12, 2002 and is the daughter of Clay and Lili Elliott of Calumet, Oklahoma. Growing up alongside her sisters, Bree and Myka, Kyra developed a passion for raising and exhibiting livestock. Kyra graduated with degrees in Animal Science and Agribusiness this past spring.

During her time at OSU, Kyra served as the president of the Meat Science Association, contributed to the success of the 2022 Meat Judging Team, and was honored to be selected for the Oklahoma Agricultural Leadership Encounter Class XXI. Participating in OALE provided Kyra with invaluable insights into Oklahoma's diverse agricultural landscape, including behind-the-scenes involvement in running the Oklahoma Youth Expo and international exposure through a trip to Switzerland. Throughout her undergraduate tenure, Kyra dedicated herself to research in the Animal and Food Sciences Department under the guidance of Drs. Morgan Pfeiffer and Ranjith Ramanathan. In addition to assisting in a number of industry and graduate projects, her research primarily focused on evaluating discoloration trends in beef whole muscles and investigating the effects of different freezing methods on meat muscle fiber histology.

Additionally, Kyra had the unique opportunity to become a student employee of OSU's Robert M. Kerr Food and Agricultural Products Center Meats Lab. Beyond her proficiency in machinery operation, animal handling, and precise

record-keeping, Kyra showcased her expertise by actively participating in new product innovation endeavors. Since graduating in May, Kyra is pursuing a master's degree in Meat Science, viewing it as a pivotal step towards advancing her career in the Food and Meat Science industries, particularly in roles focused on research and development.

Faith Howe



Award of Merit

Faith Howe was born February 1st, 2002 and is the daughter of Patrick and Amy Howe of Sulphur, Oklahoma. She grew up alongside her sister Samantha on her family's 5th generation cattle ranch raising and exhibiting livestock as well as riding and training horses. Her lifelong involvement in the animal agriculture industry led her to attend Oklahoma State University and pursue a Bachelor of Science in Animal Science with a concentration in Biotechnology and a minor in Microbiology. She will be the third generation of her family to receive a Bachelor of Science in Animal Science from OSU.

Faith has been actively involved in undergraduate research throughout her time at OSU, under the direction of Dr. Darren Hagen. She began working in Dr. Hagen's lab as a 2020-21 Freshman Research Scholar. She was then named a 2021-22 and 2022-23 Wentz Research Scholar, and now a 2023-24 Niblack Research Scholar. During her time at OSU, she has presented at various research symposiums and helped coordinate the Oklahoma State Science and Engineering Fair. She has also served as a student academic mentor, an undergraduate teaching assistant, and Mortar Board Honor Society New Member Coordinator. Additionally, she participated in a study abroad to New Zealand and Australia through the Ferguson College of Agriculture.

Faith has been set on being a veterinarian her entire life as she has spent summers working at Performance Equine Associates in Thackerville, Oklahoma under Dr. Shem Oliver. Since graduation in May, Faith is continuing her education by pursuing a Doctorate in Veterinary Medicine. She hopes to eventually complete a large animal surgery residency, become a Diplomate of the American College of Veterinary Surgeons, and work as an equine surgeon in southern Oklahoma and north Texas.

Hannah Jimenez was born July 18, 2002 and is the daughter of Mark and Rebekah Jimenez of Dixon, California. She grew up with her twin sister Hope and younger brother Tyler. Although her family did not have careers or interests in animal production, she had friends that enabled her to pursue her interest in livestock animals. From a young age, Hannah knew she loved animals showed rabbits, horses, and market hogs through 4-H and FFA. Her involvement within FFA led her to pursue a bachelor's degree in animal science with a concentration in Pre-Veterinary Medicine at Oklahoma State University.

As a freshman Hannah worked at the OSU Swine Research and Education Center. Her employment at the farm shifted her outlook on her future as she had always dreamed of being a veterinarian, she realized she enjoyed a more direct role within animal food production. Her work experience at the Swine farm as well as working at Bullnanza Stud Services ultimately led to her decision to change her concentration to Production.

Throughout her time at OSU Hannah has made connections within the animal agriculture industry. Hannah attended the Agriculture Future of America Leadership Conference in November of 2020. Hannah was also selected to attend the AFA Animal Institute. Additionally, Hannah was a member of the Oklahoma Pork Council's Pork Industry Group. While at OSU, Hannah was a member of the 2022 Equine Judging Team, and the 2024 Animal Science Academic Quadrathlon team. Hannah has served as Secretary of the Horseman's Association and was also a member of the Pre-Vet club. Hannah has also served as an undergraduate TA for Applied Nutrition. Since graduation in May, Hannah has entered the workforce of the industry with hopes to gain more experience within the field of animal nutrition with plans to obtain a master's degree in the future.

Hannah Jimenez



Award of Merit

Alexis Lake was born June 21, 2002 and is the daughter of Scott and Ruth Lake of Laramie, Wyoming. She grew up on a small cow calf operation where she raised and exhibited cattle with her three younger siblings: Kolton, Riley and Jadyn. Alexis graduated in May with a bachelor's degree in Animal Science.

Throughout her time as an undergraduate, Alexis was involved in undergraduate research under the direction of Dr. Morgan Pfeiffer, working in the muscle biology lab. Under the direction of Dr. Tim Holt and Dr. Cody Gifford at Colorado State and the University of Wyoming, Alexis assisted in a study regarding pulmonary arterial pressure in feedlot cattle. Additionally, Alexis was an intern for the University of Wyoming, where she assisted Dr. Hannah Hollinger on a study regarding the maternal reproductive biome in cattle. Alexis was a member of the 2023 National Champion livestock judging team, and was named an Academic All American. Alexis was also a member of the Meat Animal Evaluation Team and the Oklahoma Agricultural Leadership Encounter, Class XXI. Alexis served as the Vice President of the Food Science club. She is a Leader of Excellence for Food and Animal Sciences, a member of the Block and Bridle, Meat Science Association, and Phi Theta Kappa Honor Society. She also served as an undergraduate teaching assistant for Animal Breeding. Alexis's involvement led her to be named the Most Outstanding Transfer Student for the Ferguson College of Agriculture in 2023.

Alexis Lake



Award of Merit

Prior to Oklahoma State, Alexis attended Butler Community College in El Dorado KS, where she obtained her associate degree in Agriculture, with honors and was a member of the livestock judging team. Since graduation, Alexis is continuing her education here in Stillwater, pursuing a master's degree in Meat Science under the guidance of Dr. Morgan Pfeiffer. She will also be enrolled in a dietetic program at the University of Northern Colorado in hopes of becoming a registered dietitian for one of the globe's leading protein suppliers.

Ali Bowman



Ali Bowman was born on July 5, 2002 and is the daughter of Lee Ann and Tony Bowman of Glencoe, Oklahoma. She and her younger brother, Cash, grew up working alongside their parents milking Jersey cows on her family's first-generation dairy farm, Okie-Bow Dairy. Because of her purpose and passion for agriculture and the dairy industry, she felt the natural next step was to pursue a bachelor's degree in Animal Science with an emphasis on Livestock Merchandising at Oklahoma State University.

During her time as an undergraduate, Ali has participated in many activities, both on and off campus. Most notably, she was a member of the Oklahoma State Dairy Science Club and served as the club President. While at OSU, Ali was a member of the National Jersey Youth Academy Class VII and an inaugural member of the enhancement program for Jersey Youth Academy graduates. Sequentially, she served as the Oklahoma Dairy Ambassador in 2022.

Ali's focus has remained on the dairy industry and has expanded into career opportunities, following her summer internship with Dairy Farmers of America in Kansas City, Kansas. She served as the Farm Practices intern in 2023 and continues to work remotely in an apprenticeship position. Additionally, she is an employee of the Ferguson Family Dairy Center where she worked and

lived for the past four years. As she reflects on her time in Stillwater, Ali credits much of her personal growth and successes to her time in the Animal and Food Sciences Department at OSU. Since graduating in May, Ali is transitioning into a full-time role with Dairy Farmers of America as the Farm Practices Coordinator. Her role will allow her to serve as a cooperative liaison at industry meetings, research and develop resources for farmers, staff, and external groups, and support the cooperative governance processes for over 5,000 farmers nationwide.

Emma Grace Nowotny



Emma Grace Nowotny was born September 18, 2001, and is the daughter of Darryl and Meredith Nowotny of New Braunfels, Texas. Her agricultural roots began on an Angus cow-calf operation where she grew up raising and exhibiting livestock. Her involvement in Texas agriculture, American Angus Association, and its youth programs led her to pursue two bachelor's degrees in Animal Science and Agricultural Communications at Oklahoma State University.

Throughout her time as an undergraduate, Emma Grace has worked at the OSU Purebred Beef Center being the first freshman to be hired. Furthermore, Emma Grace was involved in the OSU Honors College Senior Honors Thesis Agriculture program as she conducted undergraduate research within the Agricultural Education, Communications, and Leadership Department under the direction of Dr. Settle and Dr. Legg.

Emma Grace has explored various career options in the Animal Science and Agricultural Communications industries through participating in internships. Her first internship was with Cattlemen's Congress in Oklahoma City, Oklahoma serving in many facets as a livestock intern. Furthermore, she also served as the marketing intern for Boles Marketing Co. in Braggs, Oklahoma. While at OSU, Emma Grace was selected as a member of The Honor Society of Phi

Kappa Phi and National Society of Leadership and Success. She was also a member of the OSU Honors College and Agricultural Communicators of Tomorrow. Additionally, Emma Grace served in various officer roles in the Oklahoma Collegiate Cattlemen's Association. Since graduation in May, Emma Grace is continuing her education here in Stillwater. She will begin pursuing a master's degree in Agricultural Communications at OSU. She hopes to combine her love for the Animal Science industry through Agricultural Communications.

Benjamin Roberson was born July 24, 2002, and is the son of Scott and Wendy Roberson of Rowlett, Texas. He grew up alongside his younger sister, Reece. During his childhood, agriculture and premiere leadership organizations like the FFA were not widely advertised in elementary or middle school; however, in high school, he found his passion for agriculture by joining the local FFA chapter. As a member of the organization, he served as a Rowlett chapter and District 7 officer and showed a variety of livestock species, such as swine, cattle, and laying hens. His involvement in the FFA and his newfound passion for the agricultural industry and serving those within it led him to pursue a bachelor's degree in animal science at Oklahoma State University.

As an undergraduate, Ben was involved in the Undergraduate Research Scholars Program in the Department of Animal and Food Sciences under Dr. Blake Wilson. The primary focus of these research projects is to improve growth performance and feed efficiency in feedlot cattle across the industry. Since enrolling at OSU, Ben has only ever considered one career path which is becoming a veterinarian. In his pursuit of this goal, he has participated in a variety of programs such as the Ferguson College of Agriculture Pre-vet internship and traveling to Mexico on a pre-vet focused study abroad. Ben has been a Ferguson Student Academic Mentor where he was tasked with providing guidance and sharing his experiences in college to help other students enrolled in Ferguson. Ben was also a member of the 2024 OSU animal science academic quadrathlon team.

Ben plans to serve his community and the animals within it as he navigates his future endeavors. Since graduation in May, Ben is continuing his education at the Oklahoma State College of Veterinary Medicine. He will begin his coursework in the Fall and hopes to work in mixed animal practice at the conclusion of the 4-year program.

Benjamin Roberson



Bailee Schiefelbein was born July 31, 2002, and is the daughter of Don and Jennifer Schiefelbein of Kimball, Minnesota. She was raised with her two older sisters Shelby and Abbey, on their family's Angus seedstock operation. Bailee started in 4-H at five years old after watching both her older sisters compete and soon was showing sheep. Throughout high school, Bailee expanded her love of agriculture by joining FFA and being selected as a Minnesota Beef Ambassador. Bailee graduated from Kimball Area High School. Her experiences led her to pursue a degree in Animal Science and Agricultural Communications at Oklahoma State University.

Throughout her time as an undergraduate, Bailee worked for the Oklahoma State College of Veterinary Medicine Continuing Education program. Additionally, she worked on the Integrated Beef Cattle Program and worked remotely for her family's farm as an Advertisement Designer. Currently, she submits ads to 15+ magazines and newspapers. She also designs an annual four-page brochure advertising a multi-million-dollar sale, distributed to over 250,000 households across the United States and internationally.

While at OSU, Bailee was heavily involved as a three-year officer for the Oklahoma Collegiate CattleWomen. She helped manage a t-shirt fundraiser in collaboration with the OSU baseball team and Cactus Cares to purchase meat for our on-campus food pantry. She also served as the Collegiate Representative for the American National CattleWomen Board of Directors and most recently was asked to serve on the ANCW Long Range Planning Committee. She simultaneously served as OCCW Reporter and on the ANCW Social Media and Communications committee. Also, Bailee was on the 2022 Meat Judging Team and served as Student Council Representative for the Meat Science Association. Since graduation in May, Bailee is pursuing a career in animal science and agricultural communications. Her goal is to connect producers through a variety of communication methods. She believes to be the best communicator possible she needs a solid animal science background to build trust throughout the industry, country, and world.

Bailee Schiefelbein



Erin Slagell



Erin Slagell was raised on a grain farm in Western Oklahoma near Hydro and grew up involved in her family's custom harvesting operation. She is the daughter of Dwayne and Kerry Slagell and has an older sister, Lauren. In high school, she participated on the FFA Milk Quality Products judging team and served on the Oklahoma State Department of Agriculture Youth Council. In 2020, she graduated as valedictorian from Weatherford High School and was inducted into the Oklahoma 4-H Hall of Fame.

Erin's first food science course at Oklahoma State led her to major in food science with an emphasis in meat science. In the fall of 2021, she was selected for the Oklahoma Pork Council & Oklahoma State University Pork Industry Group. Additionally, she was a member of the 2022 Meat Judging Team and was selected to attend the 2023 American Meat Science Association Tyson Foods Beyond Fresh Meat Short Course in Springdale, Arkansas. She also participated in the Ferguson Industry Insight Tour of the Cargill Protein Headquarters in Wichita, Kansas and attended the American Meat Science Association Reciprocal Meat Conference in St. Paul, Minnesota. During her OSU career, Erin has been involved the Food Science Club and served as Vice President of the Meat Science Association. In the summers of both 2022 and 2023, Erin completed summer internships at Empirical Foods in Dakota Dunes, South Dakota. While at

OSU, Erin was a three-year Ferguson Student Success Leader Career Liaison and served as both Vice President and President. She participated in the Ferguson Freshman in Transition program, served as an AG 1011 Student Academic Mentor, and was selected to serve on the OSU Student Foundation. She is a member of Zeta Tau Alpha sorority and served on the Junior Greek Leadership Council as a freshman. She is a member of the OSU Honors College and Phi Kappa Phi Honor Society, while maintaining a 4.0 grade point average over her college career. She was recently named an OSU Alumni Association Senior of Significance. Since graduation, Erin will continue employment with Empirical Foods in Dakota Dunes, SD as the Technical Services Supervisor.

Jentry Squires



Born on May 3, 2002, Jentry Squires is the daughter of Mark and Jona Kay Squires of Purcell, Oklahoma. Growing up alongside her brothers Maverick and Gatlin, she spent her formative years on a small, diversified livestock operation, in Noble, Oklahoma. After many dedicated years to the community of Kingfisher, she graduated KHS as a three-time National FFA Champion and High School Valedictorian. She ultimately chose to pursue her passion for livestock evaluation, enrolling at Butler Community College in El Dorado, Kansas, earning multiple national honors and recognition as a Junior College Academic All-American. She finished her time at Butler as a Graduate of Honor and finalist for the Hubbard Academic Excellence Scholarship.

Driven by a family legacy and a deep appreciation for the Oklahoma State University Department of Animal and Food Sciences, Jentry continued her academic journey at OSU. Joining the Livestock Judging team, she earned accolades as a Senior College All-American and placed in the Top 10 Overall at all major contests. Plus, she was also a member of the 2023 Meat-Animal Evaluation Team. Jentry was a member of College Republicans, Collegiate FFA, Collegiate Cattlewomen's, Meat Science Association, and the Swine Club. Jentry continued to pursue her passion for agriculture through internships with the American Angus Association, Iowa State University Extension and Outreach,

Cattlemen's Congress, Hobbs Show Lambs, and Rhett-Maverick Showpigs. Her involvement also extended to working in the OSU AFS Department Head's Office. Additionally, she joined Dr. Scott Carter's undergraduate research team at the OSU Swine Center.

Since graduation, Jentry is serving as the Zoetis Livestock Marketing Intern for summer 2024 and pursuing a Master of Science in Swine Nutrition at Kansas State University under Dr. Payton Dahmer. Inspired by her time at OSU, she plans to continue her commitment to research, teaching, and leadership in the pork industry, contributing to the advancement of education and innovation in agriculture.

Whiteman Research Award Winners

Isabel Tobin, Brittany Lippy Fletcher, and Emma Briggs presented their research at the 2024 Whiteman Award Competition and received first, second, and third place, respectively. They were each recognized at the 2024 Animal and Food Sciences Banquet.

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

Photos by Genesee



First Place

Isabel Tobin

A commensal bacterium protects chickens against necrotic enteritis.



Second Place

Brittany Lippy Fletcher

Goats complement cattle in a woody-plant encroached, diverse Crosstimbers rangeland.



Third Place

Emma Briggs

Effects of diet type on performance and methane yield in replacement beef heifers.

Outstanding Master's Student

Madelyn Scott

Madelyn Scott is a Master's student in the Department of Animal and Food Sciences under the guidance of Dr. Morgan Pfeiffer. She grew up alongside her brothers raising and exhibiting livestock while spending time as a resident in the states of Nebraska, Oklahoma, and Texas before her family moved back home to be closer to extended relatives. 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 under the direction of Dr. Ranjith Ramanathan, participated in summer internships, actively participated in several student organizations and teams, and was awarded the 2022 Outstanding Senior Award.

During Madelyn's time as a graduate student, she has served as a graduate teaching assistant for many of Dr. Morgan Pfeiffer's courses. She has assisted in grant writing through preparation, ideation, and editing for lamb meat quality research and co-wrote peer-reviewed articles and abstracts. She worked as a meat science lab manager and mentored both graduate and undergraduate students at OSU.

Last year, she served as a panelist for two dietetic intern group workshops and for the Animal and Food Science Professional Development course to provide insight, encouragement, and answer questions about graduate school and internship opportunities. She assisted with coaching and preparing students for the Meat Science quiz bowl. She served as a judge for the Oklahoma State Science and Engineering Fair Sixth Grade Chemistry Division and the Food Science Career Development Event for the Oklahoma FFA Association. She worked as a group leader and instructor for the annual "Meat with Mafi" meat judging clinic for novice youth. She is a member of several professional organizations including the American Meat Science Association, the Institute of Food Technologists, and the National Society of Collegiate Scholars.

Since graduation, Madelyn is pursuing a career in the meat industry in a research and development role.



Photo by Genesee

Outstanding PhD Student

Melanie Whitmore

Melanie grew up in Evanston, Wyoming, where she regularly travelled across the country to show sheep, an experience that ignited her passion for Animal Science. Her academic journey began at the University of Wyoming, where she distinguished herself by earning double BS degrees in Animal Science and Molecular Biology in May 2018. Driven by a strong desire to pursue a career in Animal Science, Melanie joined our Ph.D. Program at OSU in Fall 2018, under the guidance of Dr. Glenn Zhang. Her research is dedicated to developing cutting-edge antibiotic-free strategies for disease control and prevention of livestock and poultry.



Photo by Genesee

Melanie has presented her research multiple times at the university and national scientific conferences, earning numerous presentation awards. Additionally, she has co-authored seven peer-reviewed publications and is on track to have another three first-author publications upon completion of her degree. In recognition of her outstanding research achievements, Melanie was awarded a highly prestigious, nationally competitive Predoctoral Fellowship from the USDA in 2021, valued at \$180,000.

Beyond her research pursuits, Melanie is deeply committed to teaching and mentoring the next generation of scholars. With

her innate aptitude for teaching, she led lab sessions of ANSI 4843 (Application of Biotechnology in Animal Science) for two years before volunteering to teach most of the lectures in the next two years. In the Zhang lab, Melanie has mentored more than 15 graduate and undergraduate students over the years.

A natural leader, Melanie has held various leadership roles. She currently serves as Vice President of the Animal and Food Science Graduate Student Association and successfully coordinated the annual Totusek Lectureship for our department in 2023. Prior to that, she also served as Secretary and President of the Graduate Student Association. Additionally, Melanie led the Academic Quadrathlon poultry station five times for the American Society of Animal Science Southern Section at OSU, is a 4-H volunteer, and provides guidance for 20+ youth market lamb projects annually.



Despite her extensive commitments, Melanie has maintained a perfect GPA of 4.0 throughout her 5.5-year Ph.D. study at OSU. Her resourcefulness and willingness to lend a helping hand have earned the admiration and respect of her peers.

In summary, Melanie epitomizes the qualities of an outstanding graduate student, dedicated to advancing the mission of a land-grant institution through her commitment to teaching, research, and outreach. She is highly respected and well-liked by many fellow graduate students in the department. Since graduation, Melanies aspirations are to pursue postdoctoral opportunities to further enhance her research skills in preparation for a future career in research and teaching in Animal Science.

Graduates of Distinction Awards Highlight Alumni Success

Michael Kelsey

Michael Kelsey grew up in Rush Springs, OK, and graduated from Oklahoma State University in 1992 with a degree in Animal Science. Dr. Bob Kropp was his advisor and helped him find his first full-time employment with the Texas Agricultural Extension Service as a county extension agent in Howard County, Texas. Michael married Tonya Koontz in 1994 after renewing an old friendship from their Hereford cattle showing days. From there, the Kelseys moved to Upton County in Rankin, Texas where Michael served as their sole extension agent with emphasis in cattle, sheep, and cotton production, and an active 4H membership. In 1996, the Kelsey's moved to Blacksville, South Carolina where Michael was employed by Clemson University to manage the Edisto Experiment Station cow herd and Bull Test Station. The 200+ cow herd was researching different heat tolerant breeds for maternal traits. In 1998, Michael began his career work of advocating for cattle producers when the South Carolina Cattlemen's Association hired him as their Executive Director. Michael had an opportunity to come home to Oklahoma in 2000 and work with the Oklahoma Beef Council administering the Beef Checkoff in Oklahoma. In 2004, the Nebraska Cattlemen called upon Michael to lead that organization as Executive Vice President which he did until 2013 when an opportunity to return back home to Oklahoma presented itself. In July of that year, Michael began serving the Oklahoma Cattlemen's Association as Executive Vice President, a role he has thoroughly enjoyed to this day.

Michael Kelsey is a dedicated leader and advocate for animal agriculture. He provides the daily leadership of the Oklahoma Cattlemen's Association to support Oklahoma cattle producers. In addition to managing a large staff to provide many services to members, he is an extremely effective voice for cattlemen and Oklahomans in our State and National Legislatures, and with the media. His many talents and dedication enhance the lives and businesses of about 5,000 Oklahoma ranching families. Currently, he is a Director of the Animal Science Alumni Association.

Michael reminisces that he was recruited to OSU by Dr. Totusek, and was able to study at the feet of great instructors like Drs. Hibbard, Buchanan, Wettemann, Kropp, Clutter and so many others. His love of the beef cattle industry was Science. When he graduated from OSU in 1992, Michael's dream job was directly tied to the beef cattle industry



Photo by Genesee

increased while at OSU Animal although he had no idea how to make that happen. While his initial goal was to manage a cattle operation, his passion for representing the people of the cattle business was primed early and has continued to grow ever since, even after 25 years in the advocating business. Michael truly believes there is a great future in the beef cattle business for families to raise the best animal protein right here in Oklahoma. He considers his role of representing farmers and ranchers in the halls of government and on the media stage is both an honor and a privilege. Michael stated reality far surpasses the dreams he had in 1992 when he graduated from Oklahoma State.

Michael and his wife Tonya live in Tecumseh where they are very active in their church and community. They are enjoying the transition to empty nesters as their four children are grown and married. They are eagerly looking forward to spoiling grandchildren sometime soon!

N. Malone Mitchell Jr.

Mr. N. Malone Mitchell Jr. holds an appreciation for Oklahoma State University's land-grant mission and as a 1963 animal science graduate he continuously gives back to the Department of Animal and Food Sciences and Ferguson College of Agriculture. His education and personal knowledge has equipped him to be a life-long, successful rancher and businessman. During his time as a student, Mr. Mitchell Jr. was a part of the Flying Aggies, where he eventually met his spouse, Roberta, while attending OSU. He is a lifetime member of the OSU Alumni Association and OSU Animal Science Alumni Association.



Photo by Genesee

Mr. N. Malone Mitchell Jr. has forged an impressive, more than 60-year career working the land and raising livestock across Oklahoma and Texas. The patriarch and owner/operator of Mitchell Ranches, Mr. Mitchell Jr. has operated the ranch since his graduation from OSU acquiring land over the years that makes him the largest agricultural producer south of I-40 and east of I-35. The ranch sprawls across hundreds of thousands of acres and spans across

three generations of agriculturalists and OSU alumni. Producing primarily cattle and goats, the success of the ranch comes from the result of Mr. Mitchell Jr.'s respect for and care of the land itself.

A recognized conservationist and land steward through his personal efforts and time as director of the Rio Grande-Pecos River Soil and Water Conservation District, Mr. Mitchell Jr. believes the quality of soil is crucial to his operation recognizing you must give back and invest to have success. A pioneer in animal agriculture, Mr. Mitchell Jr. was not afraid to venture into different avenues when it came to the breeding and marketing of his livestock. Maintaining a 3,000 head sheep and Angora goat ranch through the rough terrain of West Texas, Mr. Mitchell Jr. recognized the need to be vigilant. As Mitchell Ranches grew in Oklahoma, the cowherd has a foundation of registered polled Herefords but has transitioned to a three-way cross for commercial cattle that includes Red Angus to improve carcass performance and Senepol for their heat tolerance. With a focus on the business side of the ranch, Mr. Mitchell Jr. knows there is a profit in his calf crop, and he must be innovative to discover where it is and how it changes from year to year.

In July 2021, the Mitchell's established the N. Malone and Roberta Mitchell Jr. Family Endowed Scholarship in Animal Science. This endowment supports students who are employed at the OSU Sheep and Goat Center who have plans to return to a commercial operation upon graduation.

That same year the Mitchell Family became cornerstone donors of the New Frontiers Agricultural Hall Capital Campaign to name the N. Malone Mitchell Jr. Soils Lab. Mr. Mitchell Jr. recognizes the emphasis soil has on an agricultural operation, he is known for saying "soil is the beginning of all agriculture".

While back on the OSU campus, Mr. Mitchell Jr. dedicates time to visiting the OSU Sheep and Goat Center and continuously engages with animal and food sciences faculty on the state-of-the-art research they are conducting with virtual fencing and volunteers his operation as trial opportunities for research efforts. Despite Mr. Mitchell Jr.'s professional and personal accomplishments, he remains humble and continuously gives back in ways that are meaningful to improve agriculture and support the land-grant mission of Oklahoma State University and the Department of Animal and Food Sciences.

Alumni Excellence: Honoring the **Advanced Degree Graduates of Distinction**

Amy Down Steward

Amy Down Steward was raised on her family's crop and purebred livestock operation in Central Illinois. She graduated from OSU in 1997 with a BS degree in Animal Science. She was a member of the 1996 National Livestock Team of the Year. During her time as an undergraduate she was involved in Block and Bridle and worked at both the Animal Science Arena and Purebred Beef Cattle Center. Amy continued her education at OSU and received her MS degree in Meat Science in 1999.

Her career started at Advance Food Company in Enid, OK where she was Corporate Product Quality Manager. Amy has spent the past 20 years at Tyson Foods, Inc where she currently holds the position of Principal Food Scientist, Global Business Development supporting Tyson's Global McDonald's Business. In this role, Amy has responsibility for developing products and cultivating relationships globally making Tyson both pertinent and present to the McDonald's global menu strategy.

Amy has been a public voice for the industry, helping consumers understand and feel better about their food choices—especially meat. She has taken meat science outreach mainstream through efforts such as McDonald's "Our Food. Your Questions." highlighting how Chicken McNuggets are produced. She is passionate about consumer education about where food comes from.

Apart from her career, Amy is a loyal and true alumni and lifetime member of the Oklahoma State University Animal Science Alumni Association where she currently serves on the Board of Directors. She is also very actively involved in the American Meat Science Association having previously served on the Board of Directors and presently serving on the Development Council Board of Directors. Additionally, Steward serves on the McDonald's Supplier Network Board of Directors and the Colorado State University Center for Meat Safety and Quality Tactical Advisory Council.

Steward is a 2009 recipient of the American Meat Science Association Achievement Award which recognizes the

development of early career association members that have demonstrated significant skills and contribution to the animal products industry and the American Meat Science Association. She also received the 2022 American Meat Science Association Signal Service Award making her a Fellow of the organization. This award was established in 1956 and is given to members in recognition of devoted service and lasting contributions to the meat industry and to the association.



In 2017 she established the Amy Down Steward Livestock Judging Scholarship in memory of her Father, David. This scholarship is awarded annually to an out of state student with intentions to judge livestock at Oklahoma State. Amy resides in Wyoming, IL with her husband David who operates their farming operation.

Dr. Kristin Hales

Dr. Kristin Hales was raised on a farm in the Texas panhandle. She graduated from Northeastern Oklahoma A&M College with an Associate of Science and then transferred to Oklahoma State University to complete her B.S. in Animal Science in 2004. She was a member of Dr. Cooper's 2001 Reserve World Champion horse judging team. Under the guidance of Dr. Gerald Horn, she completed her M.S. in Animal Science at Oklahoma State in 2006 and earned a Ph.D. from Texas Tech University in 2009 working with Dr. Mike Galyean. She began her career as a postdoctoral research associate at the USDA Agricultural Research Service in Bushland, Texas working with Dr. Andy Cole. She then moved to the USDA Meat Animal Research Center (Clay Center, Nebraska) where she worked as a research animal scientist from 2011-2019.

Dr. Hales currently holds the Thornton Distinguished Chair and is a Professor in the Department of Animal and Food Sciences at Texas Tech University. She has developed a highly collaborative and visible research program focused on contemporary problems relevant to the beef cattle industry. These studies have focused on energetics, enteric methane production and mitigation, the etiology and prevention of liver abscesses, and decreasing antimicrobial use in finishing cattle. Her energetics research identified a weakness in previously developed equations and led to a revised equation for estimating metabolizable energy from digestible energy of beef cattle diets. Dr. Hales' research to quantify enteric methane production from beef cattle fed highconcentrate diets led the Intergovernmental Panel on Climate Change to develop a revised method for estimating enteric methane emissions by feedlot cattle.

She has received over \$2.2 million in federal external funding since moving to Texas Tech nearly five years ago. This is a major testament of the beef cattle industry's acceptance of her research. Over the course of her relatively short career Dr. Hales and colleagues have published 106 peer-reviewed publications and multiple book chapters. She has served as the major advisor for 8 Ph.D. and 8 M.S. students and served on the graduate committees of 18 other students, many of which have been from other universities and sought her out as a source of knowledge and expertise in ruminant nutrition research. Dr. Hales also enjoys teaching Energetics and Scientific Writing to graduate students and has even had faculty members from other universities "sit in" her Energetics class. Dr. Hales has received numerous awards including the Alumni Spotlight Award from Northeastern Oklahoma A&M College (2018),

Outstanding Early Career Research Award from the Midwest Section of the American Society of Animal Science (2019), the Barnie E. Rushing Distinguished Research Award for excellence in STEM research at Texas Tech University (2022) and the Davis College of Agricultural Science and Natural Resources' Outstanding Research Award (2023).



Photo by Genesee

Beyond her academic endeavors she is active in many professional societies and has served two terms on the editorial board of the Journal of Animal Science. She currently serves as Associate Editor-In-Chief for Applied Animal Science, President of the American Society of Professional Animal Scientists, and President of the Plains Nutrition Council. She has provided expert peer reviews for the USDA Methods for Quantifying Greenhouse Gas Fluxes in Agriculture and Forestry and the Eighth Revised Edition of the Nutrient Requirements of Dairy Cattle, a publication of the National Academies of Sciences, Engineering and Medicine. Dr. Hales' friendly nature, cooperative spirit and team-building skills have bolstered her academic and research accomplishments and have been key to her many successes and recognition as a leader in the field of ruminant nutrition and her professional societies. Kristin and her husband Chris reside in Lubbock, Texas. They enjoy bass fishing throughout Texas and competitive shooting in their spare time.

OSU Faculty and Graduate Students Garner National Awards for Excellence in Animal and Food Sciences

Oklahoma State University's Department of Animal and Food Sciences has once again demonstrated its excellence in research, teaching, and extension, with several faculty members and graduate students receiving prestigious national awards at the Annual Society of Animal Science Meeting in July of 2024. These accolades highlight the department's significant contributions to the field and the exceptional caliber of its educators and researchers.

2024 ASAS Fellow Award for Extension - Dr. Paul A. Beck



Dr. Paul A. Beck, a full professor and the Dennis and Marta White Endowed Chair at Oklahoma State University, has been honored with the 2024 ASAS Fellow Award for Extension. Raised on a wheat and livestock farm near Guthrie, Oklahoma, Dr. Beck's deep-rooted connection to agriculture has profoundly shaped his career. He obtained his B.S. and M.S. degrees in Animal Science from Oklahoma State University in 1990 and 1993, respectively, and his Ph.D. in Animal Science from the University of Arkansas in 2003. He also holds an MBA from Southern Arkansas University (2017).

Dr. Beck has a 75% extension and 25% research appointment, through which he has become a highly productive and respected Extension State Specialist focusing on beef cattle nutrition and management. He leads successful extension programs, including the Cow/Calf Corner Newsletter, the

Departmental Beef Advisory Board, and statewide and multistate conferences and field days. Over the past five years, Dr. Beck has secured over \$2.1 million in extramural funding for his extension and research programs, underlining his commitment to advancing the field.

2024 Meats Research Award Recipient - Dr. Ranjith Ramanathan



Dr. Ranjith Ramanathan, a faculty member in the Department of Animal and Food Sciences since 2012, has been awarded the 2024 Meats Research Award. Dr. Ramanathan's research is renowned for its focus on the fundamental and applied factors influencing fresh meat quality, specifically postmortem biochemistry and meat color. His impressive research portfolio includes securing \$6.8 million in grants, publishing 100 peer-reviewed journal articles, and presenting 155-refereed abstracts.

Dr. Ramanathan has also demonstrated a strong commitment to mentorship, guiding 19 graduate

students as a chair and serving on 54 M.S./Ph.D. committees. His contributions extend beyond the university, with 46 invited talks in 12 states and 4 countries. His dedication and expertise have been recognized by several prestigious organizations, including the American Society of Animal Science and the American Meat Science Association.





**2024 Young Scholar
Award - Dr. Anna Goldkamp**



Dr. Anna Goldkamp, a recent Ph.D. graduate from Oklahoma State University, has also received the 2024 Young Scholar Award. Dr. Goldkamp earned her B.S. in Animal Science from the University of Missouri-Columbia in 2017 and her M.S. in Animal Science from Oklahoma State University in 2020. Under the guidance of Dr. Darren Hagan, her M.S. research on bovine fetuses produced via artificial insemination and in vitro fertilization led to the first transfer RNA expression atlas in bovine.

Dr. Goldkamp's Ph.D. research explored how tRNA abundance can act as a source of genetic variation, influencing translational efficiency and proteome composition. She has published four first-author papers and coauthored three additional papers. Her work has been recognized internationally, earning accolades from the Advances in Genome Biology and Technology, the Neal A. Jorgenson Genome Award, and the International Society of Animal Genetics.

**2024 Young Scholar
Award - Dr. Riley Messman**



Dr. Riley Messman, an Assistant Professor in Animal and Food Sciences, has been recognized with the 2024 Young Scholar Award. Dr. Messman received her B.Sc. from the University of Missouri in 2017 and her M.Sc. and Ph.D. from Mississippi State University in 2020 and 2023, respectively. Her doctoral research delved into microbial dysbiosis in the bovine reproductive tract at parturition and its impact on neonatal immune function.

Dr. Messman's research program aims to unravel the specific changes in the maternal reproductive tract microbiome that influence offspring health and performance. She has published one book chapter, 10 journal articles, and 18 research abstracts, integrating her research findings into her teaching to provide innovative management practices to improve herd health.

These awards reflect the outstanding contributions of Oklahoma State University's faculty and graduate students to the field of animal and food sciences. Their achievements highlight the department's dedication to excellence in research, teaching, and community outreach. These recognitions not only honor the individual efforts of these talented professionals but also enhance the university's reputation as a leader in agricultural sciences. Their work continues to make a significant impact on the industry and demonstrates the high standards upheld by Oklahoma State University.

Written by Dr. Riley Messman

New Faculty Revitalize Course Offerings

The Animal and Food Sciences department is excited to announce the addition of three new courses that began in the last year.

Their expertise allows us to offer a more diverse range of courses, revitalizing and expanding our curriculum to better serve our animal science students.





Dr. Meaghan Meyer: Poultry Science

Dr. Meaghan Meyer, who earned her Ph.D. in Animal Science from Iowa State University in May 2023, has joined Oklahoma State University with a primary teaching appointment. Her research interests focus on poultry welfare and behavior in commercial broilers. Starting in Fall 2024, Dr. Meyer will offer the Poultry Science Production course. She is eager to ignite a passion for the poultry industry among our senior students.

Dr. Meyer plans to cover all aspects of the commercial broiler, commercial layer, and turkey industries, focusing not only on production practices but also on the science behind them. She aims to provide students with a solid science-based background in poultry production, preparing them for various career options in the industry and ensuring they are well-equipped to transition into these roles after graduation.

Mr. Jason White: Dairy Production

Mr. Jason White, an Oklahoma State University Animal and Food Sciences alumnus, rejoined the department in Fall 2023. White received his B.S. and M.S. in the Animal and Food Sciences department at Oklahoma State, during which he also coached the Dairy Judging Team. After graduating, he worked as a dairy business consultant at Purina Mills, LLC, for six years before returning to academia.

Mr. White brings both scientific knowledge and practical industry experience in dairy science. In Spring 2024, he reintroduced

the Dairy Production course, providing students with engaging lectures and hands-on labs at the new Ferguson dairy. He is also advising the Dairy Club, coaching the Dairy Challenge Team, and working to revive the Dairy Judging Team. Mr. White aims to instill both scientific and practical knowledge about dairy production in his students, making them competitive assets to large industry corporations upon graduation.

Dr. Riley Messman: Livestock Health and Disease

Dr. Riley Messman, an assistant professor in the Animal and Food Sciences department, has reintroduced the Livestock Health and Disease course in Spring 2024. Dr. Messman's approach blends practical science, veterinary medicine, and livestock management practices to create a comprehensive curriculum. This course is designed to ensure that students feel confident in identifying and managing sick animals, implementing biosecurity plans, and developing a holistic view of animal health.

By integrating general knowledge of veterinary medicine and microbiology with livestock management techniques, Dr. Messman aims to equip students with the skills and knowledge necessary to excel in both veterinary school and the production industry. This comprehensive training will enable students to confidently manage livestock health, which is critical for their future careers.

These additions not only enhance our course offerings but also bring fresh perspectives and renewed energy to our programs. We look forward to seeing the positive impact these new faculty members will have on our students and the department.

Written by Dr. Riley Messman



FROM JUDGING RINGS TO RESEARCH LABS

A MIND FOR SCIENCE AND A TALENT FOR MENTORSHIP

By Megan Silveira, WLJ correspondent

Standing in front of the iconic fountain at the Edmon Low Library in 2010, Morgan Pfeiffer fell in love with Oklahoma State University (OSU).

“The people were just unreal,” she explained, noting the sea of friendly faces that welcomed her on that first campus visit. “I was 15 hours from home, but it still felt like it was home.”

Pfeiffer said goodbye to Colorado to take a chance with the land grant university’s livestock judging team. She had applied to 12 different colleges, but a conversation with livestock judging coach Mark Johnson sealed Pfeiffer’s future with Stillwater, OK.

At OSU, the “right way” to the livestock judging team was to start out with meat judging, Pfeiffer said. It was a simple decision at the time, but it was one that’s been shaping her life ever since.

THE BEGINNING OF A CAREER

Today, Dr. Morgan Pfeiffer is still in Stillwater, but now she’s serving as an assistant professor of meat quality in the animal and food sciences department. The young woman walking the halls today is a far cry from the student who first ventured into campus’ meat cooler a decade earlier.

“I thought I was terrible,” Pfeiffer admits of those initial weeks on the meats judging team.

The college sophomore had gone so far as to tell her parents to not even bother coming in for the National Western banquet. Thankfully, however, she said, “I ended up not being terrible at it.”

As an undergraduate, Pfeiffer was on the 2014 National Champion Meat Animal Evaluation team and named to both the meat and livestock judging All-American teams. But it wasn’t the awards and titles Pfeiffer treasured.

“One, I liked the science, but two, I really liked the people,” she remembers.

That train of thought convinced her this was the industry she wanted to call home. After graduating with bachelor’s degrees in animal science and agricultural communications, Pfeiffer continued her journey at OSU for the next five years, completing a master’s and Ph.D. program in meat science. The extended stay also allowed her to serve as assistant coach for the meat judging team.

“I gained so much from coaching outside of coaching,”

she explains. “There was the opportunity to grow as a mentor—to learn these things work and these things don’t when you’re teaching people.”

All the efforts paid off. Beyond developing lifelong friendships and hitting new levels of personal development, three out of the five teams she helped coach were recognized nationally.

“I don’t think there was really a moment that compared to those days we were named national champions,” she admits.

When she graduated for the third time in 2019, Pfeiffer tried her hand in roles at two different associations. Though she loved the companies and her coworkers, something was missing.

Attending weddings of former students reminded her of the strength of her OSU relationships. Phone calls from former members of judging teams she had coached reinforced her desire to play a role in helping others succeed.

When a position came open at her alma mater in 2020, Pfeiffer knew she couldn’t pass up the opportunity to return to academia.

“I just wanted to get back to teaching,” she said. “That’s what I really missed. It’s the moments that (the students) succeed that make it really rewarding for me.”

MARKS OF A MENTOR

In 2022, she watched

proudly as one of her first master’s students, Dani LeDonne, completed her thesis paper.

“I think that was one of the most exciting days for me, was the day she defended her thesis,” Pfeiffer admits. “Just to see the growth that she had, but then also I pushed her so hard to do something that no one had ever done.”

Instead of brushing aside Pfeiffer’s original suggestions for the project, the student put her “heart and soul into making sure it worked.” And that’s the sweetest thing for Pfeiffer.

“I just want to continue to be an influence in people’s lives,” Pfeiffer said. “Whether it continues to be on the research side or on the teaching side.”

“I just want to continue to be an influence in people’s lives.”



“I would never discourage someone from going into any type of ag career. I think we need people at every sector to make sure we continue to feed the world.”



Her origin story is ironically familiar. “All first semester, I guess I wasn’t really a standout, to be honest,” she said. “I was just kind of a person on the team.”

Pfeiffer encouraged her to stay on and keep practicing. Rice took the advice and found herself joining seven other teammates at National Western. Rice competed as usual, and then was shocked when the results were announced. “In the banquet, my name got called, and I looked around and thought, ‘There has to be another Emily Rice here.’ From then on, I guess I realized I wasn’t that bad at meat judging.”

Her career on the team was marked by national and international titles, wins Rice happily credits to Pfeiffer’s leadership.

Rice can name memory after memory of time spent with Pfeiffer in the meat locker, the classroom and even off campus. Their personalities seemed to click, and Rice is proud

to call her former coach a lifelong friend.

“Morgan is incredibly kind, incredibly smart and incredibly driven and talented in whatever she does,” Rice added.

Though it was her

encouragement that helped Rice decide to further her education at both Kansas and Colorado State University after graduating from OSU, Pfeiffer said she never shies away from telling others to chase their dreams—whether that leads them away from academia or down a nontraditional career path.

“I would never discourage someone from going into any type of ag career. I think we need people at every sector to make sure we continue to feed the world,” Pfeiffer explained. “I am a big advocate for whatever you do in life. We need students with knowledge in ag and meat science to be lawyers and doctors and politicians, etc., because we need to have a voice in all of those rooms.”

NUMBER DRIVEN, PRODUCER FOCUSED

As a researcher, Pfeiffer approaches every day in the lab with the goal of creating a better world. Most of her work at OSU focuses on sustainability—to make products that are better and last longer, she explained.

New projects are developed by everyday experiences, she adds. When Pfeiffer and her colleagues do something as simple as go to the grocery store, they leave with new questions.

Why did a consumer choose that product? Will the way a meat product thaws affect its color once it’s cooked? Does the type of packaging affect a consumer’s experience?

Recently, Pfeiffer’s work has been centered around the beef



Mentorship is a talent that comes naturally to Pfeiffer, says Emily Rice. Rice met Pfeiffer when she was a meat science undergraduate student at OSU. After signing up for the meat judging class, Rice joined the judging team.



“I’m involved in production agriculture, so I know the value of what the producers are doing.”



industry. A highlight has been working with the National Beef Quality Audit. It was a project that started during her Ph.D. program and extended into her time as faculty, but watching the National Cattlemen’s Beef Association start to roll out data has been one of Pfeiffer’s most rewarding experiences, she said.

Additionally, she’s reunited with former mentors Gretchen Mafi and Ranjith Ramanathan to explore meat color. Pfeiffer labels Ramanathan as the biochemical expert while Mafi’s focus falls to packaging.

“My specific focus would be more on the consumer side,” she added.

Together, they’re looking at different points that consumers prefer to purchase meat, based on visual appearance and other preferences. It’s a topic that might not sound thrilling to producers at first, but finding new ways to present consumer research data to cattlemen has become a challenge she’s eager to take on.

“I think research can be overwhelming. I think a lot of that can be how we present the

data when we’re finished. I enjoy being able to share our findings with our producers and people in the industry and make sure they’re understanding what they’re doing,” she explained. “Just knowing that you’re helping other people make their programs more successful in the long run is a big thing.”

Having a background rooted in the industry is a bit of a secret weapon, too.

“I’m involved in production agriculture, so I know the value of what the producers are doing,” Pfeiffer said. “I think it makes it a little bit easier to talk to those groups because it impacts my life still.”

Pfeiffer and her husband, Kelsey, raise their daughters, Klara and Kirby on a farm that’s home to cows, sheep and goats. Being a mother has created a new sense of determination in Pfeiffer to help preserve the western lifestyle and ag industry.

“Ultimately, I hope that we will have this industry for the

next generations to be involved in. I hope at the end of the day, we’re instilling in people how important ag is to everyone and how important meat is to everyone,” Pfeiffer said. But most importantly, she added, “I hope to raise my daughters to be successful citizens, to be contributing to society in the long run.”

The bits of advice she shares with students are ones she will offer to Klara and Kirby as they grow up: find what makes you happy, embrace your unique talents, don’t be afraid to take on big tasks.

It turns out, no matter what hat she’s wearing, Pfeiffer’s got the kind of attitude that others admire.

“I’ve seen Morgan through a lot of phases in life,” Rice said. “From a master’s student to a mother, I don’t think you could have chosen a more deserving person to feature.” **W**

Legacy of a Cowboy

Remembering the Impact of Jarold Callahan



In the heart of Oklahoma, Jarold Callahan's legacy resonates far beyond the pastures of cattle he tended and the classrooms he graced.

On Dec. 23, 2023, the Oklahoma State University/A&M system and the cattle industry lost an icon who radiated a spirit of generosity and service in every facet of his life.

Whether championing agricultural excellence, instilling youth with values of integrity and diligence, or passionately advocating for the educational pursuits of students at OSU, his legacy resonates with deep dedication to those around him.

"Jarold was a fierce advocate for higher education and changed thousands of students' lives through his leadership on the OSU/A&M Board of Regents," OSU President Kayse Shrum said. "From his years as a faculty member to his decades of dedication to the agriculture industry, Jarold lived by the Cowboy Code and always worked to do what was right — even if it wasn't easy. He lived a life of character and inspired all of us who knew and had the honor of working with him."

Callahan grew up in northeastern Oklahoma on a diversified family farm and cattle operation which quickly sparked his passion. He earned an Associate of Arts degree from Northeastern Oklahoma A&M College and a Bachelor of Science degree in animal science from OSU where he competed on the livestock judging team as a student, winning national honors.

Throughout his career, Callahan served as a faculty member and livestock judging coach at both NEO and OSU. Both institutions recognized him as an exceptional teacher and coach. His livestock judging teams won national championships and he was recognized as

National Coach of the Year on multiple occasions.

Callahan was elected to the OSU/ A&M Board of Regents for the first time in 2016 and began an eight-year term in 2018. Callahan served as the board chair from July 1, 2022, to July 1, 2023.

“Regent Callahan has served on the Board since his appointment in 2016 with unwavering dedication, carrying out his responsibilities professionally and thoughtfully,” said the OSU/A&M Board of Regents in a statement. “His extensive knowledge of higher education from his service as a faculty member at NEO and OSU, and his expertise in agriculture was a true asset to his role as a Regent. His strong commitment to advancing agricultural knowledge and making an impact in our state will be remembered and cherished.

“Regent Callahan’s legacy of service and his contributions to advancing the mission of each university and college governed by the OSU/A&M Board will continue to inspire and benefit future generations.”

Callahan served as president of Express Ranches, one of the nation’s largest purebred and commercial ranching operations headquartered in Yukon, Oklahoma. He also co-owned and operated Callahan Cattle Company and XCEL Feedyard LLC. Under Callahan’s leadership, Express Ranches has been the American Angus Association high point Roll of Victory Breeder for the past 10 consecutive years.

Callahan’s legacy lives on through his wife, Jennifer, and their children Brian, Tracie and Ryan.

Story by STATE Magazine
Written by Sydney Trainor



2023 Saddle & Sirloin Inductee

In 2023, Jarold Callahan was inducted into the prestigious Saddle & Sirloin Club. This honor, one of the highest in the livestock industry, recognizes individuals who have made significant contributions to animal agriculture, and for Callahan, it is a fitting tribute to a lifetime of dedication, leadership, and impact.

In a letter of nomination by Mark Johnson, Professor at Oklahoma State University, he stated, “Jarold’s impact on my life as a mentor, teacher and friend is the driving force that compelled me to begin this undertaking in 2020. I have come to realize through this process my experiences with Jarold are not unique. Former students, cattlemen from all segments of the beef industry, professionals from academia and government officials alike have shared stories documenting Jarold’s profound impact.”

The induction into the Saddle & Sirloin Club is not only a recognition of Callahan’s professional accomplishments but also a celebration of his enduring impact on the agricultural community. His portrait now hangs alongside those of other industry giants, symbolizing a legacy that will inspire future generations.

As the cattle industry continues to evolve, Jarold Callahan’s contributions will undoubtedly remain a cornerstone of its progress, and his induction into the Saddle & Sirloin Club serves as a reminder of the values and dedication that define true leadership in agriculture.

Written by Taylor Epperson



AFS RESEARCHERS

EXCEL IN GRANTSMANSHIP

The Department of Animal and Food Sciences at Oklahoma State University has recently achieved significant success in securing research grants, further solidifying its reputation as a leader in agricultural research. These grants are instrumental in advancing the department's mission to improve the health and well-being of livestock, sustainability, enhance food safety, and address critical issues in the animal and food industries.

The head of the department, Dr. Richard Coffey noted that “the successes the department's faculty have achieved in securing research funding to address real-world issues confronting producers and those in the livestock and foods industry is quite remarkable. Their efforts speak to the commitment the department has to meeting the needs of those we serve throughout Oklahoma and beyond and also shows that the various funding agencies value the work they are doing.”

The department's success in securing these grants is a testament to the quality and relevance of its research programs. Most of the research funding is for multi-year projects. We have funding from the National Cattlemen's Beef Association, the United States Department of Agriculture - the National Institute of Food and

Agriculture, the Environmental Protection Agency, and several industry sources.

We are very proud of the accomplishments and creative ideas from the faculty of the Department of Animal and Food Sciences. The successful grant activity over the past couple of years is a result of hard work and innovation that will provide local, regional, and national advancements in animal systems, added Dr. Scott Senseman, Associate Vice President, Oklahoma Agricultural Experiment Station.

The current research grant focuses on increasing cow efficiency, understanding stress in cattle, using virtual fences in cattle management, use of probiotics in enhancing swine health, transcriptomics



research, glucose metabolism and nutrient utilization in cattle, microbiome and necrotic enteritis, sustainability of dairy x beef crossbreds, dark-cutting beef research, food safety, and meat science research. We are excited to have new hires that will add strength in reproduction and breeding.

The Department of Animal and Food Sciences research coordinator Ramanathan said, “It is exciting times for the department. Most of the research faculty have funded grants from either federal agencies or industry. We currently have more than \$5 million in active research funding”

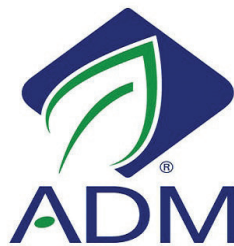
The department's research success will help the education and Extension missions of the Land Grant University. By securing these grants, the department is able to expand its research capabilities, support more students, and extend its impact beyond the university.

These grants not only support innovative research projects but also enhance the educational experience of students and contribute to the overall mission of the university.

Written by Dr. Ranjith Ramanathan

Thank You!

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