



Dear Alumni, Friends, Students, Staff and Faculty of Iowa State,

The Department of Animal Science at Iowa State University is an internationally recognized center of excellence for graduate student training and research. Our faculty and staff work day to day with our graduate students to provide them research opportunities in the field solving problems and identifying opportunities in animal agriculture with the farmers, ranchers and specialists. We are also fortunate to have our own research farms around Ames and laboratories in Kildee Hall for graduate students to manage research projects. All graduate students are involved in our undergraduate teaching program during their degree program in our department.

Our graduate program is only as good as the students that choose to come to Iowa State University. This document celebrates the success of our graduate students in the areas of teaching, research, leadership and much more. We want to thank the donors that make our scholarship program possible for these future leaders in the global food animal system. Again, congratulations to our graduate students.

Sincerely,

Dan Thomson, PhD, DVM

Professor and Chair, Department of Animal Science



## **Duane and Shirley Acker International Fellowship - \$2,000**

*To foster international experiences for graduate students*



### **Leticia Sanglard**

Leticia Sanglard is a second-year PhD Candidate in Animal Breeding & Genetics at the Serão Lab. Leticia is originally from Brazil, earning a BS degree in Veterinary Medicine from Federal University of Viçosa (*pronounced as Visoza*) in 2016. In Fall 2016 she started her MSc with Dr. Nick Serão at NC State and moved to ISU in 2017 to finish her MS in 2018. In her PhD, Leticia is leading multiple projects in swine genomics, on sow and male reproduction, antibody response to infection and vaccination, and microbiome. Leticia is a highly motivated student that is a leader among AB&G graduate students, being the president of the ABGGSO. Leticia has already published 13 peer-reviewed manuscripts, 2 peer-reviewed conference papers, and 35 abstracts. Her outstanding performance as a graduate student has already granted her innumerable prestigious awards, such as the Research Excellence Award and Iowa State University Graduate College Scholarship. As a mentee in the Preparing Future Faculty Program at ISU, Leticia plans to obtain a faculty position at a leading Animal Science program after graduation.



### **Elizabeth Messersmith**

Elizabeth Messersmith is originally from Phillips, NE and found her passion for the beef industry early in life, working alongside her family in their feedlot operation. Elizabeth earned her B.S. in Animal Science from the University of Nebraska-Lincoln, and her M.S. in Animal Science from Iowa State University. She is currently in her second year of her Ph.D. program here with Stephanie Hansen and her dissertation work focuses on elucidating the roles of zinc and copper on growth promoting processes in cattle. Her novel work has the potential to impact how millions of head of beef cattle are fed daily in the United States. Elizabeth is a leader in her research group and is an excellent leader of learning both in the undergraduate classroom, at the farm and in the lab. Elizabeth served two years as a teaching assistant during her M.S. degree at ISU and received the Graduate College Teaching Excellence Award in 2018. She is excited about career opportunities in the beef nutrition industry or extension.

## **John Airy Endowed Graduate Scholarship - \$2,500**

*For significant research accomplishment related to  
beef cattle breeding and management*



### **Josue Chinchilla-Vargas**

Josue is from Costa Rica. He attained his BS from Zamorano University in 2015. In 2016 he joined the Rothschild group working on his MS degree focusing on food security and the effects of climatic factors on livestock production. He obtained his MS under Dr. Rothschild's guidance in 2018. After this he continued his work pursuing his PhD under the guidance of Drs. Rothschild and Stalder majoring in Animal Science with a minor in Animal Breeding and Genetics. His research continues to focus around food security and novel genetic traits to improve animal performance under harsh environments. Josue has a passion for working on issues related to food security or improving food insecurity. In October 2019, Josue married his wife Krystal who received her DVM in 2020 from Iowa State University.

## **Arthur and Muriel Anderson Scholarship - \$1,500**

*For excellence in academic performance and interest in swine science*



### **Emma Helm**

Emma Helm grew up on a small farm in Southwest Virginia. She attended Virginia Tech for her Bachelor's degree in Animal Science, and while there started working in a muscle biology lab, which sparked her interest in physiology and basic science techniques. Upon graduation, Emma came to Iowa State for her MS degree, working under Dr. Nicholas Gabler. Upon receiving her MS degree, Emma chose to stay at Iowa State under Dr. Gabler and pursue her PhD, examining how swine pathogen challenges modulate gastrointestinal function, metabolism, and integrity in pigs. In addition to her dissertation work, Emma has also been exploring several other research areas, including understanding the mode of action of sub-therapeutic antibiotics in pigs and differentiating between the effects of viral challenge and disease hypophagia on skeletal muscle metabolism in growing pigs. Upon receiving her PhD, Emma hopes to start a career in academia, and continue researching how to best feed and manage poor health animals.

## **Charles H. and Inez M. Callahan Memorial Scholarship - \$2,000**

*For excellence in academic performance and outstanding leadership in extracurricular activities relating to poultry*

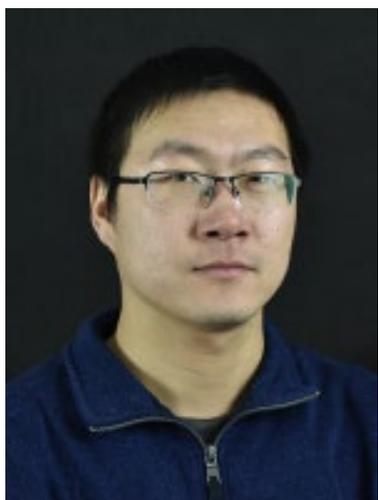


### **Meaghan Meyer**

Meaghan Meyer earned her M.S. with Dr. Bobeck in August 2019, with her thesis focused on the effects of a unique form of environmental enrichment on broiler chicken welfare, behavior, and performance outcomes. Meaghan has continued on as a PhD student in Dr. Bobeck's lab. Apart from welfare and behavior-based research in broilers, Meaghan has worked on optimizing a metabolic assay in laying hen and broiler immune cells, and has experience from multiple broiler feed-additive performance and gut health-focused trials. Additionally, Meaghan is surveying undergraduate students for an ongoing teaching study regarding opinions of the poultry industry before and after education. Meaghan continues to work on environmental enrichment in broilers for her PhD in Dr. Bobeck's lab.

## **Dr. and Mrs. M. E. Ensminger Scholarship - \$1,500**

*For excellence in academic performance, character and leadership*



### **Jian (Mark) Cheng**

Jian (Mark) Cheng grew up in the southern part of China. After obtaining his BSc degree from Yangzhou University, with a double major in Animal Science and Business English, Mark spent more than two years working in the pork industry in China by providing consultancy to large pig producers. After that, Mark went on to complete his MSc degree in Animal Breeding and Genetics under Dr. Allan Schinckel at Purdue University. Currently, Mark is a PhD student under Dr. Jack Dekkers, majoring in Animal Breeding and Genetics, with a minor in Statistics. The main focus of his research is to determine the genetic basis of disease resilience in pigs and to develop indicator traits to enable selection of pigs for increased resilience. After graduation, he hopes to become a global geneticist who can provide genetic services to the pork industry across the world.

## **Lauren L. Christian Graduate Fellowship - \$3,000**

*For excellence in academic performance and outstanding leadership in extracurricular activities relating to swine*



### **Grace Moeller**

Grace is a native of Hilliard, OH and graduated from The Ohio State University majoring in Zoology and with a minor in Dairy Science. Grace joined the Stalder group in fall of 2018 and is working on her MS degree. Her research is focused on the impact of conformation traits on sow welfare and the association of traits with removal reasons and sow productive lifetime. Grace is working on a large feet and leg conformation study where over 4,500 gilts were evaluated in order to examine the impact of these traits on age at removal and lifetime productivity. Additionally, she is looking at the impact these traits have on the sows' ability to remain in the herd in both gestation stall housing and loose housing during gestation. Grace will finish her M.S. the summer of 2020 and begin work on a PhD with Dr. Stalder. Grace's parents are both graduates of the Department of Animal Science with her Mom, Kim, receiving a BS in Animal Science and her dad, Steve, receiving his BS, MS and PhD in the Department of Animal Science.



### **Wade Wuebker**

Wade is a native of Jefferson, IA where he graduated from Greene County High School. He received his BS in Animal Science in 2019 and joined the Stalder group in the fall of the same year. Wade is working on his degree in Animal Science. His research is looking at defining a new sow phenotype associated with individual piglet birthweight within each of her litters and looking at the genetic parameters and breeding strategies associated with this trait. Wade's summer internship with Choice Genetics lead to his interest in graduate school and specifically with the project he is working on. Wade will finish his MS in the summer of 2021 and he is undecided whether he will pursue a PhD at this time.

**William Riley Gillette Graduate Scholarship**  
**in Animal Science - \$2,000**

*In recognition of academic performance in the Department of Animal Science*



**Krysten Fries-Craft**

Krysten Fries-Craft completed her Master of Science with Dr. Bobeck in August of 2019 for her work examining the effects of alfalfa supplementation on the murine immune system and microbiota. She continued on for her PhD with Dr. Bobeck. Krysten has optimized methods for the preparation of novel feed additives, learned methods for preparing maternally-derived IgY antibodies, and regularly does flow cytometry, ELISAs, proximate analyses, and H&E microscopy. For her MS work, she collaborated with the Schmitz-Esser lab to learn laboratory techniques related to analysis of the microbiota. Krysten has experience with conducting broiler floor pen trials and has publications that encompass applied nutrition and examination of the immunological response to probiotic supplementation. Her work culminated in a top presentation award at Poultry Science annual meetings last summer in Canada. She is continuing on with Dr. Bobeck for her PhD work examining the role of feed additives in altering disease in poultry.



**Cori Siberski**

Cori Siberski is from Ames, Iowa. She received a Bachelor of Science degree in Dairy Science and recently completed a master's degree in Animal Breeding and Genetics at Iowa State University. Her master's thesis was entitled "Investigating the use of automated sensor data as possible indicator traits for feed intake and health traits in dairy cattle." Cori is continuing as a PhD student in the Koltes lab where she is investigating the use of precision technologies such as automated milking systems in predicting robustness of dairy cattle to overcome health problems. Her goal is to develop breeding and analytic tools helpful in identifying healthier, more efficient dairy cattle. Cori is passionate both about the dairy industry and teaching. She has served as a teaching assistant for four courses and as an assistant coordinator for the departmental learning community. After graduation, she hopes to find a job where she may utilize her animal breeding and data analytic skills to help dairy producers solve problems and teach students and producers how to best use new scientific findings in the industry.

## **Robert E. and Dorothy B. Rust Graduate Scholarship**

### **in Meat Science - \$1,000**

*In recognition of excellence in academic performance and demonstrated active interest in applied meat processing or allied industry*



### **Logan Johnson**

Logan Johnson earned his BS (Cum Laude) in Food Science at South Dakota State University in 2018. Since arriving at ISU in January of 2019, he has been actively engaged in the meat science program. He has actively worked with the meat science extension and short course program and serves as a group leader in many industry short courses. He is Vice-President of the Meat Science Club and is an active member of the American Meat Science Association and the ISU Association of Graduate Animal Scientists. Logan served as TA in Animal Science 360 and is currently co-coach of the Meat Science Quiz Bowl team. Logan's research emphasizes defining the contribution of antioxidant enzymes to muscle metabolism and meat quality. He is co-author of two published journal articles and primary author of two published abstracts. He is looking forward to a career emphasizing research and development in meat science.

## **Vaughn and Meg Speer Graduate Award - \$2,000**

*To provide graduate students in monogastric nutrition with a unique training/education experience*



### **Sarah Elefson**

Sarah Elefson is an Indiana native who completed her undergraduate program at Purdue University in Animal Science. She recently completed her Master's degree with Dr. Lindemann at the University of Kentucky. While at the University of Kentucky, she studied the developmental changes in the pig from birth to 42 days post-weaning. Sarah started her PhD program at Iowa State University in January of 2020. She is currently working on her PhD program under Dr. Laura Greiner and is studying nutritional approaches to improve mammary development and immune function of the developing gilt. Since her arrival at Iowa State, Sarah has been involved in assisting other graduate students with their projects while developing her own project which is set to start this summer. Sarah enjoys all aspects of animal science and biology and is learning the different phases of swine production.

## **Thomas Sutherland Graduate Award for Excellence - \$750**

*For excellence in academic performance and significant accomplishment in research relative to tenure in the graduate program*



### **Johana Mayorga**

Johana Mayorga is originally from Colombia, where she earned her bachelor's degree in Animal Science. Then she joined Iowa State for her M.S. degree in Animal Science and now is completing her Ph.D. degree in the same area. Johana's research focuses on studying the effects of environmental hyperthermia on growth performance, metabolism, and inflammation in pigs. She has been involved in several trials where she has implemented heat stress as a model to evaluate nutritional and therapeutic alternatives aimed at ameliorating the negative consequences of heat stress on swine health and productivity. Johana hopes to become a competitive professional and be able to apply her scientific knowledge to advance the animal industry sector.

## **David and Jacqueline Topel Scholarship in Meat Science - \$2,000**

*For excellence in academic performance, leadership and involvement in campus activities, and promise of a career related to the meat industry*



### **Matthew Schulte**

As an undergraduate at ISU, Matt was Block and Bridle President and recipient of the LN Hazel Award. As a graduate student, Matt is a dedicated participant in departmental mission activities including being active in AGAS and serving as TA in five different courses. He was recognized during his MS program with the prestigious Graduate College Teaching Excellence Award. Matt is an important part of the Meat Science team serving in all executive roles for the Meat Science Club and as a group leader or assistant at virtually every Meat Science Short Course program. Matt's current research is directed at developing a deeper understanding of how perimortem and early postmortem muscle metabolism influence fresh beef quality. He has developed several proteomic methods for these investigations. He is first author of two manuscripts and four abstracts. In total, he is author and co-author of 12 abstracts and 3 manuscripts. Matt is a student leader in the American Meat Science Association and has served as a director on the student board of directors for that organization. Matt is looking forward to a career in meat science that allows him to continue to serve animal agriculture.

## **Harold L. and Esther G. Wilcke Scholarship - \$1,250**

*For significant research related to the nutritional requirements of domestic animals or poultry*



### **Sonia Rodriguez-Jimenez**

Sonia Rodriguez-Jimenez is from the north of Spain. After obtaining her DVM, she joined U.C. Davis as a visiting research scholar in dairy veterinarian medicine. She then obtained a M.S. degree in Dairy Science at SDSU. Afterwards, she joined Iowa State University for her Ph.D degree in Animal Science. Sonia's research involves the function of the immune system in lactating ruminants during different stressful conditions (i.e. heat stress, transition period). In particular, she is interested in identifying how immune activation alters systemic metabolism and reprioritizes nutrient partitioning away from economically important phenotypes. On her first PhD project, Sonia collaborated with Trouw Nutrition R&D (in conjunction with ISU and AnS alumnus Dr. Victoria Sanz-Fernandez) and lived in the Netherlands to spearhead the live phase of the project. Sonia's goal is to implement her scientific and research knowledge with farmers to support domestic animal health and farm profitability.

## **Esther and Richard Willham Graduate Scholarship** **in Animal Science - \$1,000**

*In recognition of out-of-the-ordinary student creativity in graduate student education*



### **Elizabeth Messersmith**

Elizabeth Messersmith is originally from Phillips, NE and found her passion for the beef industry early in life, working alongside her family in their feedlot operation. Elizabeth earned her B.S. in Animal Science from the University of Nebraska-Lincoln, and her M.S. in Animal Science from Iowa State University. She is currently in her second year of her Ph.D. program here with Stephanie Hansen and her dissertation work focuses on elucidating the roles of zinc and copper on growth promoting processes in cattle. Her novel work has the potential to impact how millions of head of beef cattle are fed daily in the United States. Elizabeth is a leader in her research group and is an excellent leader of learning both in the undergraduate classroom, at the farm and in the lab. Elizabeth served two years as a teaching assistant during her M.S. degree at ISU and received the Graduate College Teaching Excellence Award in 2018. She is excited about career opportunities in the beef nutrition industry or extension.

**Iowa Poultry Association Scholarship,  
in Honor of Tom J. Zaniros - \$1,000**

*For excellence in academic performance and interest in the poultry industry*



**Meaghan Meyer**

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**2019-2020 Iowa State University Graduate College Research  
Excellence Award**

*to recognize graduate students for outstanding research accomplishments as  
documented in their theses and dissertations*

**Erin Horst**

**Leticia Sanlard**

**2019-2020 Iowa State University Graduate College Teaching  
Excellence Award**

*to recognize and encourage outstanding teaching achievement by  
graduate students*

**Amy Petry**

**Jacob Yarian**

**Department of Animal Science**  
**Graduate Award for Outstanding Teaching**

***For teaching excellence by a graduate student***



**Jacob Yarian**

Mr. Jacob Yarian grew up in Perrysburg OH. Jacob completed his Undergraduate degree in Animal Science, May 2017 and began working for Hormel Foods Corporation as a Quality and Process Control Supervisor I. Jacob rejoined ISU August 2018 in a Teaching and Research Assistantship. Jacob is the lead TA for AnS 214L. Part of Jacobs teaching philosophy which he practices every day is as follows, *"I am passionate about educating others and working to bridge the divide between people and the knowledge I can share, regardless of their status as a student, peer, or other. I believe that leading by example is part of effective teaching, and there is an expectation to exhibit professionalism in many aspects of life."* Jacob's Masters is in Physiology with an Ethology specialization. He is focusing on how euthanasia training modules based on the Predictive Index Personality test reduce caretaker euthanasia-related strain. After graduation Jacob is very interested in extension and utilizing his passion for teaching.

**Department of Animal Science**  
**Graduate Student Excellence Award**

***For outstanding achievements and exceptional performance in teaching,  
research, or outreach activities***



**Amy Petry**

Amy Petry was born and raised in the Texas panhandle, earning BS and MS degrees (*Magna Cum Laude*) from Texas Tech University. She arrived in Ames in May, 2017 to study with Dr. John Patience in the Applied Swine Nutrition program and will defend her dissertation later this year. Amy's research is focused on understanding the *in vivo* mode of action of the xylanase enzyme when used in diets high in insoluble fiber. This has directed her into investigations in classical nutrition, digestive physiology, immunology, chemistry and microbiology. While an enthusiastic, innovative and dedicated researcher, Amy also possesses a passion for teaching, as evidenced by her involvement in numerous courses at both TTU and ISU. She is past Director of the MW ASAS, past President of AGAS, Animal Science representative on GPAA and graduate of the Preparing Future Faculty Program. Upon graduation, she hopes to pursue her interests in both research and teaching in a university faculty position.

## **Other Awards**

### **Jesus Acosta:**

2019 Pinnacle Award, International Ingredients Corporation

2019 Research Award, Graduate and Professional Student Senate, Iowa State University

### **Krysten Fries-Craft:**

Gamma Sigma Delta Induction (2019)

PSA Student Research Certificate of Excellence (2019)

WPSA Youth Program Acceptance (2020)

### **Emma Helm:**

2019 Targeting Excellence Scholarship

### **Erin Horst:**

2020 Midwest ADSA Young Dairy Scholar Award

2020 ADSA Richard M. Hoyt Award (for most outstanding PhD student in ADSA)

### **Johana Mayorga:**

2020 Midwest ASAS Young Scholar Award

### **Leticia Sanglard:**

Pork Checkoff Student Travel Award (National swine Improvement Federation)

Dr. Bob Morrison Travel Scholarship (North American PRRS symposium)

### **Tori Rudolph:**

American Physiological Society Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award

### **Beth Zuber:**

2019-2020 American Meat Science Association Student Board of Directors

American Meat Science Association C. Boyd Ramsey RMC Scholar Award

American Meat Science Association Kinsman International Award

The Department of Animal Science at Iowa State University wishes to thank all donors and sponsors for the support of the graduate scholarships.

Thank you to the Animal Science Graduate Affairs Committee, Dr. Thomson (Department chair), Dr. Patience (Interim Department chair) and Cory Walker (Cost Center Manager) for their time and effort over the last year in planning, reviewing and coordinating the Animal Science graduate programs and students.

**Graduate Affairs Committee**

Dr. Steven Lonergan – Director of Graduate Education (2014-2019)

Dr. Nicholas Gabler – Director of Graduate Education (2020)

Dr. Ken Stalder

Dr. Ranga Appuhamy

Dr. Anna Johnson

Dr. Nick Serão

Dr. Rodrigo Tarté

Rose Mary Ross (Animal Science Graduate Program support)