

# **IOWA STATE UNIVERSITY**

**College of Agriculture and Life Sciences** 

# ANIMAL SCIENCE

# **POULTRY FARM GROUNDBREAKING**

WINTER 2018 VOL. 27 NO. 1

Larissa Holtmyer-Jones, Dr. Hongwei Xin, Scott Hamilton, Arlene Hamilton, President Wintersteen, Jonathan Cade (Hy-Line), Jeff Henning, Bruce Dooyema (IA Egg Council) gather around to break ground in honor of Iowa State University's new Poultry Teaching Farm. The expected completion date is late fall of 2019. (More inside on page 7)





# LETTER FROM THE DEPARTMENT CHAIR

# **GREETINGS**

# FROM THE DEPARTMENT OF ANIMAL SCIENCE

DEAR ALUMNI AND FRIENDS,

This year was an amazing year of firsts! Former Endowed Dean of the

College of Agriculture and Life Sciences was installed as the **first woman president of Iowa State University** on September 21. The **Meat Science short course program celebrated its 40th anniversary**. The **Meat Science program celebrated 100 years** of outstanding contributions in teaching, research and extension efforts spanning the areas of basic muscle biochemistry, fresh meat quality, meat processing ingredient chemistry

and technology, meat safety and sustainability. **Dr. Don Beitz** eclipsed 100 semesters of teaching and gathered three university awards to commemorate his achievements. We gathered donors, university and CALS administrators and many others who helped achieve needed funding and planning to participate in the **ground breaking ceremony for our new poultry farm.** 

Many other notable achievements were sprinkled throughout the year. **Dr. Katy Lippolis** joined the department as assistant professor of beef cattle cow-calf management. **Dr. Anna Butters-Johnson** was promoted to full professor status July 1, demonstrating continued high-level of performance of her extension, research and teaching programs focused on animal behavior and well-being. Alumna **Dr. Laura Greiner** completed three degrees at Iowa State and managed a successful research program in the swine industry before returning to her alma mater as an assistant professor in swine science.

**Thirteen new staff** were hired to fill important positions in the main office, research labs, the farms, faculty support positions and the Iowa Pork Industry Center. Finally, much needed **facilities improvements were achieved** that benefit both students and faculty and good progress was achieved on the new swine farm facilities and feed mill and grain science complex capital projects.

Sincerely,

Don HBeermann

Dr. Don Beermann, Professor and Chair









# KATY LIPPOLIS ASSISTANT PROFESSOR

WELCOME DR. KATY LIPPOLIS as Assistant Professor of Animal Science! A Colorado native, Katy studied at Colorado State University where she double-majored in equine and animal science. Through her passion for animal nutrition and health, she found a love for the beef industry. Following the completion of undergraduate degrees in Animal Science and Equine Science, she continued at CSU and attained a Master's in Animal Science; Beef Systems Management. As part of the program, she served as the Colorado Beef Quality

Assurance Coordinator where she planned and executed numerous educational trainings for beef producers across the state, assisted with the Cow College Series and lectured undergraduates and veterinary students. She also studied low-stress weaning with nose flaps and their effect on performance, vaccine efficacy and carcass quality. Katy states, "my combined research and BQA program drove my desire for not only educating producers, but in development of management strategies to improve production, total industry

efficiency and profitability for beef producers." Katy obtained a PhD in Animal Science at Oregon State University.

Katy's appointment is 60% extension, 25% research and 15% teaching with a focus in weaning management and nutrition. She will be teaching undergraduate course AnS 427: Cow-Calf Systems Management. Katy says working in the animal science department is a perfect role for her as she has the opportunity to work with producers to identify key areas of need.

# LAURA GREINER ASSISTANT PROFESSOR

DR. LAURA GREINER joined the department this fall as an Assistant Professor in Animal Science. She previously worked for Carthage Veterinary Services, Ltd and Carthage Innovative Swine Solutions, LLC as the Nutrition Director and the Director of Research, respectively. Greiner received a BS in Animal Science from Iowa State University and then continued at Iowa State to complete a MS and PhD in Animal

Nutrition under Dr. Timothy Stahly. Her focus during that time was the impact of nutrition on immunology and disease. Laura also spent time at the University of Iowa conducting molecular immunology/microbiology postdoctoral work. Since her studies, she has focused research activities on sow nutrition and health management evaluations while consulting with family farmers on their swine nutrition needs. She will have a

50% undergraduate teaching, 25% extension and 25% research appointment. Her plans for research will continue to focus on sow nutrition and management and the interaction of health on pig performance. She looks forward to introducing undergraduate students to swine production while spending time with swine producers assisting them to grow and develop their business.

# **JOEL RYBOLT**

# INFORMATION TECHNOLOGY SUPERVISOR

JOEL RYBOLT is the IT Supervisor in Animal Science. He received a BS in Computer Science and MBA from Iowa State University. Joel worked 17 years for the Southeast Polk Community School system as the IT Manager. One of the larger, multi-year projects he was engaged with was assisting with a new building transition which involved updating curriculum and building,

computer and classroom technology and security. Joel wore many hats during this transition and provided presentations to educate and fundraise as well as project management for anything electrical. Most recently, Joel worked five years for the School Board Association and helped improve PaySchools software (an online fee processing software created by the

Association). This software was implemented in 40 of the 50 states.

Joel is thrilled about the opportunity to work in Animal Science. He sees a lot of opportunities and recognizes that the technology is diverse. One of the reasons he enjoys IT as a career is because he likes the challenges and variety of work responsibilities he is able to perform.





# CORY WALKER DEPARTMENT FISCAL COORDINATOR

CORY WALKER joined the department of animal science in February as the Department Fiscal Coordinator. He comes with 25 years of experience in accounting with various manufacturing environments including Rockwell Collins, Ball Corporation/Amcor Rigid Plastics and Smithfield Foods. With a BS in accounting and close to 20 years of managerial experience as well, Cory is excited about the opportunity to assist the department in the development of tools and processes that enhance

financial understanding and ensure compliance.

Cory was born and raised in Boone, Iowa and currently lives there with his wife, Tammy, who works at Thielen Student Health Center on campus. His daughter, Halle, is a senior and son, Nolan, a freshman at Boone High School. When not attending events in support of his children's activities, he can be found on a slow-pitch diamond, watching the St. Louis Cardinals or cheering on Iowa State.

# **GREG MESSERSCHMIDT**

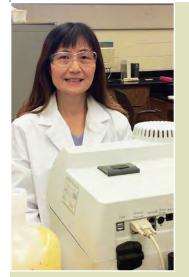
# RUMINANT NUTRITION FARM MANAGER

GREG MESSERSCHMIDT is the Department of Animal Sciences' new Ruminant Nutrition Farm Manager. Greg was born and raised in Adel, Iowa, and grew up on a small farm. He spent most of his childhood working on cow/ calf farms and feedlots around the neighborhoods and helping with harvest. He attained a BS degree in Agricultural Studies from ISU then started work in the precision-ag industry. Greg later moved to Ohio State University to begin work for the Vet School in the Veterinary Preventative Medicine Department. This department focuses on herd health and was contracted to supply veterinary services and consulting to the Ohio prison farm system. OSU Veterinary Medicine hired Greg to work within the department and, before long, he was fully managing the program responsible for ten different farms consisting of cow/calf, feedlots, and dairy farms. He worked there for seven years also focusing on manure issues and helped acquire funding for new facilities. He took a lead role in acquiring \$12.5 million from the state to help improve the farms.

Greg is excited about the opportunity to return to his alma mater and thoroughly enjoys working with students and teaching. Greg says one thing that he is very passionate about is getting to know the commodity groups and people in the industry as he would like to continue to build the positive

relationship that the department has with these groups. He says, "I'm thrilled to be back in Iowa and working for ISU. I look forward to being part of research that helps improve our great industry and continuing to build the great reputation of the animal science department and ruminant nutrition farm."





# SHOW-LING LEE LAB MANAGER

SHOW-LING LEE comes to us from Food Science and Human Nutrition at Iowa State University. She is the new Lab Manager in the Meat Science chemical laboratory. Originally from Taiwan, Show-Ling obtained a Bachelor's degree in Applied Chemistry there. When she moved to the U.S. she obtained a Master's degree in Food Science at Drexel University in Philadelphia. Show-Ling has worked the last eight years focusing on lipid-related

research, cultivation of microalgae for various applications, fermentation as well as managing Bioprocess and Biorenewable Chemicals lab. She is excited to move to Animal Science as she wants to experience new challenges and enrich her work experience. Show-Ling says, "I want to grow and learn new things and I look forward to building my repertoire". She is supervised by Dr. Joe Sebranek and Dr. Rodrigo Tarté.

# SANDAMALI DASSANAYAKE LAB MANAGER



SANDAMALI DASSANAYAKE joins Animal Science as an Assistant Scientist I and manages the Kildee non-ruminant nutrition lab. She works under the direction of Dr. Nick Gabler and others that utilize the lab including John Patience, Elizabeth Bobeck and Mariana Serao. Sandamali obtained a BSc in Physical Sciences at the University of Peradeniya, Sri Lanka. She obtained a Master's degree in Plant Sciences at the Post Graduate Institute of Science in Peradeniya, Sri Lanka. Once Sandamali moved to the States, she received a Master's degree in Food Science and Technology at the University of Nebraska, Lincoln. She worked for Washington State University in the program of individualized medicine with a focus on pharmacogenomics and briefly at the National Veterinary Service Laboratories before starting her career at ISU. She will be engaged in nutrition-related research in cell culture models.

# MIGUEL RANGEL DAIRY FARM MANAGER



MIGUEL RANGEL is the new Dairy Farm Manager. Miguel has over 15 years of experience working in the dairy industry. He grew up in Mexico City and has fond memories of visiting his grandfather's dairy farm on the weekends. Miguel attended National Autonomous University of Mexico in Mexico City where he obtained a degree in Veterinary Medicine. Miguel worked for the reproduction department while attending college and focused on reproduction and cow health. A few years later Miguel took a position with Milk Unlimited Dairy Farm located in Atlantic, Iowa. He worked there six years practicing clinical work on 3,500 cows. He then transferred to AVMC and started a calf nursery project that he developed and worked there six years. Miguel is excited about working at ISU and says he is thrilled to work at such a renowned university and have an impact in the dairy industry. It is his hope that the dairy farm will become an example for dairy farms to follow. Miguel says, "I understand the significance of teaching future professionals and being an important part for development of new techniques as well as performing research in the dairy science field."

**NEW FACULTY + STAFF** 

# **STAFF ADDITIONS**



**Brandi Vigon** Program Assistant II



**Nolan Sebert** Agriculture Specialist I Ruminant Nutrition Farm



McKenize Smith Animal Caretaker II Dairy Farm



Melissa Roths Research Associate II



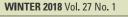
**Justin Chapman** Student Services Specialist



Amanda Chipman
Extension Program
Specialist III
Iowa Pork Industry Center



Darla Gabrielson Human Resources Coordinator



# **MEAT SCIENCE**

By Ann Robinson and Keri Morris

CELEBRATES 100 YEA

owa State University's Department of Animal Science celebrated 100 years of meat science in November. Iowa State was home to one of the country's first land-grant meat science programs, which began with construction of Iowa State's first meat laboratory in 1917. In the decades since, the program and its faculty have become well-known for leadership in teaching and extension activities, such as popular short courses for industry training and student meat judging teams. Iowa State meat research has also had—and continues to have—significant impact on the meat industry in this country and around the world.

Donald Beermann, chair of the Department of Animal Science and a 1971 alum says, "Areas we have helped pioneer include meat biochemistry, basic meat science and related technologies to enhance food quality, development of processed meats, research and computer modeling on food safety to prevent spoilage and extend shelf life, and discovery of important genetic markers."

The combination of research, extension and teaching is why Iowa State has long been considered the go-to place for continuing education in meat science in this country and internationally. This 100-year-old history informs a new online graduate certificate in meat science introduced this year, which will broaden opportunities for a future cadre of working students.

"We have a lot to be proud of, in terms of our contributions to science and the industry," says Sebranek, who has conducted meat research and taught in the department for more than 40 years. "But I think our most important product has

> been, and will continue to be, our graduates. Many have gone on to important roles in industry and government agencies, and they've become researchers and faculty members here and elsewhere. They all are an extension of our program. They are really what we're

Iowa State meat research continues

# Years of Meat Science **IOWA STATE UNIVERSITY**

**TENDERNESS.** The research of D.E. Goll identified calcium-activated meat factor known as calpain, which helps determine tenderness.

**MEAT QUALITY.** A movement to eliminate nitrite in cured meats was prevalent and Dr. Joseph Sebranek worked closely with Charles Grassley to convince the USDA that nitrite should not be banned as it would negatively impact the meat industry and Iowa agriculture. Meat palatability depends on the distribution and composition of fat, a conclusion formed by ISU studies that used professional and consumer panels. The finding equals a leaner, healthier product for consumers. This continues to be a focus of research by Elisabeth Huff-Lonergan and Steven Lonergan.

#### **GENETIC MARKER LINKED TO STRESS**

**SYNDROME.** Landmark ISU research by David Topel, emeritus professor and former dean of the College of Agriculture and Life Sciences, and Lauren Christian, a distinguished professor, identified porcine stress syndrome (PSS), a muscle metabolism condition. They discovered a genetic marker linking stressrelated mortality and poor meat quality to highly muscled animals.



to have a significant impact on meat science in the United States and world.

# ISU ANIMAL SCIENCE SCIENTISTS WHO CONTRIBUTED TO OUR HISTORY

1960s

1970s

1980s

1990s

2000s

**TODAY** 

Dr. D.E. Goll Meat tenderness

Dr. Joe Sebranek, Dr. Elisabeth Huff-Lonergan and Dr. Steven Lonergan USDA, processed and valueadded meats and meat quality

**Dr. David Topel and Dr. Lauren Christian** Stress syndrome genetic marker

**Dr. Dennis Olson** Irradiation for food safety



Dr. Huff-Lonergan and Dr. Donald Beitz Micronutrients improve meat tenderness

Dr. Jim Dickson, Dr. Joe Sebranek, Dr. Rodrigo Tarté and Dr. Joe Cordray Safety, meat grading, preservatives and quality short courses



**IRRADIATION FOR FOOD SAFETY.** One of the first linear accelerators for food irradiation was installed by ISU. Dennis Olson led the work on the technology's potential for extending shelf life and eliminating pathogens, viruses and parasites in meats and other foods.

# BENEFICIAL MICRONUTRIENTS IMPROVE MEAT TENDERNESS.

Research on supplementing livestock feed with nutrients, such as Vitamin D, to improve meat tenderness was conducted by Huff-Lonergan, Donald Beitz and others.

**MEAT SAFETY MODELING.** Jim Dickson, professor, modeled the probability of salmonellae growth on meat carcasses under a variety of cooling conditions. His work has resulted in an inexpensive technology process, now patented, which even small processing plants can use to limit occurrence of pathogens.

#### MORE CONSISTENT MEAT GRADING.

Bringing objectivity to the USDA beef grading program owes much of its origin to Iowa State. Cameras and computer software technology replaced the human eye as a more consistent method for assessing official quality grades to beef, according to Craig Morris, a 1992 animal science alum, who served in the USDA Agricultural Marketing Service for two decades, including when these instruments were officially adopted in 2008. He is now vice president of international marketing for the National Pork Board.

#### **NEW-GENERATION PRESERVATIVES.**

Joe Sebranek, distinguished professor and Morrison Endowed Chair in Meat Science, and Rodrigo Tarté, assistant professor and ISU meat science alum, are at the forefront of research to develop plant-based ingredients as effective preservatives. The research is a response to consumer desire for more "clean label" and natural products.

# QUALITY SHORT COURSES. Dr. Joe

Cordray, professor, Smithfield chair in meat extension and Meats Lab director, has revolutionized the way short courses are taught. ISU is known worldwide for its short course offering including basic sausage, cured meats, dry & semi-dry sausage and processed meats.

# **HAMILTON POULTRY**

# TEACHING AND RESEARCH FARM IN SIGHT



GROUND WAS BROKEN AUGUST 31 as the next step in replacing Iowa State University's aging poultry science facilities, made possible by private funding from Iowa agricultural donors. The new complex will be called the Robert T. Hamilton Poultry Teaching and Research Farm in honor of the Iowa Falls farmer who, with his wife Arlene, worked to build a successful poultry and hog operation and are considered pioneers of the modern layer chicken industry. Robert Hamilton died in 2014 at the age of 90.

"The Hamilton Poultry Teaching and Research Farm will be a modern, state-of-theart place where we'll begin writing a new chapter of Iowa State poultry science," said Joe Colletti, interim endowed dean of the College of Agriculture and Life Sciences at Iowa State. "The facility will help us provide the best hands-on educational experiences for students and the infrastructure required for new scientific discoveries."

The \$5 million project, expected to be completed in late 2019, was made possible by three donors with Iowa connections. A lead gift of \$3 million was pledged by Arlene Hamilton and the Robert and Arlene Hamilton Charitable Foundation. The Iowa Egg Council pledged \$1.5 million. Hy-Line International and Hy-Line North America pledged \$500,000. Pending Iowa Board of Regents approval, portions of the new facility will be named the Iowa Egg Council Layer Research Wing and the Hy-Line Genetics Research Wing. "This research facility will offer much improved facilities and **provides our poultry and egg farmers a terrific resource for important and relevant work,"** said Kevin Stiles, executive director of the Iowa Poultry Association and Iowa Egg Council. "We also see the farm as a tremendous asset to the university and students who will later become an integral part of our poultry and egg farming operations across the state and throughout the Midwest."

The project will be built south of Ames on the same site as the university's existing Poultry Science Farm, and will replace buildings dating back to the early 1960s. The new facility will accommodate educational and research needs in breeding and genetics, housing systems, flock management, nutrition, food safety and microbiology, behavior and welfare, flock health and well-being, environmental impact and economic efficiency. It will feature modern production systems that reflect current industry practices, and will have the flexibility to adapt to emerging production systems. Animal Science Farms Director, Ben Drescher says, "These projects don't come along every day and **it is tremendously exciting to be a part of the team developing it.** We are very thankful for the support of our donors and the poultry industry. This facility is going to allow the Animal Science Department to better serve its land grant mission to our students, researchers and stakeholders for years to come."

The new farm will have enhanced biosecurity measures of modern poultry farms to maximize animal well-being and health, food safety and environmental conditions for air quality and water quality. Dr. Susan Lamont, Charles F. Curtiss Distinguished Professor, says, "The new farm's **increased biosecurity will help to ensure the quality of the teaching and research activities conducted there.** This is especially important for the long-standing research program on genetic resistance to disease, which is conducted with ISU's unique research populations of chickens. The oldest research populations at the farm originated in 1925. "



# NEW TECHNOLOGY IN KILDEE 25

# PROVIDES ENHANCED LEARNING

By Keri Morris

eterinarian and Lecturer, Jessie Juarez, instructs Ans 214L: Domestic Animal Anatomy and Physiology Lab. After teaching class for a couple of years, Juarez realized a real

Whenever a dissection would take place, students would crowd around a specimen table but unfortunately, those in the back of the crowd frequently would have obstructed views so finding a system that allowed all students the chance to see the specimen close-up was paramount.

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Jessie Juarez



necessity for a system that shows specimens magnified. "Whenever a dissection would take place, students would crowd around a specimen table but unfortunately, those in the back of the crowd frequently would have obstructed views so finding a system that allowed all students the chance to see the specimen close-up was paramount," said Juarez. She also mentioned that there were times when students couldn't always attend class due to life and they needed a system that would capture the information to view at a later date so they wouldn't fall behind.

Juarez started researching systems that might work. While working at the ISU Vet Med school, she noticed an efficient system in one of the labs that she wanted to emulate. Jessie met with Dr. Beermann and applied for funding and was able to use the computer technology funds that students pay as part of their tuition to fund some of the project. The Department of Animal Science covered the remaining costs. Over the course of the summer, Mechdyne installed nine 43-inch

monitors over the dissection tables as well as an 86-inch Ultra HD touchscreen display TV for the instructor to utilize. For classroom capturing capabilities, two remote video cameras were mounted in the room. Video material could then be delivered via Canvas or other streaming service for view by students.

The project was complete a couple weeks prior to the 2018 fall semester. Juarez has received a lot of positive feedback. "Students are able to gain more from the class with the aid of cameras and monitors as it is now possible to provide a better view for all in the class. A secondary benefit is the labs can be recorded for later use as study aids or for distance education."

Jessie graduated in 2010 with a BS in Animal and Dairy Science and received a Master's in Animal Science in 2012 with a Doctorate of Veterinary Medicine in 2014. She worked as a large animal ambulatory veterinarian and embryo transfer veterinarian for 1.5 years in Waupun, Wisconsin before moving back to Ames in the fall of 2015 to work in Animal Science.

# ANIMAL U

The Iowa Pork Producers Association and Iowa Beef Industry Council have made generous gifts to the Animal U project this past year.



ANIMAL U IS A SELF-DIRECTED ON-LINE, INTERACTIVE CURRICULUM that teaches youth ages 9-19 about all aspects of animal husbandry, advocacy and careers in each of the meat animal species. Iowa Pork Producers generously donated \$315,000 to build the swine curriculum and the Iowa Beef Industry Council contributed \$100,000 to begin the build of the beef curriculum. The curriculum contains 13 modules with over 100 lessons. A facilitator guide will also be available for educators to use in conjunction with the on-line lessons. The curriculum's main audience are the 16,000 Iowa 4-H members enrolled in livestock projects but the ultimate goal is to implement the curriculum into schools.



# **NEW STUDENT STUDY SPACE**

# SUPPORTS ANIMAL AND DAIRY SCIENCE STUDENTS



KILDEE HALL has a new student study space! This space was created entirely for students to be able to conduct meetings and have a place for quiet study. In the Kildee history book, the room was once a wet lab space complete with fume hood and chemical sink. After years of use and equipment ceasing to function, the room was repurposed into an area where the information technology staff

could work on computer hardware. They 'lived' in this space for over 30 years before the department decided to remodel a more accessible, customerfocused space for our IT staff to better serve faculty, staff and students. With a lot of remodeling, room 106 became a modernized study room complete with new furniture, glass marker boards, printer and many outlets for students to plug in and charge laptops or handheld devices. Both rooms received new carpet, paint, dropped ceiling for acoustics and soft, bright light for easier reading.

Room 106 includes two separate spaces: One space is a larger, common area with tables, chairs, printer, glass marker board and sink. This room accommodates 15 students. The smaller area serves as a conference room that can hold ten people and boasts a 56-inch TV and glass marker board. Furniture in both rooms is mobile to allow for



Kildee 106 has a new student study space (left) and updated conference area (above).

reconfiguration for student meetings. The room is open from 7am to 10pm, Monday through Friday to allow adequate study time for students.

# **KILDEE 122**

# BECOMES A MORE COLLABORATIVE OFFICE

A GENEROUS ANONYMOUS DONOR supplied funds for office furniture in 122 Kildee to create an IT office to support faculty, staff and graduate students. The former IT office was housed in 106 Kildee. The reason for the move was because the new office allows easier accessibility for animal science folks to collaborate with IT and due to ISU moving to a different work model and housing all of Kildee's servers, the need for that space wasn't there.

Dr. Beermann, Department Chair, says, "We saw an opportunity to create two student rooms out of the former IT office (106 Kildee). Since Kildee no longer houses servers we thought the space could be better utilized as a

conference room for students. The former 122 Kildee space was not being used to its fullest potential as there were old coolers in the alcoves that didn't work and cabinets against the wall that took up a lot of space that weren't being used. We uninstalled these and added new carpet and softer, brighter lighting as well as a fresh coat of paint. Office cubicles were installed and the cooler alcoves became IT benches for IT staff to test equipment. New tables for meetings and work space were also added."

Joel Rybolt–IT Supervisor, Mark Hawley–System Support Specialist III and Kevin Schwien–Data Technician I are housed in this office.



Through a generous donation, a new IT office has been created at Kildee 122 to be utilized by faculty, staff and graduate students.



# LIVESTOCK **JUDGING**

OVER THE SUMMER, THE LIVESTOCK JUDGING TEAM took a very active role in organizing the livestock judging camp that took place June 11-13th. The camp is designed to help youth build their knowledge of evaluating market and breeding animals which include beef, swine, sheep and goats. Livestock judging team members taught the basics of livestock judging including selection, oral reasons, evaluation and breeding animal performance data.

The Livestock Judging Team kicked off the fall season in mid-September at the National Barrow Show in Austin, MN. Out of 18 total teams, Iowa State finished as the 2nd overall team. Individually, Jacob Hinshaw, from Secor, IL finished 3rd in oral reasons and high individual overall. Mindy Cook (Camden, DE) and Lacey Knodle (Fillmore, IL) were also recognized in the top 10 individually for oral reasons.

> We want to congratulate all students on their individual and team successes!

The team recently competed at the Aksarben Intercollegiate Livestock Judging Contest in Grand Island, NE. Out of 12 total teams, Iowa State finished as the 2nd overall team. Individually, Lacey Knodle, from Fillmore. IL finished 2nd in oral reasons and was named high individual overall in the contest! Skylynn Fleming (Paxton, IL) was named high individual in beef judging and 6th overall. Jacob Hinshaw (Secor, IL) was also named 10th overall individual. We congratulate all students on their individual and team successes!

Left to right: Cody Redifer, Chris Cassady, Frank Bradshaw, Bailey Schneckloth, Mitch Holcomb, Lacy Knodle, Mindy Cook, Jacob Hinshaw, Rylee Derrer, Skylynn Flemming, Tyler Triggs, Macy Marek, Curtis Harsh, Mason Edwards, Reid Nichols, Evan Dietz and Wayne Orr.



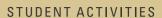
# DAIRY **JUDGING**

THE IOWA STATE DAIRY JUDGING TEAM welcomed several new faces this fall with 7 juniors trying out for the team to compete at North American International Livestock Expo (NAILE) in Louisville, Kentucky. Christen Burgett welcomed a new family member into the world and took maternity leave so former Iowa State graduate and judging team member, Matt Henkes, is assisting with coaching responsibilities.

> In September, Matt took the senior team of Macey Betcher, Katie Kerndt, Molly Mormann and Mary Scott to the 25th Accelerated Dairy Judging Contest in Viroqua, Wisconsin where the team finished 9th overall. Mary placed 5th in Guernseys which lead to placing 5th in oral reasons and 8th individual overall. Next the seniors competed at the Collegiate Dairy Cattle Judging Contest at World Dairy Expo. At this event students have the chance to evaluate some of the greatest cows from across the US and Canada. The team placed 4th in Guernseys -Molly was 8th and Katie 9th individual. The team also placed 5th in Milking Shorthorns and Mary was 9th individual. Katie placed 7th in Ayrshires and Mary was 5th in Holsteins. The team finished 11th out of 21 teams and the biggest honor of the night was Katie Kerndt earning All-American status placing 25th overall. We thank all the farms that opened their barn doors and provided great classes.

Left to right: Macey Betcher, Katie Kerndt, Molly Mormann and Mary Scott with interim coach, Matt Henke.







# **MEAT**JUDGING

THE 2018 IOWA STATE UNIVERSITY MEAT JUDGING TEAM began the fall judging season in early September at the Hormel National Barrow Show Intercollegiate Meat Judging Contest held at the Hormel Research and Development Facility in Austin, MN. This unique contest tested both undergraduate and graduate students on their knowledge of both fresh and processed pork products. Seven teams competed in the undergraduate competition and the ISU team finished fourth behind the University of Illinois, South Dakota State University, and the University of Missouri. In divisions, ISU finished first in specifications and fourth in fresh meat judging, processed meat judging, and questions. Three teams completed in the graduate student division with the University of Illinois finishing first, Iowa State University second, and North Dakota State University third. In divisions, ISU finished second in fresh meat judging, processed meat judging, questions, and specifications.

The Iowa State University Intercollegiate Meat Judging Team recently competed in their first American Meat Science Association contest of the fall at the 2018 American Royal Intercollegiate Meat Judging Contest hosted by Nebraska Beef, Omaha, NE. A record 18 teams competed in the contest and the ISU team was 7th in beef judging, specifications, and total placings; 8th in pork judging and reasons; and 10th in overall beef. Overall the ISU team finished in 10th place. Kaitlyn Boyer (Weldon) was 10th high individual in pork judging; Shelby Deaton (Baxter) was 10th high individual in specifications. Additional team members include Georgia Androy (Malvern), Hannah Engle (Ames); Macy Leonard (Newton); Kaitlyn Olson (Luana); and Jennifer VanderLee (Hartley).

The Iowa State University Meat Judging Team recently competed in the Cargill High Plains Intercollegiate Meat Judging Contest held in Friona, Texas. Twelve teams competed in the event and the team placed 9th behind Kansas State University, Texas Tech University, Texas A&M, Oklahoma State University, Colorado State University, Angelo State University, West Texas A&M, and Florida. The team placed second in the lamb carcass division behind West Texas A&M. Individual results included: Kaitlyn Boyer (Weldon)—high individual in the lamb carcass division and 3rd high individual in total placings. Team members also included: Georgia Androy (Malvern); Shelby Deaton (Baxter); Hannah Engle (Ames); Darin Koch (Osage); Macy Leonard (Newton); Kaitlyn Olson (Luana); and Jennifer VanderLee (Hartley).

The team is looking forward to traveling to Tyson in Dakota City, NE, for The International (the national championship).



Left to right: Darin Koch (Osage); Hannah Engle (Ames); Taylor Wulf– Assistant Coach (Hudson); Kaitlyn Boyer (Weldon); Kaitlyn Olson (Luana); Jennifer VanderLee (Hartley); Georgia Androy (Malvern); Macy Leonard (Newton); and Shelby Deaton (Baxter).



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# ANIMAL SCIENCE SCHOLARSHIP RECIPIENTS 2018



#### **AGAS Travel Scholarship, \$250**

Spencer Becker\*
Remy Carmichael\*
Erin Deters\*
Kristen Olsen\*

Alison Ciancio Memorial Award, \$2,000 Matthew Langsing

#### Alison Ciancio Memorial Award, \$2,000

Luke Bombei McKenna Brinning Emma Maust

#### Allyn Hagen Dairy Science Scholarship, \$750

Jessica Schmitt

# Animal Science General Scholarship Fund, \$1,500

Matthew Ciesielski Adam Koch
Keeley Greco Mary Van Rentzell
Madeline Herring Rosalie Roberts
Samantha Kelm Amber Vegter
Helen Kilian Katelyn Zimmerman

### Animal Science Recruiting Scholarship (Maynard and Anne Hogberg Saddle and Sirloin Recruiting Scholarship), \$1,500

Daeson DalPorto Carter Gualandri

# Arther and Muriel Anderson Scholarship, \$1,000

Sarah Heiller

#### Arthur Gerlach Scholarship in Dairy Science, \$1,000

Katelyn Goldsmith

### Arthur Molln Scholarship, \$1,000

Amanda Bryan Meghan Hettinga
Alison Buetel Kylie Juenger
Erin Chalupa Lindsay Miller
Shelby Deaton Claire Okoren
Cayley Fehr Mikayla Spinler
Madison Fitzgerald Allison Wallace

Kaylenn Hammer



# **Arthur R. Porter Scholarship, \$1,500** Emily O'Meara

# Bernard Ebbing Memorial Scholarship in Animal Science, \$550

Tyler Triggs

# Bob Pim Memorial Scholarship in Animal Science, \$3,250

Jessica Meseck

# C. F. Foreman Scholarship in Dairy Science and Animal Science, \$2,500

Nathan Arthur Ben Butikofer Paulina Padron

### Charles H. and Inez M. Callahn Memorial Graduate Award, \$2,000

Meaghan Meyer\*

#### Charles R. and Ethel P. Mountain Scholarship Award in Animal Science, \$500

Lacee Karkosh

# Curtis Askelson Scholarship in Animal Science, \$1,000

Jill Berkland

#### Dairy Science Student Support Scholarship, \$1,500

Clayton Arntz Ben Cooper

# David and Jacqueline Topel Endowed Scholarship, \$1,000

Kaitlyn Boyer

# David and Jacqueline Topel Scholarship in Meat Science, \$1,000

Carl Frame\*

# Dennis L. Crone Scholarship in Animal Science, \$550

Lexi Kunkel Michaela Kuzniar

#### Department of Animal Science Graduate Award for Outstanding Teaching, \$1,000

Benjamin J. Duran\*



# Department of Animal Science Graduate Student Excellence Award, \$1,000

Nichole Huntley\*

# Donald and Doris Warner Memorial Scholarship, \$1,000

Genevieve VanWye Austin Whited

# Donald W. Helble Scholarship in Animal Science, \$1,500

Justin Swanton

# Doug & Carol Kenealy International Travel Scholarship, \$1,000

Aubree Beenken Delaney Ridgway

#### Dr. and Mrs. M. E. Ensminger Scholarship, \$1.000

Josue Chinchilla- Victoria Hegstrom
Vargas\* Chad Lawyer
Samantha DeVoe Julia Mullenbach
Kelsey Gerwig Janaka Wicramasinghe\*

# Duaine & Sally Holck Judging Teams Award, \$500

Kenton Lain

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

Spenser Becker Matt Schulte\*

# Dudley R. Scott Endowed Scholarship in Animal Science, \$550

Caroline Treadwell

# Eldred J. and Donna Harman Scholarship in Animal Science, \$1,500

Corina Bates Emma Persoon Brynnen Gardner Sydney Steenhoek Kara Klemm

#### Erik M. Krekel Memorial Scholarship, \$1,000

Caitlin Shugart

**(** 



#### **Erpelding ISU Dairy Science Inspiration** Award, \$1,000

Jack Myers

#### **George Gund Agricultural School** Scholarship, \$1,000

Mitchell Holcomb Georgia Androy Kaitlyn Boyer Lacey Knodle Darin Koch Frank Bradshaw Mindy Cook Macy Leonard Shelby Deaton Macy Marek Rylee Derrer Reid Nichols Evan Dietz Kaitlyn Olson Mason Edwards Wvatt Orr

Hannah Engle Bailey Schneekloth Skylynn Fleming Tyler Triggs Curtis Harsh Jennifer Vander Lee

Jacob Hinshaw

#### Harold L, and Esther G, Wilcke Scholarship, \$1.500

Caroline Gregg Erin Horst\*

#### Helen M. Maddock Scholarship for Women in Animal Science, \$550

Madeline Hagerty Dori Kraji

Henry R. Duncan Scholarship, \$500 Marissa Phillips

#### **Iowa Dairy Leader Scholarship in Honor** of Gene and Judy Rathjen, \$2,500 Jack Myers

# **Iowa Dairy Leader Scholarship in Honor** of Gene Henderson, \$2,500

Matthew Lansing

### **Iowa Dairy Leader Scholarship in Honor** of Hadwin Kleiss, \$2,500

Mary Scott

**(** 

#### **Iowa Dairy Leader Scholarship in Honor** of Mildred Lyon, \$2,500

Isabella Portner

### **Iowa Poultry Association Scholarship** in Honor of Tom J. Zanios, \$1,500

Yalitza Curiel Krysten Fries\*

#### **Iowa Turkey Federation Scholarship,** \$1,000

Tanner Volkmann

#### James J. Kiser Scholarship in Animal **Science, \$1,000**

Shelby Miller

# Jeff Hansen/Iowa Select Farms Pork **Industry Scholarship, \$1,350**

Jacob Sterle

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

Remy Carmichael\*

# John and Roberta Rodecap Scholarship,

Samantha Bollman

## Keith M. and Arlene C. Kirkpatrick Memorial Scholarship, \$500

Kiersten Jass

#### **Kermit & Janis Coggshall Scholarship** in Dairy Science, \$1,000

**Aaron Gerdts** 

#### **Kermit and Janis Coggshall Scholarship** in Animal Science, \$1,500

Tristen Fulton

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

Austin Putz\*

### **Lauren L. Christian Swine Education** Endowment, \$2,000

Sam Baker Katyann Graham Jordan Travis

#### Lyle E. McBride III Memorial Scholarship, \$1,500

Keeley Greco Ashley Schwartzhoff

# Mary B. & William H. Gilbert Brown Swiss Memorial Scholarship, \$1,000

Isabella Portner

# Monica G. and William H. Welter Scholarship in Dairy Science, \$3,500

Katelyn Goldsmith

# **Naylor Educational Aid Scholarship in** Dairy Science, \$500

Macey Betcher

# Palmer & Sheryl Holden Scholarship in **Animal Science, \$500**

Gabrielle DiRusso Shana Hilgerson

# Paul Stewart Memorial Scholarship, \$1,000 Trevor Melvin

#### R. W. "Dick" Witt Scholarship \$1,000 Annika Koppes

#### Ralph Baker Scholarship, \$750

Emily O'Meara

#### **Rex Beresford Scholarship in Animal** Science, \$500

Morgn Grabau

#### Richard and Nancy Degner Scholarship, \$2,500

**Garrett Hatfield** Chad Lawyer Zack Rankin Danielle Stock

### Robert E. and Dorothy B. Rust Graduate Scholarship in Meat Science, \$1,000

Michael Cropp\*

# Robert E. and Dorothy B. Rust Undergraduate Scholarship in Meat Science, \$750

Jay Stowater

# Robert E. Walton Scholarship, \$1,000

Elizabeth Moore

#### **Roger and Susan Lenius Dairy Science** Scholarship, \$1,188

Mary Scott

#### Rufus C. Obrecht Scholarship, \$1,250 Brady Goetz

#### **Russell Bentley Dairy Science Award,** \$1,500

Rachel Grober Rosa Rarick

### Solon A. and Dorothy F. Ewing Animal **Science, \$1,000**

Erika Johnson Sydney See Auretta Wittkopf

# **Thomas and Esther Ringkob Scholarship** in Animal Science, \$750

Sara Glab

# **Thomas Surtherland Graduate Award** for Excellence, \$1,000

Hannah Spaulding\*

#### Thorvald J. Andersen Scholarship, \$2,500

Macy Betcher Trevor Melvin Jessica Schmitt Kendra Spier

# **Tom and Cindy Baas Swine Industry** Scholarship, \$1,250

Alex Bishop

#### Tom and Corrine Lonergan Scholarship, \$1,500

Sierra Becker

### Tom and Janie Wickersham Scholarship, \$2,000

Brooke Bowen Kaitlyn Olson

### **University Graduate College Awards** Research Excellence Award, \$500

Melissa Deist\* Qingyun Li\* Benjamin J. Duran\* Matt Schulte\* Nichole Huntley\*

# Vaughn and Meg Speer Graduate Award, \$1,500

Emma Helm\*

# William Riley Gillette Graduate Scholarship in Animal Science, \$1,000

Erin Deters\*

11/14/18 1:28 PM

<sup>\*</sup> Graduate students

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# **ANIMAL SCIENCE**

# **FACULTY AND STAFF AWARDS 2018**

**Excellence in Teaching by Lecturers and Adjunct Faculty** 

Sherrlyn Olsen College of Agriculture and Life Sciences

**Merit Award for Achievement and Service** 

Marcella Bruhn College of Agriculture and Life Sciences

**P&S Council Cytation Award** 

Mary Sue Mayes College of Agriculture and Life Sciences

**Learning Community Coordinator Award** 

Jennifer Bundy College of Agriculture and Life Sciences

**Young Animal Scientist Research Award** 

Stephanie Hansen College of Agriculture and Life Sciences

**Dean's Citation for Extraordinary Contributions** 

Mark Rasmussen College of Agriculture and Life Sciences

**Award of Merit; Teaching** 

Tom Baas ISU Chapter of Gamma Sigma Delta

**Award of Merit; International Mission** 

Jim Reecy ISU Chapter of Gamma Sigma Delta

**Award of Merit; Research** 

Lance Baumgard ISU Chapter of Gamma Sigma Delta

**Award of Merit; Extension** 

Jason Ross ISU Chapter of Gamma Sigma Delta

# **UNIVERSITY AWARDS**

**Exemplary Faculty Mentor Award** 

Susan Lamont

Hongwei Xin Iowa State University

P&S Outstanding New Professional Award
Lesa Vold Iowa State University

**Award for Outstanding Achievement in Research/Scholarship** 

Christopher Tuggle Iowa State University

**Regents Award for Faculty Excellence** 

Curtis R. Youngs Iowa State University

**James Huntington Ellis Award for Excellence in Teaching** 

Jodi Sterle Iowa State University

**Award for Early Achievement in Departmental Leadership** 

**Donald Beermann** Iowa State University

**Hall of Fame Award** 

**Don Beitz** ISU Block and Bridle Club

**CAST President's Award** 

**Don Beitz** Council for Agricultural Science

and Technology

50-Year Gold Medal Award

Don Beitz ISU Alumni Association

**Distinguished Service Award for Extension** 

**Beth Doran** Iowa State University

**ASSOCIATIONS** 

**ASAS Animal Industry Service Award** 

Anna Johnson American Society of Animal Science

ASAS Fellow Tom Baas

Ken Stalder American Society of Animal Science

**ADSA Zoetis Physiology Award** 

Lance Baumgard American Dairy Science Association

ASABE Cyrus Hall McCormick-Jerome Case Gold Medal

Hongwei Xin American Society of Agricultural

and Biological Engineers

**Research Leader Fellow** 

James Reecy Association of Public and Land Grant

Universities Council on Research

**Fellow** 

Max Rothschild National Academy of Inventors

**ACE Bronze Award** 

Lesa Vold Association for Communications

Excellence

**ASABE Blue Ribbon Award** 

Egg Industry Ctr American Society of Agricultural

and Biological Engineers

**Research Award of Poultry Science Association** 

Anna Wolc American Egg Board

**U.S. Department of Agriculture** 

Steven Lonergan Food and Agriculture Excellence

in Teaching

INDUSTRY or OTHER

**Distinguished Service Award** 

Tom Baas National Pedigreed Livestock Council

**Distinguished Service Award** 

**Tom Baas** National Pork Board

**Award of Distinction** 

Max Rothschild University of California Davis College of

Agricultural and Environmental Science

Iowa Beef Quality Assurance Educator Award

Leo Timms Iowa Beef Industry Council

**Reviewing Editor of 2017 Award** 

Aileen Keating Biology of Reproduction

**Partner Award** 

Egg Industry Ctr Iowa Egg Council





James Kiser

Richard Willham

Philip Golding

William Zmolek

| Class | Name                | Degree | Residence                    | Death    | Class   | Name                           | Degree     | Residence                     | Death          |
|-------|---------------------|--------|------------------------------|----------|---------|--------------------------------|------------|-------------------------------|----------------|
|       |                     |        |                              |          |         |                                |            |                               |                |
| 1938  | Robert Nelson       | EX     | Sarasota, FL                 | 3/10/11  | 1958    | Ladislav Hanka                 | PhD        | Kalamazoo, MI                 | 3/26/08        |
| 1941  | Frederick Gordon    | BS     | Delano, MN                   | 2/27/08  | 1960    | John Greig                     | MS         | Estherville, IA               | 2/24/18        |
|       | Clarence Jensen     | EX     | Stamford, NE                 | 5/21/18  |         | Robert Groenwald               | BS         | Bear Lake, MI                 | 9/21/14        |
| 1942  | Stanley Davidson    | BS     | Ames, IA                     | 12/14/17 |         | D.E. Topf                      | BS         | Quincy, IL                    | 12/21/12       |
|       | James Kiser         | BS     | Ames, IA                     | 7/14/18  |         | Richard Willham                | PhD        | Ames, IA                      | 12/31/17       |
| 1945  | Dale Newman         | EX     | Cedar Rapids, IA             | 1/3/16   |         | (ISU Retiree)                  |            |                               |                |
| 1947  | Robert Dowson       | BS     | Des Moines, IA               | 1/26/08  | 1961    | Larry Christensen              | BS         | Rockford, IL                  | 8/18/18        |
|       | Glen Taylor         | BS     | Rocklin, CA                  | 8/28/18  | 1962    | Jerome Bullis                  | BS         | Glenwood, FL                  | 2/24/18        |
| 1948  | Harold Dahlgran     | BS     | Shenandoah, IA               | 1/1/11   |         | Kay Cox                        | BS         | Alexandria, IN                | 9/25/18        |
|       | Edgar Dorow         | BS     | Osage, IA                    | 12/7/17  |         | John Jess                      | BS         | Haslette, MI                  |                |
|       | (ISU Retiree)       |        |                              |          |         | Gerald Larson                  | BS         | Algona, IA                    | 6/1/16         |
|       | Wayne Hillman       | BS     | Alliance, NE                 | 6/23/18  | 1963    | Wendell Wilson                 | BS         | Travelers Rest, SC            | 3/5/18         |
|       | Joseph Hineman      | BS     | Tucson, AZ                   | 1/1/18   | 1964    | Jacque DeWeese                 | BS         | Pardeeville, WI               | 1/6/06         |
|       | Marvin Julius       | BS     | Ames, IA                     | 1/22/08  |         | Richard Salzer                 | PhD        | Minneapolis, MN               | 4/21/17        |
|       | (ISU Retiree)       |        |                              |          | 1965    | Harold Hodson                  | PhD        | Ankeny, IA                    | 9/23/18        |
| 1949  | Donald Harman       | BS     | Roseville, CA                | 10/11/17 | 1967    | Byron Bryant                   | BS         | Woodbury, TN                  | 4/3/08         |
|       | Robert Wight        | BS     | Hoffman Eastates, <b>I</b> L | 4/19/14  |         | William Dieterichs             | BS         | Chesterfield, MO              | 5/1/18         |
| 1950  | Dale Cochran        | BS     | West Des Moines, IA          | 8/27/08  |         | Ernest Lucas                   | MS         | Springfield, OR               | 3/28/14        |
|       | William Penningroth | EX     | Tipton, IA                   | 1/18/11  |         | William Sirowy                 | BS         | Redlands, CA                  | 8/24/18        |
|       | Eugene Place        | BS     | Rio Linda, CA                | 10/24/03 | 1968    | Joe Drews                      | MS         | St. Charles, IL               | 6/1/18         |
|       | Edward Sindelar     | BS     | La Rue, OH                   | 1/20/12  | 1969    | Dennis Achenbaugh              |            | LeClaire, IA                  | 6/9/18         |
| 1951  | John Nelson         | BS     | Dekalb, <b>I</b> L           | 5/25/18  |         | James Benson                   | BS         | Dallas Center, IA             | 12/10/17       |
|       | John Smaltz         | BS     | Toledo, OH                   | 8/5/18   |         | Wayne Bush                     | PhD        | Ankeny, IA                    | 7/14/18        |
| 1952  | Robert Fresenborg   | BS     | Parker, CO                   | 4/29/18  |         | Bruce Eason                    | PhD        | Mission, TX                   | 4/5/18         |
|       | Eldon Hovey         | BS     | Badger, IA                   | 4/18/08  | 1970    | Larry Hoversten                | BS         | Eagan, MN                     | 6/8/18         |
|       | Ivan James          | BS     | Ames, IA                     | 1/21/18  |         | Stephen Stout                  | BS         | Van Alstyne, TX               | 1/10/18        |
| 1953  | Lewis DeGraff       | BS     | Lanark, <b>I</b> L           | 8/17/18  | 1971    | Richard Peterson               | BS         | Arvada, CO                    | 3/4/15         |
|       | Howard Drevs        | BS     | Kanawha, IA                  | 12/24/17 |         | Gary Ternus                    | PhD        | Ankeny, IA                    | 4/1/18         |
|       | Robert Koch         | PhD    | Colorado Springs, CO         | 3/10/16  | 1972    | Richard Gallentine             | BS         | Adair, OK                     | 7/10/08        |
|       | Willis Kuecker      | BS     | Goldfield, IA                | 6/9/14   |         | Linus Kuennen                  | BS         | Ft. Atkinson, IA              | 8/16/08        |
|       | Jack Ohms           | BS     | Palo Alto, CA                | 2/1/17   | 1973    | Fred Hefty                     | BS         | Renwick, IA                   | 5/7/18         |
| 1954  | Darold Dralle       | BS     | Wabasha, MN                  | 11/29/15 | 1974    | Daniel Pitzen                  | PhD        | Wooster, OH                   | 12/2/17        |
|       | Judd Leland         | BS     | Lake Forest, IL              | 3/21/08  | 1976    | Daniel Anderson                | BS         | Cherokee, IA                  | 2/24/18        |
| 1955  | Claire Rodgers      | BS     | Bloomfield, IA               | 3/15/18  |         | Nathan Beck                    | BS         | Byron, MN                     | 7/11/18        |
| 1956  | Frank Arney         | BS     | Oklahoma City, OK            | 4/15/18  |         | Eddie Peterson                 | BS         | Hercourt, IA                  | 2/21/05        |
| 1957  | Larry DuVal         | BS     | Onawa, IA                    | 5/10/18  | 1977    | Russell Kurth                  | BS         | Logan, IA                     | 11/7/17        |
|       | (ISU Retiree)       |        |                              |          | 1980    | Joe Rollenfson                 | BS         | Henderson, NV                 | 2/25/18        |
|       | Virgil Hays         | PhD    | Lexington, KY                | 9/28/15  | 1983    | Kenneth Simpson                | BS         | Port Jervis, NY               | 4/18/08        |
|       | Darrell Helgens     | BS     | Cedar Rapids, IA             | 1/24/08  | 1993    | Jennifer Drisko                | DMJ        | Middletown, NJ                | 5/29/15        |
|       | Lewis Holland       | PhD    | Las Cruces, NM               | 12/3/05  |         | Philip Golding                 |            | Clear Lake, IA                | 11/22/17       |
|       | James Lefebure      | BS     | Logansport, IN               | 4/23/08  |         | William Zmolek                 | MS         | Toledo, IA                    | 9/1/17         |
|       | Arvid Munson        | MS     | Fish Creek, WI               | 11/14/14 |         | vviiiaiii ZiiiUIGK             | IVIO       | TOTOUU, IA                    | J/ 1/ 17       |
|       | Dean Schnell        | BS     | Bemidji, MN                  | 5/4/08   | The nar | mes on this list originate fro | m notifica | itions the university receive | d during 2018. |

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# IOWA STATE UNIVERSITY

**Animal Science Department** 

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