2024 Graduate Student Scholarships & Awards

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 Cydnie’ Jess
Philanthropy Chairs – Lizzy Due and Kayle Eivins

AGAS Officers for 2024-2025
President – Caitlyn Wileman
Vice President – Mariah Mayer
Secretary – Bridget Buol
Treasurer – Grace McKibben
GPSS Senator – Annika Parks
Fundraising Chairs – Jacob Henderson & Allison Baumhover
Philanthropy Chairs – Yureni Carvajal & Taylor Flemming
Duane and Shirley Acker International Fellowship - $2,500
To foster international experiences for graduate students

Alexandra Else-Keller
Alexandra Else-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 interdepartmental 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.

Caitlyn Wileman
Caitlyn Wileman is a Janesville, Wisconsin native. Caitlyn completed her undergraduate career at Iowa State University before attending Oklahoma State University for 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 is currently pursuing her PhD degree under Dr. Greiner. 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, served as a teaching assistant for An S 320, and is completing the preparing future faculty program. Caitlyn is a co-PI for a Miller Fellowship to evaluate the role of using personal development tools in undergraduate curriculum to improve communication skills. Caitlyn is co-authoring a book chapter and has been an author on 3 abstracts. Caitlyn would like to pursue a career in academia.
John Airy Endowed Graduate Scholarship - $3,000

For significant research accomplishment related to beef cattle breeding and management

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. Most recently Emma has explored the effects of disease progression on mineral absorption by dairy beef cattle. Emma is a leader in the Hansen lab and is always willing to share her knowledge with others!

Sarah Phelps

Sarah Phelps (no relation to Gold medalist Michael Phelps) is an Iowa native growing up in St. Ansgar, Iowa and is a seventh-generation shorthorn breeder. Sarah obtained her undergraduate degree in Animal Science at Iowa State University. As an undergrad, Sarah was a member of the Collegiate Cattlemen Club, served as president of Block & Bridle, was the junior CALS representative, and was a TA for several beef undergraduate classes. Sarah stayed at Iowa State University and is currently pursuing her Master’s degree in Animal Breeding and Genetics under Randie Culbertson. Sarah’s research uses data from the McNay Research herd and examines the effect of selection for carcass traits on heifer development and fertility.

Fazhir Kayondo

Fazhir Kayondo was born and raised in Uganda, where he earned a BSc in Agriculture from Makerere University. After additional training through internships at Chonbuk National University in Korea and at Iowa State University, as well as work experience in Uganda, he started his PhD in the Interdepartmental Genetics and Genomics program in 2021. His PhD research focuses on genetic analysis of stress hormones in hair of pigs prior to and during a polymicrobial natural disease challenge, as genetic indicators of resilience to non-infectious and infectious stressors. Fazhir has presented his research at multiple national and international scientific conferences, receiving travel awards from several. His first scientific paper is close to be ready for submission.
Arthur and Muriel Anderson Scholarship - $1,000
For excellence in academic performance and interest in swine science

Mubashrah Mahmood
Mubashrah Mahmood, originally from Faisalabad, Pakistan, has a background in veterinary medicine, earning accolades such as the Gold Medal in DVM and the Silver Medal and her Master’s in Theriogenology from the University of Agriculture, Faisalabad. After graduating, she spent some time as an intern in China before continuing on with her PhD. She is currently pursuing a PhD in Animal Science under the guidance of Dr. Karl Kerns. Her research focuses on the changes that occur in boar spermatozoa during the maturation process of capacitation just prior to fertilization of the ovum.

Charles H. and Inez M. Callahan Memorial Scholarship - $3,000
For excellence in academic performance and outstanding leadership in extracurricular activities relating to poultry

Kayla Elmore
Kayla Elmore is originally from Burlington, Iowa and completed her MS at ISU in May of 2023. Kayla continued on with Dr Bobeck to pursue her PhD. Kayla’s current work is focused on understanding and improving broiler welfare and meat quality through the use of environmental enrichment in the production setting. Her project will further characterize molecular changes that may contribute to improving meat quality outcomes in market broilers. While working on her PhD, Kayla has also been mentoring undergraduate students in both laboratory and farm work, and is a key member of the Bobeck lab group.
Lauren L. Christian Graduate Fellowship - $3,000
For excellence in academic performance and outstanding leadership in extracurricular activities relating to swine

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 and participated in Science with Practice. Chloe completed her MS degree in 2022, which focused on compensatory gain post-nutrient restriction to slow pig growth as well as floor space evaluations in finishing hogs. She is working towards her PhD degree under Dr Greiner evaluating the impact of various starter diets/components on gut integrity during E. coli challenges. Chloe has served as a teaching assistant for An S 225 and 320. She is serving in the Animal Science Graduate Organization. Chloe was a National Pork Board Scholar and worked for Cargill Animal Nutrition between her MS and PhD program. She is an author on 4 manuscripts, 12 abstracts and is currently working on a book chapter. Chloe would like to serve as a technical nutritionist.

Alexandra Else-Keller

Alexandra Else-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 interdepartmental 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.
Dr. and Mrs. M.E. Ensminger Scholarship - $2,500
For excellence in academic performance, character and leadership

**Tapiwa Magwaba**

Tapiwa Magwaba is from Zimbabwe, where he earned a BSc in Animal and Wildlife Sciences. He then completed the European Master Animal Breeding and Genetics through the Erasmus Mundus program with studies at both the University of Goettingen (Germany) and the Norwegian University of Life Sciences. Tapiwa joined the Animal Breeding and Genetics major at ISU in fall 2021. His first research project focused on genetic analysis of performance and resistance to Newcastle Disease Virus of local chicken populations in Ghana and Tanzania. This USAID-research was in collaboration with scientists at the University of California-Davis and universities in Ghana and Tanzania. Tapiwa has presented his research at multiple national and international scientific conferences, winning the first prize for student presentations at the National Breeders Roundtable.

**Mubashrah Mahmood**

Mubashrah Mahmood, originally from Faisalabad, Pakistan, has a background in veterinary medicine, earning accolades such as the Gold Medal in DVM and the Silver Medal and her Master’s in Theriogenology from the University of Agriculture, Faisalabad. After graduating, she spent some time as an intern in China before continuing on with her PhD. She is currently pursuing a PhD in Animal Science under the guidance of Dr. Karl Kerns. Her research focuses on the changes that occur in boar spermatozoa during the maturation process of capacitation just prior to fertilization of the ovum.
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

Andrea Nuñez

Andrea Nuñez has a BSc in Animal Science from Zamorano University in her home country of Honduras and she has a MSc in Animal Science with emphasis on Animal Breeding and Genetics from University of Florida. Andrea is currently pursuing a PhD in Animal Breeding and Genetics in our department. Andrea enjoys working with animals as much as working in the wet lab and in the dry lab, coding to implement complex analyses of genomics and phenomics dataset. She is an enthusiastic and dedicated graduate student and a great team member. This summer Andrea is attending the University of Georgia Athens graduate course on genomic predictions where she will further learn to implement genomic prediction analysis in big data.
William Riley Gillette Graduate Scholarship in Animal Science - $1,500

In recognition of academic performance in the Department of Animal Science

**Yureni Carvajal**

Yureni Carvajal is from Humboldt, Iowa. She has a B.S. in Food Science and a minor in food safety from Iowa State University. As an undergraduate, she conducted research in the Department of Animal Science with Dr. Rodrigo Tarte. She had internships with Grain Millers and Cargill. Prior to entering graduate school, Yureni spent time as a Quality and Process Control Supervisor for Osceola Foods. Currently, he conducts research in the Unruh laboratory, focused on behavior of *Salmonella* subjected to thermal stress and survival of *Listeria* in biofilms on food contact surfaces. She’s also a Quiz Bowl coach and active in departmental organizations and activities. Yureni is a dedicated researcher, collegial member of the graduate student body, and an inquisitive scholar with a bright future ahead.

**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.

**Mitch Nisley**

Mitch Nisley, an Iowa native from Cedar Rapids, Mitch has consistently demonstrated exceptional skills and dedication in his work, significantly contributing to our research efforts. As a Ph.D. research assistant in my swine nutrition and physiology lab, Mitch has been involved in various research projects focused on understanding the influence of different nutrients and dietary components on pig performance and health. His responsibilities have included investigating the effects of vitamins, minerals, proteins, fibers, pharmaceuticals, and enzymes on pig performance, particularly under disease-challenged conditions such as coccidia, PEDV, and rotavirus. Mitch has conducted studies involving pigs of all age groups in which he has performed metabolic analyses to assess nutrient retention and has evaluated disease pathogenesis.
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

Yureni Carvajal

Yureni Carvajal is from Humboldt, Iowa. She has a B.S. in Food Science and a minor in food safety from Iowa State University. As an undergraduate, she conducted research in the Department of Animal Science with Dr. Rodrigo Tarte. She had internships with Grain Millers and Cargill. Prior to entering graduate school, Yureni spent time as a Quality and Process Control Supervisor for Osceola Foods. Currently, he conducts research in the Unruh laboratory, focused on behavior of Salmonella subjected to thermal stress and survival of Listeria in biofilms on food contact surfaces. She’s also a Quiz Bowl coach and active in departmental organizations and activities. Yureni is a dedicated researcher, collegial member of the graduate student body, and an inquisitive scholar with a bright future ahead.

Vaughn and Meg Speer Graduate Award - $2,500

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

Caitlyn Wileman

Caitlyn Wileman is a Janesville, Wisconsin native. Caitlyn completed her undergraduate career at Iowa State University before attending Oklahoma State University for 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 is currently pursuing her PhD degree under Dr. Greiner. 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, served as a teaching assistant for An S 320, and is completing the preparing future faculty program. Caitlyn is a co-PI for a Miller Fellowship to evaluate the role of using personal development tools in undergraduate curriculum to improve communication skills. Caitlyn is co-authoring a book chapter and has been an author on 3 abstracts. Caitlyn would like to pursue a career in academia.
Thomas Sutherland Graduate Award for Excellence - $1,500

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

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 11 manuscripts, 14 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 plans to pursue a career in academia.

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

Elias Perez is from Iowa City, Iowa. He received the B.S. in Culinary Food Science from Iowa State in Fall 2023. He immediately joined the Tarté laboratory, where he worked extensively as an undergraduate and now as a master’s student majoring in Meat Science. Elias currently serves as teaching assistant for AN S 460 and AN S 270L and is co-coach of the ISU Meat Science Quiz Bowl Team.
Harold L. and Esther G. Wilcke Scholarship - $1,000
For significant research related to the nutritional requirements of domestic animals or poultry

Lizzy Due
Lizzy Due, a native of Ohio, currently a M.S. graduate student in Dr. Gabler’s swine research program. Lizzy has a Bachelor of Science in Agriculture with Research Distinction and Global Distinction from The Ohio State University. Currently in the final throws of her M.S. in Animal Science at Iowa State University, she is researching swine nutrition, particularly in intestinal health and maturation of nursery pigs undergoing enteric challenges. Her research is understanding and evaluating enterotoxigenic Escherichia coli (ETEC) expressing F18 fimbriae attachment in nursery pigs and how dietary fiber and fiber metabolites can modulate enteric disease. Lizzy plans to continue on as a Ph.D. student in Animal Science upon completion of her M.S.

Esther and Richard Willham Graduate Scholarship in Animal Science - $2,000
In recognition of out-of-the-ordinary creativity in graduate student education

Mubashrah Mahmood
Mubashrah Mahmood, originally from Faisalabad, Pakistan, has a background in veterinary medicine, earning accolades such as the Gold Medal in DVM and the Silver Medal and her Master’s in Theriogenology from the University of Agriculture, Faisalabad. After graduating, she spent some time as an intern in China before continuing on with her Ph.D. She is currently pursuing a Ph.D in Animal Science under the guidance of Dr. Karl Kerns. Her research focuses on the changes that occur in boar spermatozoa during the maturation process of capacitation just prior to fertilization of the ovum.
Iowa Poultry Association Scholarship, in Honor of Tom J. Zanios - $1,500

For excellence in academic performance and interest in the poultry industry

**Kayla Elmore**

Kayla Elmore is originally from Burlington, Iowa and completed her MS at ISU in May of 2023. Kayla continued on with Dr Bobeck to pursue her PhD. Kayla’s current work is focused on understanding and improving broiler welfare and meat quality through the use of environmental enrichment in the production setting. Her project will further characterize molecular changes that may contribute to improving meat quality outcomes in market broilers. While working on her PhD, Kayla has also been mentoring undergraduate students in both laboratory and farm work, and is a key member of the Bobeck lab group.
2023 - 2024 Iowa State University
Graduate College Research Excellence Award

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

Logan Johnson
Dalton Humphrey

2023 - 2024 Iowa State University
Graduate College Teaching Excellence Award

to recognize and encourage outstanding teaching achievement by graduate students

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

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 11 manuscripts, 14 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 plans to pursue a career in academia.
Department of Animal Science

Graduate Student Excellence Award

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

Logan Johnson is from Rosholt, South Dakota. He has a BS in Food Science from South Dakota State University and a Master of Science in Meat Science from ISU. Logan is a very generous and effective mentor for Animal Science graduate and undergraduate students (and a great mentor to his major professor!). He is an innovative researcher who expanded the Lonergan lab’s capabilities in proteomic and metabolomic applications and established effective machine-learning models to predict meat quality. Logan is the primary author of five published manuscripts and co-author of seven published manuscripts. He is the author or co-author of fifteen conference abstracts. Logan defended his dissertation in April and completed a graduate certificate in Data-Driven Food, Energy, and Water Decision Making (part of an NSF program).

Logan has been a highly effective teacher in the meat science program where he was a teaching assistant on three occasions for Animal Science 360. He also coached the ISU Intercollegiate Meat Science Quiz bowl team in 2020. Logan Johnson is a well-rounded scholar, showcasing excellence in both research and teaching. His exceptional contributions have significantly elevated departmental research and teaching endeavors during his graduate career.
Other Awards & Honors

Logan Johnson:
- Iowa Farm Bureau Graduate Fellowship
- John Duyn Scholarship – North American Meat Institute Graduate Scholarship
- Graduate College Research Excellence Award
- 2023 International Congress of Meat Science and Technology PhD poster competition second place.

Andrea Nuñez
- Secured travel awards to present her work at NSIF in Fall 2023

Blessing Olabosoye:
- Secured travel awards to present his work at NSIF in Fall 2023
- The Bruce Weir Summer Institute in Statistical Genetics (SISG) Scholarship to attend training this summer

Shedrack Omale:
- International Livestock Congress Student Fellowship Award 2024 to attend the International Livestock Congress 2024, in Houston, Texas

Elias Perez:
- Recipient of 2023 North American Meat Institute (NAMI) Merit Scholarship
- Current President of the ISU chapter of Phi Tau Sigma, The Honor Society of Food Science and Technology

Mina Shumaly
- Received a travel award from the AG2PI to present her work at MWASAS this spring semester

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.

2023-2024 Graduate Affairs Committee

Dr. Nicholas Gabler – Director of Graduate Education
Dr. Randie Culbertson
Dr. Stephanie Hansen
Dr. Karl Kerns
Dr. James Koltes
Dr. Juan Steibel
Dr. Rodrigo Tarté
Rose Mary Ross (Animal Science Graduate Student Services Specialist)