

IOWA STATE UNIVERSITY



Department of Animal Science



2023 Graduate Student Scholarships & Awards

AGAS Officers for 2022-2023

President – Grace Moeller
Vice President – Chloe Hagen
Secretary – Kayla Elmore
Treasurer – Logan Johnson
GPSS Senator – Vishesh Bhatia
Fundraising Chairs – Sarah Bludau and Ava Frase
Philanthropy Chairs – Kayla Miller and Mackenzie Cassas

AGAS Officers for 2023-2024

President – Kayla Miller
Vice President – Chloe Hagen
Secretary – Caitlyn Wileman
Treasurer – Dalton Humphrey
GPSS Senator – Alexandra Keller
Fundraising Chairs – Mitch Nisley and Cydne' Jess
Philanthropy Chairs – Lizzy Due and Kayle Eivins

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

To foster international experiences for graduate students



Chloe Hagen

Chloe Hagen is from Stockton, Iowa where she spent many hours with her horses. Chloe worked as an undergraduate research assistant in Dr. John Patience's lab throughout her undergraduate program. She also participated in Science with Practice and was active in Block and Bridle. Upon finishing her BS degree, Chloe worked with Dr Greiner to complete her MS degree in 2022. Her MS work focused on compensatory gain post-nutrient restriction to slow pig growth as well as floor space evaluations in finishing hogs. She started her PhD program in 2022 and is working on the evaluation of biomarkers to assess gut integrity at weaning and the determination of the impact of various starter diets/components on these markers. Chloe has served as a teaching assistant for An S 225 and 320. She is also serving as the vice president of the Animal Science Graduate Organization. Chloe is a National Pork Board Scholar and worked for Cargill Animal Nutrition between her MS and PhD program. Chloe would like to move to allied industry and serve as a technical nutritionist.



Logan Johnson

Logan Johnson is from Rosholt, South Dakota. He has a BS in Food Science from SDSU and a Master of Science in Meat Science from ISU. He has also proven to be a very generous mentor you other Animal Science students. He is an innovative researcher and has expanded the lab's capabilities in proteomic and metabolomic applications. Logan is the author or co-author of seven published manuscripts and fourteen conference abstracts. Last summer, he attended the 4th Annual North American Mass Spectrometry School at the University of Wisconsin. In the next academic year, he will complete his dissertation, a traineeship in the ISU Data FEWSion program (an NSF program), and a graduate certificate in Data-Driven Food, Energy, and Water Decision Making. Logan is an excellent departmental citizen and active member and leader in AGAS and the Meat Science Club.

John Airy Endowed Graduate Scholarship - \$2,500

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



Kourtney Jimmerson

Kourtney Jimmerson grew up in Manning, Iowa, on a purebred and show cattle cow/calf operation. Growing up on a farm sparked her passion for the agriculture industry. In August 2017, Kourtney started her bachelor's degree at Iowa State University and throughout her time in undergrad had many internship opportunities in the agriculture field. In May 2021, Kourtney graduated with her bachelor's degree in agriculture education with a communications option. She then worked at Iowa State College of Veterinary Medicine in the Theriogenology Cryo-Lab before returning to Iowa State for a Master's in Animal Reproductive Physiology.



Emma Rients

Emma Rients is from Towanda, IL, and earned her B.S. in Animal Science from Southern Illinois University. She earned her M.S. in Animal Science from Iowa State University in May 2022. She is currently a Ph.D. student in Animal Science, under the direction of Drs. Jodi McGill and Stephanie Hansen. In her research, Emma seeks to better understand the interaction between nutrition and disease in the feedlot animal. She is studying how nutrients like zinc and vitamin A support the resiliency and recovery of cattle from bovine respiratory disease. Emma is a leader in the lab, providing guidance to the undergraduates in particular. She has recently acquired a puppy, who keeps her busy with her shenanigans.

Arthur and Muriel Anderson Scholarship - \$500

For excellence in academic performance and interest in swine science



Caitlyn Wileman

Caitlyn Wileman is a Janesville, Wisconsin native. Caitlyn started her undergraduate career at the University of Wisconsin and later moved to Iowa State University where she was very active in Block and Bridle and the Swine Interest group. Upon graduation, Caitlyn attended Oklahoma State University and completed her MS degree with Dr Scott Carter. During her MS program, she evaluated prediction models to estimate nursery and finisher performance based on starting weights. She joined Dr Greiner's lab this last fall and is currently pursuing her PhD program. Her research focus is the utilization of enzymes to reduce greenhouse gas emissions and improve environmental sustainability. Caitlyn is currently a National Pork Board Scholar and has served as a teaching assistant for An S 320. Caitlyn was recently part of the team that received the ISU Miller Fellowship to evaluate the role of using personal development tools in undergraduate curriculum to improve communication skills. Caitlyn would like to pursue a career in academia with teaching as her primary focus.

Charles H. and Inez M. Callahan Memorial Scholarship - \$2,500

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



Krysten Fries-Craft completed her Master of Science with Dr. Bobeck in August of 2019. Her work examined the effects of alfalfa supplementation on the murine immune system and microbiota. She then 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. She continues to collaborate 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 has culminated in a top presentation award at Poultry Science annual meetings as well as several departmental and university awards, including the Griffith Award in 2022 for nutrition research. She has published 9 peer-reviewed articles, 7 animal industry reports, and 16 abstracts, 1 patent, and is examining the role of feed additives in altering coccidiosis and necrotic enteritis in poultry.

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

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



Alexandra Keller

Alexandra Keller is from Clarion, Iowa where she grew up with a wide variety of livestock. She obtained her bachelor's degree in animal science with a minor in genetics in 2020. After graduation, she took a position with USDA APHIS where she helped develop testing methods for Seneca Valley virus in veterinary products. This grew her interest in further education and research. She is currently pursuing a PhD with Dr. Karl Kerns and majoring in genetics and genomics, specializing in livestock reproductive physiology. Her research focuses on the changes that occur in boar spermatozoa during the maturation process of capacitation just prior to fertilization of the ovum.



Grace Moeller

Grace Moeller is originally from Hilliard, OH and graduated from The Ohio State University in 2017, majoring in Zoology and with a minor in Dairy Science. Grace finished her MS degree in 2020, and is working on her PhD. Grace is being co-advised by Dr. Anna Johnson and Dr. Dan Thomson. Grace is working with big data associated with both the swine and beef industry. Her swine research is focused on the impact of conformation traits on sow welfare and the association of traits with longevity in stalled and group-housed gestation facilities. Grace's beef industry project is focused on the association of feedlot cattle temperament on cattle health, performance and carcass characteristics. Grace served as the President for AGAS, in addition to serving on a variety of other committees at the college and university level. Her career goal is to provide support to commercial livestock producers to improve the health and welfare of livestock, while optimizing product quality and producer profitability.

Dr. Gene Freeman Animal Breeding and Genetics

Graduate Student Travel Scholarship - \$2,000

*For excellence in academic performance and an interest
in working with cattle*



Vishesh Bhatia

Vishesh Bhatia is originally from India and completed a BSc in Genetics at Iowa State University in 2020, after which he started his PhD program in the Interdepartmental Genetics and Genomics major and joined the Dekkers group. His PhD research focuses on genetics of immune response and disease resistance in pigs. Vishesh has been very pro-active in seeking out opportunities to learn about the swine industry, resulting in an internship with Topigs-Norsvin in the Netherlands on the genetics of pelvic organ prolapse in sows, which resulted in a recent publication in *Frontiers in Genetics*, with Vishesh as first author. As a graduate student, Vishesh is also continuing the leadership in student organizations that he exhibited during his BSc, when he served as Vice President of the Student Body, by taking on leadership roles as President of the Genetics and Genomics Graduate program and as Co-chair of the first ISU Interdisciplinary Biological Sciences Symposium, which was held in April, 2023.



Leonora James

Leonora “Leo” James is from Carlisle, Iowa. She received a Bachelor of Science degree in Animal Science at Iowa State and is currently pursuing a master’s degree in Animal Breeding and Genetics. Leo has been an integral part of the FFAR funded dairy cattle feed efficiency genetics project, responsible for a significant portion of data collection and coordination of research activities at the Iowa State dairy with Koltes lab members. The objective of Leo’s master’s research is to identify milk fatty acids that are potential predictors of feed intake and the genetic mutations associated with these fatty acids. In the fall of 2022, she was selected to present her research at the Norman Bourlaug symposium associated with the World Prize as part of an ISU wide competition. Leo has served as a teaching assistant for ANS 434 Dairy Systems Management and ANS 352 Domestic Animal Breeding and Genetics. In addition, Leo participates in the Cardinal Women Student leadership program at Iowa State.

William Riley Gillette Graduate Scholarship in Animal Science - \$1,500

In recognition of academic performance in the Department of Animal Science



Zoë Kiefer

Zoë Kiefer is from Plainfield, Illinois and came to Iowa State University to pursue her undergraduate degree in Animal Science. After gaining experience in the swine industry through internships and earning her bachelor's degree in 2016, Zoë began working as a Research Scientist with Dr. Jason Ross and pursuing her Master of Science degree in animal physiology, which she earned in 2021. Since earning her M.S., Zoë has continued working as a Research Scientist overseeing all project coordination and research compliance for the Ross research team. Concomitantly, Zoë has also began coursework to pursue a PhD focused on sow reproductive health, specifically as it relates to pelvic organ prolapse. To date, Zoë has published 10 peer-reviewed manuscripts with three of them as a first author and has also been an author on 20 abstracts presented at scientific meetings.



Kayla Miller

Kayla Miller was raised in Vincent Iowa, a small town in central Iowa. She grew up helping her dad out in the barns feeding and weighing pigs, which ultimately stimulated her interests in swine production and nutrition. In the fall of 2016, she moved to Ames to pursue a Bachelor's degree in Animal Science here at Iowa State. She completed her B.S. (2020) and M.S. (2022) degrees in Animal Science at Iowa State University and is now pursuing a Ph.D. in Animal Science under Dr. Gabler. Her M.S. thesis was entitled "Management strategies to extend feed budgets of grow-finish pigs and the effects on performance, behavioral aggression, and gastric ulceration". Kayla's Ph.D. work is examining soybean meal and hull formulations in nursery to finishing pigs and the role these products have in modulating pig performance and health.

Dr. and Mrs. M.E. Ensminger Scholarship - \$2,000

For excellence in academic performance, character and leadership



Tapiwa Magwaba

Tapiwa Magwaba is originally from Zimbabwe, where he completed a Diploma in Agriculture and a BSc in Animal and Wildlife Sciences, with first class honors. He then was successful in applying for the European Master Animal Breeding and Genetics through the Erasmus Mundus program of several Universities in Western Europe where he spent time at both the University of Goettingen (Germany) and the Norwegian University of Life Sciences. Tapiwa began his graduate program in Animal Breeding and Genetics at Iowa State University in fall of 2021. His research focuses on the genetic analysis of performance and resistance to NewCastle Disease Virus of local chicken populations in Ghana and Tanzania. This research is in collaboration with scientists at the University of California-Davis and at Universities in Ghana and Tanzania. Last year, Tapiwa presented the first results of his research to the premier quadrennial international conference on animal breeding and genetics in the Netherlands and to the National Poultry Breeders Roundtable. He received first prize in the student presentations competition for the latter.

Robert E. and Dorothy B. Rust Graduate Scholarship **in Meat Science - \$750**

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



Kayle Eivins

Kayle Eivins is from Winterset, Iowa where she grew up on a beef cattle operation. She obtained her bachelor's degree in Animal Science from Iowa State in 2022 and has continued on with Dr. Terry Houser in a M.S. program. Her research project funded by the Iowa Pork Producers Association will focus on the oxidative stability of frozen, food-service bacon. Since arriving at Iowa State she has been very active in Meat Science Club, Block and Bridle, and Collegiate Cattleman. Further, Kayle has been instrumental in conducting over ten Extension program events through ISU Meat Science Extension ranging from the "Basic Sausage" course to "Fresh Pork Processing."

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

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



Dalton Humphrey

Dalton Humphrey grew up in Eaton Rapids, Michigan raising and showing hogs. Dalton was part of the Western Illinois University livestock judging team and interned at Carthage Innovative Swine Solutions before starting his graduate program at Iowa State University. He completed his MS degree with Dr Greiner in 2021 focusing on the impact of enzymes and acids on odor emissions in grow-finish pigs. He is currently working on his PhD under Dr Greiner and is focused on branch chain amino acid requirements in nursery pigs and lactating sows. Dalton has served as a National Pork Board Scholar and is an author on 6 manuscripts, 9 abstracts, 1 proceeding and 1 popular press article. He has also been a co-investigator on multiple grants and has taught in multiple undergraduate courses during his graduate tenure. Dalton hopes to either work as a production nutritionist or pursue a career in academia.



Caitlyn Wileman

Caitlyn Wileman is a Janesville, Wisconsin native. Caitlyn started her undergraduate career at the University of Wisconsin and later moved to Iowa State University where she was very active in Block and Bridle and the Swine Interest group. Upon graduation, Caitlyn attended Oklahoma State University and completed her MS degree with Dr Scott Carter. During her MS program, she evaluated prediction models to estimate nursery and finisher performance based on starting weights. She joined Dr Greiner's lab this last fall and is currently pursuing her PhD program. Her research focus is the utilization of enzymes to reduce greenhouse gas emissions and improve environmental sustainability. Caitlyn is currently a National Pork Board Scholar and has served as a teaching assistant for An S 320. Caitlyn was recently part of the team that received the ISU Miller Fellowship to evaluate the role of using personal development tools in undergraduate curriculum to improve communication skills. Caitlyn would like to pursue a career in academia with teaching as her primary focus.

Thomas Sutherland Graduate Award for Excellence - \$1,000

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



Krysten Fries-Craft

Krysten Fries-Craft completed her Master of Science with Dr. Bobeck in August of 2019. Her work examined the effects of alfalfa supplementation on the murine immune system and microbiota. She then 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. She continues to collaborate 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 has culminated in a top presentation award at Poultry Science annual meetings as well as several departmental and university awards, including the Griffith Award in 2022 for nutrition research. She has published 9 peer-reviewed articles, 7 animal industry reports, and 16 abstracts, 1 patent, and is examining the role of feed additives in altering coccidiosis and necrotic enteritis in poultry.

David and Jacqueline Topel Scholarship in Meat Science - \$1,500

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



Logan Johnson

Logan Johnson is from Rosholt, South Dakota. He has a BS in Food Science from SDSU and a Master of Science in Meat Science from ISU. He has also proven to be a very generous mentor you other Animal Science students. He is an innovative researcher and has expanded the lab's capabilities in proteomic and metabolomic applications. Logan is the author or co-author of seven published manuscripts and fourteen conference abstracts. Last summer, he attended the 4th Annual North American Mass Spectrometry School at the University of Wisconsin. In the next academic year, he will complete his dissertation, a traineeship in the ISU Data FEWSion program (an NSF program), and a graduate certificate in Data-Driven Food, Energy, and Water Decision Making. Logan is an excellent departmental citizen and active member and leader in AGAS and the Meat Science Club.

Harold L. and Esther G. Wilcke Scholarship - \$1,000

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



Sonia Rodríguez-Jiménez

Sonia Rodríguez-Jiménez 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 - \$1,500**

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



Dalton Humphrey

Dalton Humphrey grew up in Eaton Rapids, Michigan raising and showing hogs. Dalton was part of the Western Illinois University livestock judging team and interned at Carthage Innovative Swine Solutions before starting his graduate program at Iowa State University. He completed his MS degree with Dr Greiner in 2021 focusing on the impact of enzymes and acids on odor emissions in grow-finish pigs. He is currently working on his PhD under Dr Greiner and is focused on branch chain amino acid requirements in nursery pigs and lactating sows. Dalton has served as a National Pork Board Scholar and is an author on 6 manuscripts, 9 abstracts, 1 proceeding and 1 popular press article. He has also been a co-investigator on multiple grants and has taught in multiple undergraduate courses during his graduate tenure. Dalton hopes to either work as a production nutritionist or pursue a career in academia.

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

For excellence in academic performance and interest in the poultry industry



Krysten Fries-Craft

Krysten Fries-Craft completed her Master of Science with Dr. Bobeck in August of 2019. Her work examined the effects of alfalfa supplementation on the murine immune system and microbiota. She then 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. She continues to collaborate 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 has culminated in a top presentation award at Poultry Science annual meetings as well as several departmental and university awards, including the Griffith Award in 2022 for nutrition research. She has published 9 peer-reviewed articles, 7 animal industry reports, and 16 abstracts, 1 patent, and is examining the role of feed additives in altering coccidiosis and necrotic enteritis in poultry.



2022 - 2023 Iowa State University

Graduate College Research Excellence Award

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

Meaghan Meyer

Krysten Fries-Craft

2022 - 2023 Iowa State University

Graduate College Teaching Excellence Award

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

Cori Cooper

Vishesh Bhatia





Department of Animal Science
Graduate Award for Outstanding Teaching
For teaching excellence by a graduate student



Caroline Downey

Caroline Downey is from Putnam, Illinois where she grew up on a beef cattle and row crop farming operation. She obtained her bachelor's degree from the University of Illinois Urbana-Champaign in 2020 and then moved to Ames to work on her M.S. degree with Dr. Terry Houser. Since arriving at Iowa State she has been extremely active in teaching and coaching in the area of Meat Selection and Grading having coached three ISU Meat Judging Teams to date. Additionally, she has been active in both Extension programming helping to conduct over 25 ISU Meat Science Extension activities for both youth and adult learners. Further, her research has focused on improving the color and oxidative stability of frozen ground beef specific to our small locker industry here in Iowa. Upon completion of her M.S. degree, Caroline hopes to stay in academics as an instructor in Meat Science.





Department of Animal Science

Graduate Student Excellence Award

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



Brady Goetz

Brady Goetz is originally from Stewartville, MN. After high school he attended Northeast Iowa Community College where he received an Associate of Applied Science in Dairy Science and Technology. Brady was a herdsman for Strief Farms Inc. in Farley, Iowa for three years before coming to Iowa State University to obtain his bachelor's degree in Animal Science. After graduating, he stayed at ISU for his PhD degree in Animal Science. Brady's research involves the role of immune activation in poor transition cow performance and dietary solutions to consider. In addition, he is interested in knowing the correlation between the inflammatory response following dry-off and its impact on inflammation and production in the following lactation. Brady completed five projects and defended his PhD in early April. He accepted a consulting position with GPS Dairy.



Meaghan Meyer

Meaghan Meyer earned her M.S. with Dr. Bobeck in August 2019, with a thesis focused on the effects of a unique form of environmental enrichment on broiler chicken welfare, behavior, and performance outcomes. Since earning her MS, Meaghan has continued on as a PhD student in Dr. Bobeck's lab and is graduating this May. Meaghan's welfare and enrichment work has also expanded into meat quality and woody breast outcomes positively altered by exercise. 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 piloted multiple broiler feed-additive performance and gut health-focused trials. Meaghan's work has resulted in mentoring over 50 undergraduate students, 19 conference abstracts, 8 animal industry reports, and 17 peer-reviewed publications.



Other Awards

Megan Abeyta:

National Milk Producers Federation Richard M. Hoyt Award from ADSA

Vishesh Bhatia:

Neal A. Jorgenson Genome Travel Grant

Travel grant to attend National Swine Improvement Federation/Poultry Breeders Roundtable conference

Gaelan Combs:

F. Wendell Miller Scholarship

Cargill Animal Nutrition Scholarship

Krysten Fries-Craft:

David R. Griffith Research Excellence Award

Chloe Hagen:

Nelda Christian Graduate Pork Fellowship

Dalton Humphrey:

CALS Iowa Farm Bureau Graduate Fellowship in Agriculture

Imaobong Inyang:

Burroughs Welcome Travel Fellowship

Leonora James:

Abstract Poster Presentation at the Norman Borlaug Poster Competition

Fazhir Kayondo:

Travel grant to attend the Poultry Breeders Roundtable Conference

F. Wendell Miller Scholarship

Alexandra Keller:

CALS A.B. Caine-Bogle Family Graduate Fellowship Award

Tapiwa Magwaba:

1st prize student presentations at Poultry Breeders Round Table Conference

Travel grant to attend the Poultry Breeders Roundtable conference

Travel award to attend BIPOC in Biotechnology conference in Chicago

Zhengqiang Ni

Travel grant to attend the World Congress on Genetics Applied to Livestock Production

Caitlyn Wileman:

CALS A.B. Caine-Bogle Family Graduate Fellowship Award

NPPC Neil Dierks Scholarship and the

F. Wendell Miller Scholarship

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. Ross (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.

2022-2023 Graduate Affairs Committee

Dr. Nicholas Gabler – Director of Graduate Education

Dr. Ranga Appuhamy

Dr. Stephanie Hansen

Dr. Karl Kerns

Dr. James Koltes

Dr. Juan Steibel

Dr. Rodrigo Tarté

Rose Mary Ross (Animal Science Graduate Student Services Specialist)