### South Dakota State University Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

Animal Science Newsletter

Department of Animal Science

Spring 2018

# News of the Department of Animal Science

Department of Animal Science

Follow this and additional works at: https://openprairie.sdstate.edu/ans\_news

# News of the Department of Animal Science

South Dakota State University

Spring 2018

Volume 38, Issue 1

### Welcome

Welcome to the College of Agriculture, Food and Environmental Sciences, formerly the College of Agriculture and Biological Science. The Board of Regents approved the name change in March. As part of a realignment of academic units, the academic departments in the College of AFES include Agricultural and Biosystems Engineering, **Animal Science**, Dairy and Food Science, Veterinary and Biomedical Sciences, Natural Resource Management, Agronomy, Horticulture and Plant Science.

In late March, Dr. John Killefer began duties as the South Dakota Corn



Utilization Council endowed Dean of the College of Agriculture and Biological Science at SDSU. Most recently, **Dr. Killefer** served at Oregon State and previously at the University of Illinois Urbana-Champaign. He earned his B.S. in biological sciences at Hastings College in Nebraska, his Ph.D. at Oregon State.

We welcome Dr. Carmen Paulson, DVM to the position of Equine Instructor

beginning Fall 2018. **Dr. Paulson** was raised on a ranch in western, ND, attended NDSU where she was on the rodeo team, and completed her DVM at Colorado State University. She spent five years as an Adjunct Instructor for the Veterinary Technology program at Globe University in Sioux Falls and is currently the sole practitioner for Paulson Veterinary Service in Pipestone, MN.

Sheep Unit Manager **Karolyn Marsan** began work March 5. She received a B.S. in Animal Science from the University of Idaho and is from Coer D' Alene, ID.



**Kevin Jerez-Bogota** is pursuing his M.S. in Swine Nutrition under the direction of **Dr. Tofuko Woyengo.** He received his B.S. degree in Animal Science from the National University of Columbia in 2014.





# Upcoming events

- June 7-9 Session 1 SDSU Youth Livestock Judging Camp
- June 10-12 Session 2 SDSU Youth Livestock Judging Camp
- July 8-12 ASAS Annual Meeting, Vancouver BC, CA
- August 20 Fall Semester begins
- September 15 Beef Bowl SDSU vs Arkansas-Pine Bluff
- September 19 Animal Science Scholarship Banquet, SDSU Volstorff Ballroom

**October 3** – Ag-Bio Career Fair

October 13 - Hobo Day SDSU vs Youngstown

2019 Little I - March 29-30, 2019



**Kaitlin Epperson** has begun M.S. graduate studies in Reproductive Physiology under the direction of **Dr. George Perry**. She is from Columbia, MO and received her B.S. in December 2017 from the University of Missouri.

Lily Hernandez completed her B.S. studies in Animal Science in December 2017 at Texas A&M. She is pursuing her M.S. in Swine Nutrition under the direction of Dr. Crystal Levesque. Lily is from Sugarland, TX.

> Katelyn Zeamer, has begun M.S. graduate studies in Swine Nutrition under the direction of Dr. Crystal Levesque. She is from DePere, WI and received her B.S. Animal Science,

Meat Animal Management Emphasis, in December, 2017 from the University of Wisconsin-River Falls.

## Congratulations

Graduate student Janine (Swartz) Sinniger, presented a seminar prior to her successful M.S. defense on February 22. Janine studied under the direction of Dr. Derek Brake.

> Graduate student Megan Webb, presented a seminar prior to her successful Ph.D. defense on February 26. The title of her presentation was Influence of Production System on Animal Performance, Carcass Characteristics, Meat Quality, Environmental Impacts, Production Economics, and Consumer Preference for Beef. Megan studied under the supervision of Dr. Amanda Blair.

Graduate student Casey Zangaro presented a seminar prior to her successful M.S. defense on March 29. The title of her presentation was Enhancing the Nutritive Value of Corn DDGS for Pigs. Casey studied under the supervision of Dr. Tofuko Woyengo.

> Graduate student Ron Navales presented a seminar prior to his successful M.S. defense on May 24. The title of his presentation was Efficiency of Utilizing Standardized Ileal Digestible Lys and Thr for Whole Body Protein Retention in Pregnant Gilts During Early, Mid and Late Gestation. Ron studied under the supervision of **Dr. Crystal Levesque**.

**Rebecca Whitlock** (B.S.'11, M.S. '13, and Instructor F'14) has completed four years of study at the Ross University School of Veterinary Medicine, Caribbean Nations and is currently at Kansas State University where she is completing requirements for a DVM.

> Dr. Rebecca Bott-Knutson has accepted the position of dean of the Van D. and Barbara B. Fishback Honors College. Rebecca held appointments in teaching, research and Extension in the Animal Science Department from 2009-2016.

Recently honored by the Department and the state of SD for years of service:

- Dennis DeBoer, Ag Research Tech, 15 years;
- Dr. Michael Gonda, Associate Professor, 10 years
- Dr. George Perry, Professor, Extension Specialist-Beef Reproduction Management, 15 years
- Veronica Shriver, Senior Computer Support Specialist, 20 years
- Deon Simon, Senior Chemist, 35 years (Deon pictured right with Carol Kleinjan, Cheryl Beste)
- Kevin Vander Wal, Cow Calf Education & Research Facility Manager, 30 years













After 34 years as a ruminant nutritionist in the Department, **Dr. Robbi Pritchard** has left SDSU to pursue consulting work in Nebraska. From 1984-2018, **Dr. Pritchard** directed research at the Feedlot Nutrition Unit, supervised ruminant nutrition labs and metabolism facilities on campus, taught undergraduate and graduate classes, advised numerous graduate students, served on external and internal committees, and presented at many state, regional and national seminars emphasizing beef cattle nutrition and growth. In 2005 he was awarded the rank of Distinguished Professor.



Dr. Rick Wahlstrom turned 95 years young on



February 13. Rick and LaRayne's mailing address is 122 4<sup>th</sup> St W, Apt 19, Brookings, SD 57007.

SD Pork Producers Council announced

**Macey Kriens**, Dell Rapids, SD as one of three students to serve as a 2018 SD Youth Pork Ambassador. A current student at SDSU majoring in Animal

Science, **Macey** served as the Vice President of SDSU Swine Club.

Adam Krause (B.S. 2016), Clear Lake, SD was one of three producers named as 2018 Class of Pig Farmers of Tomorrow during the National Pork Industry Forum in Kansas City, MO.





Jason Smith and **Anna Taylor** (B.S. '07, M.S. '10, PhD '13) have announced their engagement. They will be married in September 2018.



Rees Edward was born to Curt and **Amanda Knorr Hesse** (M.S. '08) December, 2017. He weighed 8lbs and was 20 inches long.

Karen and **Bob Thaler** became grandparents when Hunter Michael Steffen was born April 11, 2018 to Allyse and Mike Steffen. He weighed 6 lbs 15.6 oz and was 19 ½ inches



long and joins big sister Charleigh at home.

Clara Marie was born March 22, 2018 to Carrie and **Kyle Schell**, former Range Management Outreach Coordinator. She weighed 8 lbs 5 oz and was 19 inches long.





Roly Owen was born to Kyle and **Rebecca Bott-Knutson** (2009-2016) on April 30, 2018. He weighed 9 lbs. 6 oz. and was 22 inches long.

### Condolences

We express our sympathy to **Brenda Bjorklund** and family on the loss of her brother, Dexter Johnson of Rapid City, SD who passed away May 6<sup>th</sup>.

### Legacy Celebration - SDQHA

From left, SDSU President **Barry Dunn**, students **Brody Jones** (Midland, SD), **Holly Krueger** (Arlington, NE) and Animal Science Department Head **Joe Cassady** are pictured at the South Dakota Quarter Horse Association Legacy Celebration in Pierre January 6. SDQHA formally recognized those who have been raising quarter horses for 50 years or more including the equine program at SDSU. **Dr. Paul Kohler** started the Quarter Horse breeding program when he bought a yearling filly named Gold Duster at the 1952 Denver National Western Quarter Horse Sale. An



active Quarter Horse breeding program continues today; every horse produced is used within the program for hands-on learning.

### Pork Classic

Pork Classic was held Saturday, January 27 at the SDSU vs Fort Wayne double header basketball game. From 1:30-3:00 pm, over 600 people enjoyed a delicious BBQ pork loin sandwich meal, which included

SDSU ice cream for dessert. Loins for the BBQ were donated by Smithfield Foods. Twenty pork bundles, also donated by Smithfield Foods, were sold. In all, approximately \$8,000 was raised with proceeds going toward Animal Science scholarships. Special thanks to all staff and student volunteers and **Jeff Clapper, Crystal Levesque, Ryan Samuel** and **Bob Thaler** for organizing this event.

### Lamb Bonanza



The 26th annual Lamb Bonanza was held on January 13<sup>th</sup> at Frost Arena on the SDSU Campus prior to the SDSU vs Denver men's basketball game. The popular lamb products, leg of lamb sandwiches and lamb meatballs, were served to over 700 basketball fans by Animal Science staff and producers with the SD Sheep Growers' Association. Six lamb pelts were auctioned during halftime with proceeds supporting undergraduate scholarships in the Departments of Animal Science and Athletics. The pelt auction average was \$1,083 setting a new all-time Lamb Bonanza record! Thanks to all who supported the event including the successful pelt auction bidders: Pat and Kim Barnett (Jackson, MN) Lynn and Dianne Perry (Bancroft, SD), Blake and Sheryl Meshke Family (Lake Crystal, MN), Kelly and Stacie Bruns Family, North Platte, NE; Gregg and Jane Ode, Brandon, SD and Jason and Brandy Aho, Lake Norden, SD. The Lamb Bonanza undergraduate scholarship program currently awards \$5,000 dollars annually. Special thanks to all the SD Sheep Growers Association volunteers and our staff who assisted with the event: **Dr. Lowell Slyter, Dr. Julie** 

Walker, Heidi Carroll, Adam Rhody, and Carol Kleinjan.

# Honors College Animal Science Honorees

<u>Convocation</u>: The Van D. & Barbara B. Fishback Honors College Convocation was held in February and began with a reception attended by faculty, students and community members. Animal Science students and faculty who received Honors College recognition included:



- Excellence in Service Award: Brianna Buseman (pictured with President Dunn and Dean Bott-Knutson)
- Excellence in Professional Preparation: Broc Mauch
- Completion of independent study in 2017-18: Brianna Buseman
- Faculty Honors Advocate and Finalist for Honors Teacher of the Year: Dr. Rosie Nold (pictured with President Dunn)
  SDSU Photos



# Celebration of Faculty Excellence



The Celebration of Faculty Excellence, a recognition event for the faculty of SDSU, was held February 20 in the University Student Union Volstorff Ballroom. **Dr. George Perry**, pictured left with **Dr. Don Marshall**, received the College of Agriculture and Biological Sciences Outstanding Researcher award. **Dr. Perry** is internationally recognized for having developed a highly productive research program focused on the application of technology to improving reproductive efficiency in beef cattle.



**Dr. Perry** is internationally recognized for having developed a highly productive research program focused on the application of technology to improving reproductive efficiency in beef cattle. **Veronica Shriver**, pictured left with **President Barry Dunn**, was awarded the F.O. Butler Award for Excellence in Service. Veronica has worked for the Animal Science Department as a Senior Computer Support Specialist for 19 years. She continues to meet the challenge of new technologies and is a patient and solution focused troubleshooter. Veronica has provided dedicated services at the community, regional, national and international levels as a 26-year member of the Air Force Reserve

and South Dakota Air National Guard. She fulfilled missions in Turkey, Kuwait and Saudi Arabia. As a volunteer with the American Red Cross she serves in leadership positions including Lead Captain for the Brookings Area Disaster Action Team, Mass Care and Feeding worker, and Emergency response vehicle driver. SDSU Photos

### Midwest Meeting ADSA/ASAS

The Midwest Branch of the American Dairy Science Association and American Society of Animal Science

(ADSA/ASAS) meeting was held in Omaha, NE March 11-14. Currently Dr. Joe Cassady serves as an ASAS Director at Large; Dr. George Perry serves on the Research Award Committee and Warren Rusche is involved with the Extension Beef/Small Ruminant Program Committee. Dr. Ryan Samuel served as Co-Chair of the session Nonruminant Nutrition 1: Minerals. Ron Navales, pictured right, was awarded second place in the graduate student oral competition. Others participating:

#### GRADUATE STUDENT ORAL COMPETITION: MS

Efficiency of Utilizing Standardized Ileal Digestible Lysine for Whole Body Protein Retention in Pregnant Gilts during Early, Mid, and Late Gestation. R. A. S. Navales\*, B. C. Thaler, and C. L. Levesque, South Dakota State University, Brookings

#### GRADUATE STUDENT ORAL COMPETITION: PHD

Comparison of Two Serum Pregnancy Tests in Detection of Artificial Insemination versus Natural Service Pregnancies in Beef Herds. J. J. Rich\*1, E. J. Northrop1, S. D. Perkins1, E. E. Beck1, J. Rhodes2, and G. A. Perry1, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>IDEXX Laboratories, Westbrook, ME

#### **UNDERGRADUATE STUDENT ORAL COMPETITION**

Effect of Essential Oil Supplementation to Lactation Diets on Reproductive Performance and Fecal Characteristics of Sows. K. Fuoss<sup>\*1</sup>, M. D. Lindemann<sup>2</sup>, and C.L. Levesque<sup>1</sup>, <sup>1</sup>South Dakota State University, Brookings, <sup>2</sup>University of Kentucky, Lexington

Effect of Pre- and Postinsemination Maternal Plane of Nutrition on Estrus and Embryo Development. R. T. Douglas<sup>\*1</sup>, E. E. Beck<sup>1</sup>, J. J. Rich<sup>1</sup>, E. J. Northrop<sup>1</sup>, S. D. Perkins<sup>1</sup>, T. W. Geary<sup>2</sup>, J. A. Walker<sup>1</sup>, and G. A. Perry<sup>1</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>USDA–ARS Fort Keogh Livestock and Range Research Laboratory, Miles City, MT

Immunological Response of Pigs by Lymphocyte Proliferation by the Supplementation of Beta-Glucans. H. Kerkaert\*, J. Koepke, C. L. Levesque, and B. C. Thaler, South Dakota State University, Brookings

#### GRADUATE STUDENT POSTER COMPETITION I: PHD

Comparison of Two Methods of Bovine Pregnancy Tests to Determine Embryonic Loss in Beef Cows. E. J. Northrop<sup>\*1</sup>, J. J. Rich<sup>1</sup>, J. R. Rhodes<sup>2</sup>, and G. A. Perry<sup>1</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>IDEXX Laboratories, Westbrook, ME

#### POSTER SESSION II: UNDERGRADUATE STUDENT

Changes in Ram Semen Quality between Subsequent Ejaculates. D. T. Smerchek<sup>\*1</sup>, P. P. Anderson<sup>1</sup>, J. E. Held<sup>1</sup>, A. R. Kolthoff<sup>1</sup>, T. Stenberg<sup>2</sup>, and G. A. Perry<sup>1</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>Volga Veterinary Clinic, Volga, SD

Influence of Postpubertal Ram Semen Quality on Ewe Conception Rates. P. P. Anderson<sup>\*1</sup>, D. T. Smerchek<sup>1</sup>, J. E. Held<sup>1</sup>, A. R. Kolthoff<sup>1</sup>, T. Stenberg<sup>2</sup>, and G. A. Perry<sup>1</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>Volga Veterinary Clinic, Volga, SD







Maternal Influences on Early Calf Rumen Volatile Fatty Acid Profile. S. R. Powell<sup>\*1</sup>, H. C. Cunningham<sup>1</sup>, K. J. Austin<sup>1</sup>, K. M. Cammack<sup>2</sup>, and D. C. Rule<sup>1</sup>, <sup>1</sup>Department of Animal Science, University of Wyoming, Laramie, <sup>2</sup>West River Ag Center, South Dakota State University, Rapid City

#### ORAL PRESENTATIONS:

Growth Performance, Organ Weights, and Blood Parameters of Nursery Pigs Fed Diets Containing Cold-Pressed Canola Cake. J. W. Lee\* and T. A. Woyengo, South Dakota State University, Brookings

Estimates of Botanical Composition of Diets from Analyses of Chemical Components or Near-Infrared Spectroscopy among Cattle Fed Binary Mixtures of Cornstalk and Noncornstalk Residue. *E. A. Petzel\**<sup>1</sup>, *A. J. Smart*<sup>2</sup>, *E. A. Bailey*<sup>3</sup>, *J. A. Walker*<sup>1</sup>, *C. L. Wright*<sup>1</sup>, *J. E. Held*<sup>1</sup>, and *D. W. Brake*<sup>1</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>Department of Natural Resource Management, South Dakota State University, Brookings, <sup>3</sup>Division of Animal Sciences, University of Missouri, Columbia

Effects of Pre- and Postinsemination Maternal Plane of Nutrition on Peripheral and Uterine Luminal Fluid Metabolites. E. E. Beck<sup>\*1</sup>, R. T. Douglas<sup>1</sup>, J. J. J. Rich<sup>1</sup>, E. J. Northrop<sup>1</sup>, S. D. Perkins<sup>1</sup>, T. W. Geary<sup>2</sup>, G. A. Perry<sup>1</sup>, and J. A. Walker<sup>1</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>USDA–ARS Fort Keogh Livestock and Range Research Laboratory, Miles City, MT

Role of Epididymal Proteins and Mannose on Sperm Longevity. S. D. Perkins\*, E. J. Northrop, J. J. J. Rich, and G. A. Perry, Department of Animal Science, South Dakota State University, Brookings

Influence of Sexcel (Gender Ablation Technology) Gender-Skewed Semen in Fixed-Time Artificial Insemination of Beef Cows and Heifers. *G. A. Perry*<sup>\*1</sup>, *J. A. Walker*<sup>1</sup>, *J. J. J. Rich*<sup>1</sup>, *E. J. Northrop*<sup>1</sup>, *S. D. Perkins*<sup>1</sup>, *E. E. Beck*<sup>1</sup>, *M. D. Sandbulte*<sup>2</sup>, and F. B. Mokry<sup>3</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>ABS Global, DeForest, WI, <sup>3</sup>Genus plc, DeForest, WI

Current Understanding of Factors Influencing Antral Follicle Count and Applications to Reproductive Management in Cattle. R. A. Cushman<sup>\*1</sup>, G. A. Perry<sup>2</sup>, and J. H. Britt<sup>3</sup>, <sup>1</sup>USDA–ARS U.S. Meat Animal Research Center, Clay Center, NE, <sup>2</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>3</sup>Department of Animal Sciences, North Carolina State University, Raleigh

Regulation of Preovulatory Estradiol and Its Impacts throughout the Bovine Estrous Cycle. *E. J. Northrop\**<sup>1</sup>, *J. J. Rich*<sup>1</sup>, *R. A. Cushman*<sup>2</sup>, and *G. A. Perry*<sup>1</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>USDA–ARS U.S. Meat Animal Research Center, Clay Center, NE

Effectiveness of Genomic Testing in Predicting Carcass Characteristics and Feedlot Performance. W. C. Rusche\*, J. A. Walker, and M. G. Gonda, Department of Animal Science, South Dakota State University, Brookings

#### POSTERS (Non-Competition):

Floor Space Allocation Effects on Heavy-Weight Finishing Pigs (over One Hundred Thirty-Five Kilograms). *R. Samuel\*, B. C. Thaler, C. L. Levesque, and J. Darrington, South Dakota State University, Brookings* 

Use of Formative Assessment Methods to Improve Student Perception and Performance in an Introductory Animal Science Laboratory Course. A. N. Abrams\*, R. A. Nold, and M. G. Gonda, Department of Animal Science, South Dakota State University, Brookings

Nutrient Digestibility of Heat- or Heat plus Citric Acid–Pretreated Distiller's Dried Grains with Solubles for Pigs. *C. Zangaro*\* and *T. A. Woyengo*, *South Dakota State University, Brookings* 

Feeding an Essential Oils Blend to Neonatal Holstein Dairy Calves Increased Rumen Propionate Concentration and Resulted in Higher Representation of a Previously Uncharacterized Strain of *Prevotella ruminicola*. **P. Poudel**<sup>\*1</sup>, K. Froehlich<sup>2</sup>, D. P. Casper<sup>3</sup>, and **B. St-Pierre**<sup>4</sup>, <sup>1</sup>Department of Animal Science, South Dakota State University, Brookings, <sup>2</sup>Lincoln University, Lincoln, New Zealand, <sup>3</sup>Furst-McNess Company, Freeport, IL, <sup>4</sup>South Dakota State University, Brookings

Metagenomic Analysis of an Uncharacterized Rumen Bacterial Species Associated with Feeding Diets with Higher Lipid Content. *C. Hron\*1, D. W. Brake2, E. J. Blom1, and B. St-Pierre1, 1South Dakota State University, Brookings, 2Department of Animal Science, South Dakota State University, Brookings* 

Identification and Metabolic Characterization of a Novel Strain of *Prevotella ruminicola* Using Starch as Substrate in Anaerobic Batch Cultures. *V. Bandarupalli\** and *B. St-Pierre*, South Dakota State University, Brookings

Comparative Analysis of Bacterial Composition in the Ileum of Weaned Pigs Fed Microbially Enhanced Soybean Meal as a Potential Ingredient Replacement in Conventional Weaning Diets. *J. L. Ortman\*, B. St-Pierre, and C. L. Levesque, South Dakota State University, Brookings* 

Simulating Public Meetings on Controversial Agricultural Issues Using Cross-Departmental Collaboration. *R. A. Nold\*1, S. Mastellar2, and E. Cortus3, 1Department of Animal Science, South Dakota State University, Brookings, 2The Ohio State University Agricultural Technical Institute, Wooster, 3Department of Bioproducts and Biosystems Engineering, University of Minnesota, Saint Paul.* 

The 2018 Academic Quadrathlon team, L to R: Daniel Roker, (Bird island, MN), Shane Mueller (Garretson, SD),



**Broc Mauch**, (Yankton, SD), **Dennisen Nelson** (Lonsdale, MN). The Quadrathlon was held in the Animal Science Complex/Arena and consisted of a lab practical, written exam, oral presentation, and quiz bowl. Teams participated with four students per team. The winning team earned the privilege to represent SDSU in the Regional Contest in Lincoln and Omaha, NE in March in conjunction with the Midwest Section meeting of the American Society of Animal Science. **Dr. Rosie Nold** accompanied the team and assisted

with the Quadrathlon contest.

### Little International 2018



The 95<sup>th</sup> Little International, "Green Chips, Gold Standards", was held March 23-24. Leon Wrage, an extension weed specialist at SDSU for 35 years, was named Honored Agriculturalist and Lisa Smith, Kimball, SD was honored with the Pete Pritchett Memorial Award. Candidates for Ag & Bio Teacher of the year included Brent Owen, **Dr. J. Kyle** 

**Grubbs** and **Dr. Michael Gonda** with **Dr. Gonda** being chosen. An alumni reception was held in the SD Agricultural Heritage Museum

(formerly Livestock Pavilion) Saturday afternoon prior to the evening events. Final showmanship awards were Grand Champion, **Tyler Myers** (Rushsylvania, OH), Reserve Champion, Adam Bierstedt (Pipestone, MN), High Point Upperclassman, Andy Socha (Cocoran, MN), High Point Freshman, Aaron Linke (Woonsocket, SD). Mark March 29-30, 2019 on your calendar for next



year's Little I. Tristin Fliehe, (Tulare,SD) will serve as Manager and **Collin Vander Wal** (Volga, SD) as Assistant Manager.

## Celebration of Achievement

The SDSU Chapter of Gamma Sigma Delta held a Celebration of Achievement and Initiation Ceremony on April 25 in the Volstorff Ballroom, University Student Union. Among those participating in the student poster competition were graduate students **Ron Aldwin Navales**, *The Efficiency of Utilizing Standardized Ileal Digestible Lys and Thr for Whole Body Protein Retention in Pregnant Gilts During Early, Mid and Late Gestation;* and third place winner in the M.S. student poster competition **Jamie Ortman**, *Comparative Analysis of Bacterial Composition in the Ileum of Weaned Pigs Fed Microbially-Enhanced Soybean Meal as a Potential Ingredient Replacement in Conventional Weaning Diets*. Undergraduate

students participating in poster competition were **Andrea Strong**, *Relationship Between Docility and Eye Temperature in Beef Cattle* and **Katelyn Berndt**, *Evaluating and Improving Consumer Perceptions of the Agriculture Industry*. **Warren Rusche** and **Drs. Crystal Levesque**, **Michael Gonda**, **Rosie Nold** were among those judging the poster competition. **Brenda Bjorklund**, pictured right, with Tim Bjorklund and Dr. Alexander Smart, received the 2018 Honorary Service Award. New initiates included Ph.D. graduate student **Christina Fehrman**.



### Annual Bull Sale

The 26th Annual Bull Sale was held April 6 at the Cow Calf Education and Research Facility with 30 bulls in the lineup. Overall, the sale was a successful day with approximately 100 people in attendance. Averages of the sale were as follows: Angus average was \$4,156.25, SimAngus average was \$3,833.33, and the overall average was \$4,017.86. The bulls were sold to buyers from South Dakota, Minnesota, and Wisconsin. **Dr. Cody Wright's** Seedstock Merchandising class was responsible for the preparation and coordination of the sale. Helping with bid numbers are students, pictured L to R: **Cara Finck** (Tripp, SD), **Bridget Baker** (St. Peter, MN), Katie Berndt (Eagle Butte, SD), **Paige Binger** (Redfield, SD), **Clara Moeller** (Kimball, SD). We thank all of the buyers for attending as well as **Kevin VanderWal** and his

crew at the Unit for their efforts leading up to sale day and the Block and Bride Club for helping with the delicious meal.

### Annual Hampshire Sale



The 8<sup>th</sup> annual SDSU Hampshire sale was held on May 2 using an on-line auction format. Sixteen lots were offered this year with the average selling price at \$703; the top selling animal was a fall ewe lamb selling for \$1,700. Several animals were sold to South Dakota breeders; the volume buyer was from Colorado with the purchase of five spring ewe lambs and a spring ram lamb. Other buyers were from Indiana, Missouri, and Kentucky. The SDSU Hampshire flock is the oldest established flock of Hampshire sheep in the U.S. Thanks to **Karolynn Marsan**, SDSU Sheep Unit Manager and the undergraduate students employed at the Sheep Unit for the excellent presentation of the consignment for the on-line auction. Pictured is student worker **Emily Heiberger** (Bridgewater, SD) helping picture a spring ewe lamb sold to an Indiana producer.

# Equine Teaching Facility

Jen Eide, the Equine Facility manager, has relocated her office to the vacated Cow/Calf barn on campus. In addition

to the academic classes offered each year, **the Equine Unit** has hosted many elementary student and FFA groups for field trips at the historic horse barn. Elementary children learn horse safety, how to brush and interact with the new foals. FFA groups look at foal production and care as well as facility setup. April and May were busy months for faculty, staff and students at the Unit hosting the State FFA contest as well as the arrival of a new crop of foals. To date eight have been born with two to go! Pictured right: Indy and Liberty. A horse sale is tentatively being planned



for early fall offering a variety of young stock to the public. Everyone is welcome to stop by and see the foals!

### Research Labs

Laboratory renovations have been ongoing in the Animal Science Complex. Improvements made include new fire sprinkler, electrical, plumbing and HVAC work as well as the



installation of new shelving, cabinetry and counter top workspaces. A door to connect Room 155 with Room 162 was created to allow technicians easier access to equipment in both labs and expand collaborative research opportunities. Renovations have been completed in the Monogastric Lab (Room 155) and the Microbiology/Swine Nutrition Lab (Room 153).



Home of Tradition

### Livestock Judging Team



The SDSU Livestock Judging Team pictured at the National Western Stock Show, front row (L to R): **Jonathan Linke** (Woonsocket, SD), Josh Brown (Rushford, MN), **McKenna Cech** (Glenville, MN), **Amy Beckstrand** (Waldorf, MN), **Shaye Jungwirth** (Hoven, SD). Back row (L to R): **Wyatt Smith**, assistant coach, Adam Eichacker (Salem, SD), Tyler Myers (Rushsylvania, OH), **Spencer Wangen** (Ellendale, MN),

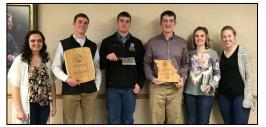
**Lindsey Wolles** (Dell Rapids, SD), Jackson Walsh (DeGraff, MN), **Brady Jensen**, Head Coach. The team competed at the National Western, Sioux Empire, Iowa Beef Expo, San Antonio

Livestock Show, Houston Livestock Show and National Contest. The team witnessed many highlights as they advanced to new levels throughout the spring. Highlights included finishing 6<sup>th</sup> in the Carload contest at the National Western Stock Show and placing in the top ten overall at San Antonio and Iowa Beef Expo!

The team will host two sessions of the SDSU Youth Livestock Judging Camp in the Animal Science Arena. Session 1 is scheduled for June 7-9 with Session 2 scheduled for June 10-12 Information and a registration form can be found at <u>http://www.sdstate.edu/ars/</u> or contact **Brady Jensen**, SDSU Livestock Judging Coach at <u>brady.jensen@sdstate.edu</u>.

### Meat Judging Team

The SDSU Meat Judging Team is pictured at the MAMP contest in March, L to R: Molly Kroeger (Stratford, SD), Josh



Homann (Pipestone, MN), Kyle Laveau (Wrenshall, MN), **Clay Newton** (Echo, MN), **Addison Magill** (Verona, ND), **Logan Ellingson** (Stratford,

SD). Coach **Christina Fehrman** reports the first contest of the spring season was the National Western in Denver, CO. The team placed 7th. The team placed 5th in beef grading, 6th in specifications, 6th in overall beef, 7th in pork judging, and 7th in placings. Individually,



Josh Homann was 8th in total placings, Molly Kroeger was 7th in Beef grading, and **Clay Newton** was 9th in pork judging. We had a great showing at the 40th Iowa State Intercollegiate Meat Judging Contest. The team was 4th in specs, 2nd in grading, 5th in beef, 6th in lamb, 1st in boneless ham, 2nd in processed meats, and 3rd overall. Josh Homann was 5th in beef grading, **Clay Newton** was 3rd in beef grading. Molly Kroeger was 5th in lamb and 10th overall individual. We had a great time in this unique contest that included ribbed pork and lamb carcasses, a keep/cull turkey class, and processed meats. We wrapped up the spring season at the Missouri Association of Meat Processors (MAMP) contest hosted in Columbia, MO. The team placed 1st in specs, 2nd in questions, and 4th overall. Kyle Laveau was 1st in specs, 3rd in questions (tied for 1st), 3rd overall (one point behind first place). Josh Homann was 4th in specs (tied for 2nd). We will begin the fall season at the Hormel National Barrow Show contest in Austin, MN in early September.

### Rodeo Team

The rodeo team started practices on February 19th and plan to finish the season May 20th after the last two rodeos of



the season were postponed due to an EHV-1 outbreak in the Great Plains college region. Due to the late winter weather, the team was able to practice outside for only three days. The fast melting of the heavy snow sent a river of water through the boarding stables for a week, which made for a fast paced and time consuming practice schedule. Through it all, the men's team is leading the region with 2,856 points; only 36 points ahead of Mid-Plains Community College. The women's team is comfortably in second place with 2,654 points and 1,564 points ahead of third place Mid- Plains Community College. Black Hills State women

lead the region with 3,890 points. The top two teams in the region will qualify for the College National Finals Rodeo in Casper, Wyoming, June 10-17<sup>th</sup>. Pictured is the grand entry at the Jackrabbit Stampede with this year's attendance totaling 3,720 in three performances.

### Stethoscope & Scholarship Ceremony

Twelve Animal Science students were among those honored at the South Dakota Veterinary Medical Association and



SDSU Veterinary and Biomedical Sciences Department Stethoscope and Scholarship Ceremony for SDSU Pre-Veterinary students accepted to veterinary schools. The ceremony was held April 27, 2018. Pictured back row, L to R: **Broc Mauch** (Yankton, SD) Iowa State University; **Samantha Wagner** (Sun Prairie, WI) University of Wisconsin; **Boaz Swift** (Burke, SD) Iowa State University; **Brok Miller** (Hauska, MN) Iowa State University; **Tyler Pieper** (Davis, IL) University of Illinois; **Holly Krueger** (Arlington, NE) University of Nebraska and

Iowa State University; **Logan Harris** (Jasper, MN) Ross University; **Alyssa Parker** (Montevideo, MN) Iowa State University; **Megan Tuschen** (Sioux Falls, SD) Iowa State University. Front row: Audrey Souza (Milbank, SD) Iowa State University; Megan Garms (Lake Park, IA) Iowa State University; **Laura Pelzel** (Sleepy Eye, MN) Iowa State University; Lauren Chirnside (Lees Summit, MO) Iowa State University; **Sidney Bierman** (Aberdeen, SD) Iowa State University; **Jordan Coon** (Brookings, SD) Iowa State University.

### Graduation Recognition Event

Sixty-one undergraduate graduation candidates (spring, summer and December), and their families were invited to attend a recognition event in the Animal Science Complex on Friday, May 4 beginning with tours of classrooms and laboratory areas. Vans were available to transport those families interested in the livestock units. A presentation highlighting our graduates ran continuously in the lobby where appetizers were available. **Dr. Joe Cassady** provided an official welcome, presented the students and invited them to introduce themselves and their family as well indicate their future plans.

<u>Medallion Ceremony and Graduation</u>: The Honors Medallion Ceremony on Friday before commencement recognized students for completion of Honors College requirements. Graduates **Brianna Buseman, Hattie Cramer, Broc Mauch, and Samantha Wagner** proudly wore their medallions during commencement.

### Animal Science Spring 2018 Graduation Candidates

Emily Andersen Paige Anderson Alexís Bakker Andrew Berg Sídney Bíerman Cassie Binger Paíge Bínger Austin Bower Grant Brass Bríanna Buseman Alaine Buysse Jordyn Clark Tyler Clayton Jordan Coon Hattie Cramer Jaydín Ellenbecker James Ellsworth Annaliese Favorite Cara Fínck Paíge Gravenhof Danielle Groeneweg Erín Gubbels Catelyn Hall Laura Hauser Raela Hínes Lydía Híte Jessíca Jasper Kyler Johnson Sterling Kappes Hayden Kerkaert Holly Krueger

Centerville, SD Jackson, MN Renville, MN Pipestone, MN Aberdeen, SD Tulare, SD Redfield, SD Vivian, SD Rochester, MN Canístota, SD Ghent, MN Brookings, SD Lakevílle, MN Brookings, SD Camp Crook, SD Beaver Creek, MN Ft Thompson, SD Eagan, MN Trípp, SD Roundup, MT Hawarden, IA Laurel, NE Neligh, NE Prínsburg, MN Granada, MN Gracey, KY Edgerton, MN Baltic, SD Aberdeen, SD Pipestone, MN Arlington, NE

Rebecca Leddy Christian Lewis Brigit Lozinski Broc Mauch Matthew Metzger Brok Miller Lane Myer Allyssa Parker Laura Pelzel Jace Philipsen Tyler Pieper Carter Pinske Jayd Roberts Tucker Roeker Brooke Rogelstad Kendrah Schafer Bradie Schmidt Nícole Seídel Andrea Severtson Dathan Smerchek Míkayla Sousa Joshua Stangeland Boaz Swift Bailey Thompson Megan Tuschen Ashley Waagen Joshua Wagenaar Samantha Wagner María Wríght Morgan Zaske

Twin Brooks, SD Frankfort, SD Taunton, MN Yankton, SD Larchwood, IA Saint James, MN Frederick, SD Montevídeo, MN Sleepy Eye, MN New Underwood, SD Davís, IL Plato, MN Winside, NE Janesvílle, MN Fergus Falls, MN Goodhue, MN Arlington, NE Battle Lake, MN Kenneth, MN Rosholt, WI Milbank, SD Jasper, MN Burke, SD Elkton, SD Síoux Falls, SD Wolsey, SD Ocheyedan, IA Sun Praírie, WI Volga, SD Spicer, MN

### Animal Science Graduate Students



Doctor of Philosophy in Animal Science, emphasis in Meat Science: **Dr. Megan Webb** (Burlington, WV)



Master of Science in Swine Nutrition: Ron Navales (LosBanos, Philippines),

Jamie Ortman (New Palestine, IN), Casey Zangaro (Fairview, KS)



Master of Science in Ruminant Nutrition: Grady Ruble (Albert Lea, MN), Emily Petzel (Balsam Lake, WI), Alejandro Casella (Santa Rosa, Argentina) Emily Rosenthal (El Cajon, CA), Sarah Mayes Gdantz (Minneapolis, MN)

### 2018 Australia Ag Travel Class



**Drs. Julie Walker** and **Ben St-Pierre** and 19 students from SDSU are on an ag study abroad class to Australia May 11--26. Read about their experiences on their travel blog at <u>https://2018sdsuaustralia.blogspot.com/</u>

### Travel Notes

Dr. Ken Olson attended the Beef Bottom Line Improvement



Summit in Miles City, MT National Cattlemen's January 10-11. He presented a paper titled *Environemt* and Management – Adapting to Environment

While Making Genetic Progress. **Dr. Olson** was an invited speaker at the American Forage and Grasslands Council held January 15-16 in Louisville, KY. Dr. Olson spoke on Nutrient Requirements of Beef Cattle.

Dr. Ben St-Pierre attended the National Bison Association



Winter Conference to meet producers and explore bison research. The conference was held in Denver, CO on January 17-20.

Stacy Hadrick and Adele Hardy

accompanied 18 beefSD participants on an East Coast trip January 21-27. **Stacy Hadrick** and **Robin Sanderson** participated



in another trip March 20-27 with 16 beefSD participants to the East Coast. Both trips included stops in Washington, DC, Philidelphia and New York. The trips were an opportunity for begining beef producers to learn more about today's consumers needs.

"Like" us on Facebook at:

https://www.facebook.com/pages/Animal-Science-Department-South-Dakota-State-University/259477894091902 Submitted by Carol Kleinjan, Editor **Dr. George Perry** attended the 2018 Montana Veterinary Summit in Bozeman, MT on January 24-25 and presented information from data on the impact of diet changes on fetal development and programming during the time of AI.

The 2018 Cattle industry Convention and NCBA Trade Show, held in Phoenix, AZ January 31-February 3, was attended by **Drs. Joe Cassady** and **Amanda Blair** as well **Heidi Carroll, Warren Rusche**, and Ph.D. student **Megan Webb. Heidi Carroll** attended sessions as the South Dakota Beef Quality Assurance (BQA) coordinator.

Plains Nutrition Council Spring Conference was held in San Antonio, TX on April 5-6. **Warren Rusche** attended while **Dr. Derek Brake** judged graduate student poster and oral presentations at the conference. Two SDSU Ph.D. students presented posters: **Ethan Blom**, *Evaluation of Hay and Silage* 



*in Receiving Diets of Newly Weaned Calves Over Two Years;* **Wesley Gentry,** *Weaning Performance* 

and Carcass Characteristics of Steers Implanted During the Suckling Phase

with a Combination of Estradiol Benzoate and Trenbolone Acetate.

