

# IOWA STATE UNIVERSITY



**Department of Animal Science**



## **2022 Graduate Student Scholarships & Awards**

### **AGAS Officers for 2021-2022**

President – Grace Moeller  
Vice President – Cori Cooper  
Secretary – Emma Rients  
Treasurer – Logan Johnson  
GPSS Senator – Sarah Elefson  
Fundraising Chairs – Erika Johnson and Jake Manternach  
Philanthropy Chairs – Sophie Breuer and Kayla Elmore

### **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 – Tyler Loew and Kayla Miller

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

*To foster international experiences for graduate students*



### **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.



### **Sophia Breuer**

**Sophia Breuer** grew up on a row crop and beef cattle farm in Burlington, IA. She received her BS from Iowa State in 2020 and joined the Stalder lab group in coordination with Dr. Kerr (USDA) in the fall of 2020, working towards her MS degree. Her research is focusing on oxidative stress and its effects on sow longevity and genetic relationships. She had the opportunity to complete this work at a sow farm within the Carthage System in Illinois, where she collected data on over 300 sows. She will present the genetics portion of her research at the World Congress on Genetics Applied to Livestock Production in the Netherlands this summer. Sophia will finish her MS in the summer of 2022 and looks forward to working for the JBS Live Pork team as a business analyst at the conclusion of her degree program.

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

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



### **Dathan Smerchek**

**Dathan Smerchek** is from Rosholt, WI. Dathan completed his B.S. in Animal Science at South Dakota State University and stayed at SDSU to earn his M.S. in feedlot nutrition. Since January 2021, he has worked with Dr. Stephanie Hansen on a PhD program focused on elucidating the roles of manganese and zinc on performance of feedlot cattle. Dathan has already published a review of zinc and steroidal implants from Iowa State and also stepped up, along with another graduate student, to help the beef nutrition farm manage feed bunks during a farm labor shortage last fall. Dathan is a talented graphite artist and has a serious sheep habit. Dathan's career goal is to work in the feedlot industry to help producers optimize cattle performance.

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

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



### **Jamie Studer**

**Jamie Studer** is from Wesley, Iowa where she grew up on a small family-owned hog operation. She obtained her bachelor's degree in animal science from Iowa State in 2018 and continued on to graduate school under the mentorship of Dr. Jason Ross. In April of 2021 she earned her M.S. degree in animal physiology with a specialization in reproductive physiology. Her thesis was focused on understanding the effects of manganese supplementation on ovarian function in gilts. Since earning her M.S., Jamie has continued on as a PhD student in Dr. Ross's lab and her research focuses on sow reproductive health, specifically as it relates to disorders surrounding farrowing such as pelvic organ prolapse and post-partum dysgalactia syndrome. Jamie has published six peer-reviewed manuscripts with three of them as a first author and has also been an author on 12 abstracts presented at scientific meetings.

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

*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 culminated in a top presentation award at Poultry Science annual meetings last summer in Canada. She has 6 peer-reviewed articles, 7 animal industry reports, and 14 abstracts, and is continuing on with Dr. Bobeck for her PhD work examining the role of feed additives in altering coccidiosis and necrotic enteritis in poultry.

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

*For excellence in academic performance, character and leadership*



### **Julie Opgenorth**

**Julie Opgenorth** is from Northwest Iowa. She completed her bachelor's of science at Iowa State University in 2017 and later her M.S. at Michigan State University in 2019 studying supplements to improve dairy calf health and reduce oxidative stress. She returned to Iowa State in 2020 to begin work on her PhD dissertation. Julie's research investigates the impacts of immune activation on dairy cow production and metabolism. Her work explores the immunometabolic response to lipopolysaccharide given different physiological states of the animal and how they partition nutrients to mount an effective inflammatory response. Her career goals are centered on conducting research to improve animal health through nutrition, management, and treatment strategies that will enhance farm sustainability and profitability.

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

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



### **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 joined Dr. Stalder's group in fall of 2018, finished her MS degree in 2020, and is working on her PhD. Her 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 is also co-advised by Dr. Dan Thomson where her research focuses on the association of feedlot cattle temperament and the incidence of dark cutters, as well as the role of genetics in those two areas. Grace serves 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.

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

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



### **Derek Henningsen**

**Derek Henningsen** is from DeWitt, IA. He received his Bachelor's of Science Degree from Iowa State University and is currently pursuing a Master's Degree in Animal Science, under the direction of Dr. Ken Stalder. His current research project focuses on digital overgrowth and histological changes in the feet of sows amongst various breeding herds. Derek also manages the Allen Christian Swine Teaching Farm which focuses on promoting swine education and enhancement through several different classes and clubs within the university. In the future, he plans to continue his involvement in the industry working with a swine genetics company.

**Dr. Gene Freeman Animal Breeding and Genetics**

**Graduate Student Travel Scholarship - \$1,000**

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



**Cori Cooper**

**Cori Cooper** is from Ames, Iowa. She received a Bachelor of Science degree in Dairy Science and master's degree in Animal Breeding and Genetics at Iowa State University. Cori is a PhD candidate in the Koltes lab, investigating the use of precision sensing technologies to predict future animal health and identify the impact of health events on feed intake and efficiency. She has published 3 peer reviewed manuscripts with two as first author, 9 abstracts, 3 popular press articles and a conference proceedings during her time at ISU and has given talks at 2 international meetings. Cori is passionate both about the dairy industry and teaching. She has served as a teaching assistant for eight courses, as an assistant coordinator for the departmental learning community and is participating in the preparing future faculty program.

**Dr. Gene Freeman Animal Breeding and Genetics**

**Graduate Student Travel Scholarship - \$1,000**

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



**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 began working in the Koltes lab as a summer feed efficiency genetics intern in 2020. During her time as an undergraduate in the Koltes lab, she was an integral part of the lab efforts to develop a large gene expression discovery dataset. The objective of Leo's master's research is to identify milk fatty acids that are potential predictors of feed intake. In fall of 2021, she served as the teaching assistant for ANS 434 Dairy Systems Management course and was integral to making this course a success. In addition, Leo participates in the Cardinal Women Student leadership program at Iowa State.

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

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



### **Jamie Studer**

**Jamie Studer** is from Wesley, Iowa where she grew up on a small family-owned hog operation. She obtained her bachelor's degree in animal science from Iowa State in 2018 and continued on to graduate school under the mentorship of Dr. Jason Ross. In April of 2021 she earned her M.S. degree in animal physiology with a specialization in reproductive physiology. Her thesis was focused on understanding the effects of manganese supplementation on ovarian function in gilts. Since earning her M.S., Jamie has continued on as a PhD student in Dr. Ross's lab and her research focuses on sow reproductive health, specifically as it relates to disorders surrounding farrowing such as pelvic organ prolapse and post-partum dysgalactia syndrome. Jamie has published six peer-reviewed manuscripts with three of them as a first author and has also been an author on 12 abstracts presented at scientific meetings.

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

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



### **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 Ph.D 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 has completed five projects and his goal is to apply his scientific and research knowledge with farmers and nutritionists to support and sustain the dairy industry.

**Robert E. and Dorothy B. Rust Graduate Scholarship**  
**in Meat Science - \$500**

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



**Sarah Bludau**

**Sarah Bludau**, a native of Hallettsville, Texas, received the B. S. in Animal Science from Texas A&M University in May 2021, and subsequently joined the lab of Dr. Rodrigo Tarté in Fall 2021 to pursue an M.S. in Meat Science. In her research, she will investigate the optimization of oil structuring technologies for use as potential fat substitutes in meat and other food products. Sarah is very active in leadership inside and outside Iowa State, currently serving as President of the Meat Science Club, co-coach of the Meat Science Quiz Bowl Team, and on the Student Board of Directors of the American Meat Science Association. In the future, Sarah plans to work towards dispelling common misconceptions of meat products, instilling selfless service in the meat industry and her community, and increasing international agricultural development in low income countries by helping them obtain reliable, safe protein sources.

**Vaughn and Meg Speer Graduate Award - \$1,500**

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



**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 as a kid, which ultimately stemmed her interests in swine production and the industry. In the fall of 2016, she moved to Ames to pursue a Bachelor's degree in Animal Science here at Iowa State. After graduating undergrad in May of 2020, she continued her education to pursue a Master's degree under Dr. Gabler. This semester she has recently completed her Master's degree in which her thesis was entitled "Management strategies to extend feed budgets of grow-finish pigs and the effects on performance, behavioral aggression, and gastric ulceration." She will be starting her PhD this coming summer semester under Dr. Gabler.

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

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



### **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 Ph.D 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 has completed five projects and his goal is to apply his scientific and research knowledge with farmers and nutritionists to support and sustain the dairy industry.

## **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, S. D. He has a BS in Food Science from SDSU and an MS in Meat Science from ISU. Logan has already proved to be an excellent scholar as a teacher and researcher. Last fall, he made an invited presentation on peroxiredoxin biochemistry at Colorado State University. Logan is the author or co-author of six abstracts presented this summer. This spring, Logan was accepted into the ISU DataFEWSion Graduate trainee program (an NSF graduate program). Logan is an active member and leader of AGAS and the Meat Science Club.

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

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



### **Julie Opgenorth**

**Julie Opgenorth** is from Northwest Iowa. She completed her bachelor's of science at Iowa State University in 2017 and later her M.S. at Michigan State University in 2019 studying supplements to improve dairy calf health and reduce oxidative stress. She returned to Iowa State in 2020 to begin work on her PhD dissertation. Julie's research investigates the impacts of immune activation on dairy cow production and metabolism. Her work explores the immunometabolic response to lipopolysaccharide given different physiological states of the animal and how they partition nutrients to mount an effective inflammatory response. Her career goals are centered on conducting research to improve animal health through nutrition, management, and treatment strategies that will enhance farm sustainability and profitability.

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

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



### **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 that he will embark on this summer. As a graduate student, Vishesh is also continuing the leadership in student organizations that he exhibited during his BSc, when he served Vice President of the Student Body, becoming involved in the Graduate Student Organizations for both the Genetics and Genomics Graduate program and Animal Science.

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

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



**Shulan Xiao**

**Shulan Xiao** is from China and is a fourth-year Ph.D. candidate in Meat Science and Food Science and Technology at ISU. She received her MS degree from Nanjing Agricultural University in 2018, majoring in Food Science. During her MS program, she studied myoglobin-mediated lipid oxidation in fresh meat and visited Dr. Mark Richards' lab at the University of Wisconsin-Madison for 6 months as a visiting student. Currently, Shulan is developing healthy meat products by enriching lutein and DHA/EPA. She believes this project will offer scientific support to meat industries in new and nutritious product development. She has participated in the PFF (Preparing Future Faculty) program, various meat science club activities, and meat science extension programs as an assistant. After graduation, she would like to share her knowledge at Iowa State University with the industry people and consumers and update their knowledge and understanding of meat processing and processed meat products.



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



**Brady Goetz**

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

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



**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 culminated in a top presentation award at Poultry Science annual meetings last summer in Canada. She has 6 peer-reviewed articles, 7 animal industry reports, and 14 abstracts, and is continuing on with Dr. Bobeck for her PhD work examining the role of feed additives in altering coccidiosis and necrotic enteritis in poultry.





**2021 - 2022 Iowa State University**  
**Graduate College Research Excellence Award**

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

**Elizabeth Messersmith**

**Megan Abeyta**

**Handagala Janaka Wickramasinghe**

**2021 - 2022 Iowa State University**  
**Graduate College Teaching Excellence Award**

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

**Julie Opgenorth**

**Jaspreet Rishi**



## **Other Awards**

### **Jaspreet Rishi:**

Print and Grace Powers Hudson Scholarship in Agriculture (2022)

### **Maria Estefania Gonzalez Alvarez:**

Print and Grace Powers Hudson Scholarship in Agriculture (2022)

### **Janaka Wickramasinghe:**

Print and Grace Powers Hudson Scholarship in Agriculture (2021)

The Graduate and Professional Student Senate Research Award (2021)

### **Brady Goetz**

Caine-Bogle Family Graduate Fellowship (2022)

### **Julie Opgenorth**

Iowa Farm Bureau Graduate Fellowship (2022)

### **Dathan Smerchek**

Print and Grace Powers Hudson Scholarship in Agriculture (2022)

### **Jamie Studer**

Iowa Farm Bureau Graduate Fellowship (2022)

Iowa Pork Foundation Graduate Fellowship (2022)

### **Elizabeth Messersmith**

ASAS Midwest Animal Science Young Scholar winner

### **Blythe Schultz**

The Iowa Pork Congress Research Poster Contest (Sponsored by Cargill), First place

Farm Journal's Pork, Up and Coming Leaders, November/December 2021

### **Dalton Humphrey**

3<sup>rd</sup> in Midwest ASAS Graduate Student Oral Competition

### **Sarah Elefson**

Targeting Excellence Scholar

### **Swathy Krishna**

American Physiology Society's Cell and Molecular Physiology Section Research Recognition Award (2022

APS CAMPS Research Recognition Award).

### **Tori Rudolph**

USDA NIFA Predoctoral Fellowship.

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. Lawrence (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. Nicholas Gabler – Director of Graduate Education

Dr. Ranga Appuhamy

Dr. Stephanie Hansen

Dr. James Koltes

Dr. Josh Selsby

Dr. Ken Stalder

Dr. Rodrigo Tarté

Rose Mary Ross (Animal Science Graduate Student Services Specialist)