



• Teaching • Research • Extension • Departmental Activities

CALS/MAFES FACULTY AND STAFF SPRING MEETING on March 28, 2017

ADS Faculty Members receive Excellence in Teaching Awards

Dr. Jamie Larson received the MSU College of Agriculture and Life Sciences Undergraduate Teaching Award in the Upper Division from Dr. George Hopper



Dr. Caleb Lemley received the MSU College of Agriculture and Life Sciences New Faculty Teaching Award from Dr. George Hopper





THE DEPARTMENT OF ANIMAL AND
DAIRY SCIENCES AT
MISSISSIPPI STATE UNIVERSITY

cordially invite you to attend the

2017 ANNUAL AWARDS BANQUET

Monday April 24, 2017

Hors d'oeuvres and live music beginning at 6:30

Program beginning at 7:00

Desserts and music following

East Building B, MSU campus



Please RSVP by April 17th

662-325-2802 or J.Larson@msstate.edu

 **CRAWLIN' CALEB'S
BLUES REVUE**

Upcoming Extension Events

Beef Extension – Dr. Brandi Karisch Cobie Rutherford



- **Beef Cattle Boot Camp** on **April 21, 2017** in Starkville, MS
- **MSU Beef Unit Field Day** on **April 29, 2017** in Starkville, MS

Equine Events – Dr. Clay Cavinder



- **Cow Horse and Ranch Handling Clinic**—prepare for competing in 2 new classes at the 2017 State 4H Show. \$30 fee, Lunch is provided.
 - **May 13, 2017**; 9 am - 3 pm; Forrest Co. Multipurpose Center, Hattiesburg, MS
- **Management 101: Ranch Horse Series**-Tues. 6-9 pm in Verona, **April 11-May 16**
- For more info, contact Dr. Cavinder at clay.cavinder@msstate.edu

4-H Events – Dr. Dean Jousan



- **State 40H Livestock Judging Contest**, MSU Horsepark, Starkville, date TBD

Dairy Events – Dr. Amanda Stone



- **Bearden Dairy Research Center Open House**: May 20, 2017

Research Presentations at ADS Spring 2017 Academic Insight

Many thanks to Ms. Jessica Graves for leading the efforts and to the ADS faculty and students for helping out in this semester's Academic Insight.

On Saturday February 4, 2016, together with the postdoctoral research associate Dr. Erika Menezes, graduate students Naseer Kutchy, Muhammet Rasit Ugur and Md Shamimul Hasan, and undergraduate student Peyton Haynes, we have had the opportunity to present research to the visiting students and their guests on the second floor of Ballew Hall.

The presentations included posters from the ADS faculty members highlighting research from their laboratories, display sections focusing on preserved organs and fetuses, bones, digestive tract, and microanatomy and cell biology, as well as a slide show about our Department and programs, and research.

Following their lunch, many of the prospective students and their companies visited the research displays, actively engaged with the presenters, and were empowered with the knowledge in animal and dairy sciences.



Peyton Haynes is discussing the value of undergraduate research.



Md Shamimul Hasan is demonstrating comparative anatomy and physiology of the digestive tracts.



Naseer Kutchy is discussing mammalian development and systems



Dr. Erika Menezes is explaining the fascinating biology of the bones.



Muhammet Rasit Ugur is demonstrating molecular and cellular morphology and function.

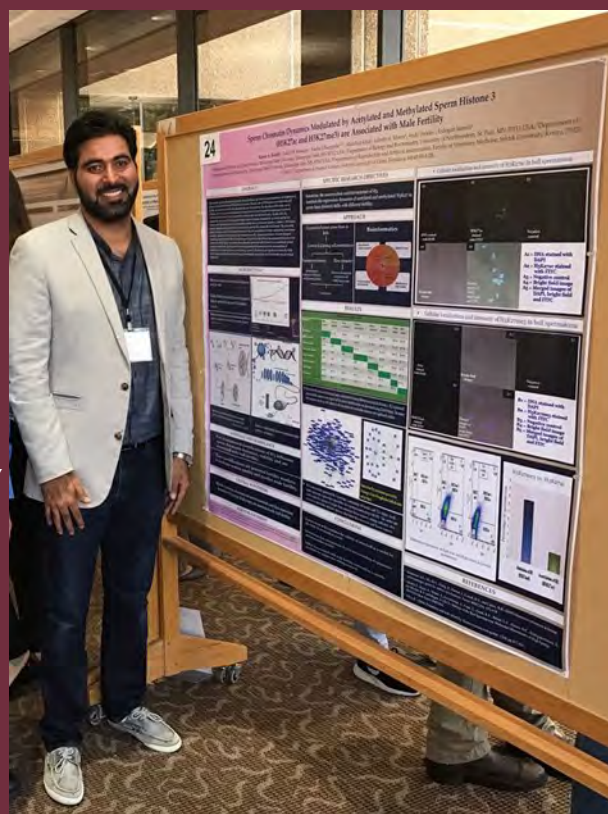
Kutchy presents research at the Triangle Consortium for Reproductive Biology (TCRB) conference

Naseer A. Kutchy, a Ph.D. candidate in the Department of Animal and Dairy Sciences presented his poster “*Sperm Chromatin Dynamics Modulated by Acetylated and Methylated Sperm Histone 3 (H3K27ac and H3K27me3) are Associated with Male Fertility*” at the TCRB in Research Triangle, North Carolina on Saturday February 25, 2017.

The goals of TCRB are to promote basic biomedical research on diseases that affect human reproductive system and to educate public about basic reproductive biology. TCRB is funded in part by Campion fund of the Phyllis and Mark Leppert foundation for fertility research for sponsoring trainees. The conference took place in the National Institute of Environmental Health Sciences (NIEHS).

Focus of this year’s conference included the current findings in reproductive diseases, reproductive biotechnology, female fertility, male infertility and role of transcription factors in spermiogenesis (<https://www.med.unc.edu/tcrb>).

Naseer is pursuing his dissertation research “*Sperm Genetic and Epigenetic Mechanisms Regulating Bull Fertility*” with guidance from his graduate advisor and mentor, Dr. Memili.



Provost Scholars Visit Department of Animal and Dairy Sciences

Mississippi State University's Provost Scholars explored frontiers in science during their visit to the Department of Animal and Dairy Sciences on Tuesday, February 28, 2017.

Led by their advisor Prof. Seth Oppenheimer, the Provost Scholars are among the brightest minds at MSU. The Provost Scholarship is a research centered scholarship. Now in its second year, this program requires its Scholars to be involved in faculty sponsored undergraduate research by the end of their second year and continue research culminating in an honors research thesis.

Information about the Program is available through www.honors.msstate.edu/scholars.



Coordinated by Dr. Erdogan Memili, the visit started at 5:00 PM with the poster presentations by ADS graduate students [Megan Owen (from Dr. Caleb Lemley's research group), Zhongyue Yang and Md Shamimul Hasan (from Dr. Shengfa Liao's research group), Naseer Kutchy and Muhammet Rasit Ugur (from Dr. Erdogan Memili's research group)] followed by research presentations in laboratories by Dr. Thu Dinh, Naseer Kutchy and Md Shammul Hasan. The concluding program was a series of short research presentations by Drs. Dinh and Memili, Megan Coleson, and Ms. Abbey Schnedler (an undergraduate research scholar from Dr. Dinh's group).

Southeastern Livestock Exposition in Montgomery, AL



By Brett Crow



Champion Team Overall

Champion Team—Sheep & Goat Division

Champion Team—Hog Division

Reserve Champion Team—Cattle Division

Reserve Champion Team—Oral Reasons

Individual Results

Kirsten Midkiff-High Individual Overall, 1st in Hogs, 1st in Oral Reasons, 2nd in Cattle, 6th in Sheep & Goats

Emily Vowell-4th Overall, 4th in Hogs, 5th in Oral Reasons, 6th in Cattle

Alex Pittman-10th Overall, 7th in Cattle

Tate Powell-4th in Sheep & Goats, 1 point outside top ten overall

Wyatt Haynes-2nd in Sheep & Goats

Ashley Ivy-8th in Hogs

Houston Livestock Show

By Brett Crow



The contest was host to 26 universities and 210 individuals representing those schools. The MSU team had its strongest day in the Swine division ranking 12th with team member, Kirsten Midkiff, just 1 point shy of top-ten recognition in that division.



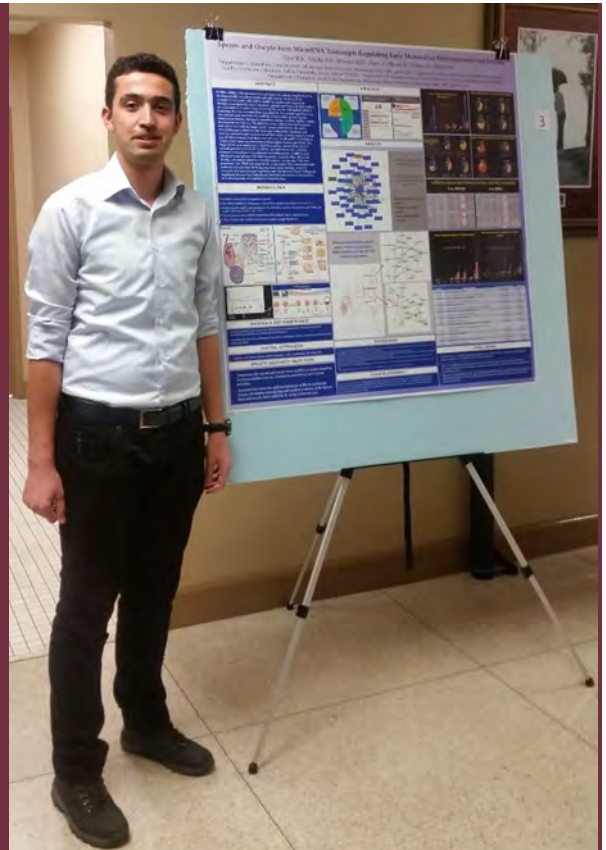
MSU team with one of our alumni, Brandon Cutrer, taken after a great workout at V8 Ranch leading up to our contest in Houston

Muhammet Rasit Ugur presents research at the Graduate Student Research Symposium

Muhammet Rasit Ugur, an MS student in the Department of Animal and Dairy Sciences presented his poster "*Sperm- and Oocyte-born MicroRNA Transcripts Regulating Early Mammalian Embryogenesis and Fertility*" at Mississippi State University's (MSU) Graduate Student Research Symposium organized by the Graduate Student Association (GSA) at MSU's main campus on Saturday March 25, 2017.

Information about the GSA and its goals in catalyzing success in student development and advancement of science is available through <http://www.grad.msstate.edu/professional-development/students/graduate-student-association/>.

Using systems biology and physiology approaches, Muhammet is pursuing his research aimed at ascertaining paternal and maternal effect genes regulating fertility in livestock, with applications to other mammals, with guidance from his graduate advisor and mentor, Dr. Memili. Muhammet is the recipient of a competitive graduate fellowship from the Turkish Ministry of National Education.



Congratulations!



Dr. Erdogan Memili and Dr. Thu Dinh

On your award of a competitive research grant (\$150,000) from USDA's National Institute of Food and Agriculture (NIFA). The project is aimed at identifying metabolomic fertility markers in bull sperm and seminal plasma.

Dr. Erdogan Memili receives Service and Leadership Award

Dr. Erdogan Memili was honored with an outstanding leadership and exceptional service award by Starkville Civitan on Monday April 3, 2017.

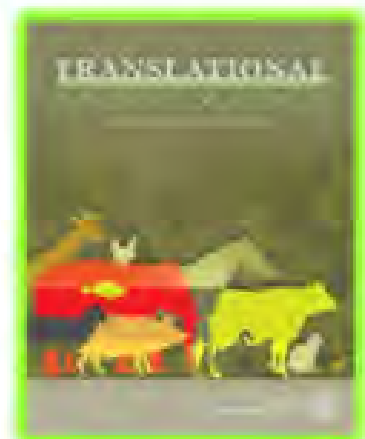
At Starkville Civitan, Dr. Memili has served as the past president and he has been the coordinator of Starkville Civitan's Special Education Grant Program which provides grant support for special education teachers in Starkville area to empower children with developmental disabilities.

Starkville Civitan is a branch of Civitan International (www.civitan.org), a volunteer organization aimed at helping develop nobler citizenship among the members of our society and support research and education of children afflicted with developmental and intellectual disabilities.



Dr. Memili receiving the award from Mr. Richard Johnston, current president of Starkville Civitan

PUBLICATION SEMINAR
**“SURVIVING THE REVIEW
PROCESS: AN EDITOR'S
PERSPECTIVE”**



PRESENTED BY

DR. JAMES SARTIN

EDITOR-IN-CHIEF, JOURNAL OF ANIMAL SCIENCE

EDITOR-IN-CHIEF, TRANSLATIONAL ANIMAL SCIENCE

EDITOR-IN-CHIEF, ANIMAL FRONTIERS

PRESIDENT, WORLD ASSOCIATION FOR ANIMAL PROTECTION

ON THURSDAY, APRIL 20 AT 11:00 AM – 12:00 PM

ROOM L1446 WISE CENTER

CONTACT: DR. SHENGFA LIAO, E-MAIL: S.LIAO@MSSTATE.EDU;

TEL: 662-325-7318

2017 Refereed Publications:

- Jones, Barbara W., **Amanda E. Stone**, Connie L. Wood, Kristen J. McQuerry, Joey D. Clark, Denise L. Ray, and Jeffrey M. Bewley, PAS. Case Study: Characterization of milk yield, lying and rumination behavior, gait, cleanliness, and lesions between 2 different freestall bases. *The Professional Animal Scientist* 33:140–149. <https://doi.org/10.15232/pas.2016-01548>.
- Stone, A. E.**, B. W. Jones, C. A. Becker, and J. M. Bewley. 2017. Influence of breed, milk yield, and temperature-humidity index on dairy cow lying time, neck activity, reticulorumen temperature, and rumination behavior. *Journal of Dairy Sciences*. 100:1–9. <https://doi.org/10.3168/jds.2016-11607>.
- Hodge, Lauren B., **Brian J. Rude**, **Thu N. Dinh**, **Caleb O. Lemley**. Effect of u-3 Fatty Acid Supplementation to Gestating and Lactating Mares: On Milk IgG, Mare and Foal Blood Concentrations of IgG, Insulin and Glucose, Placental Efficiency, and Fatty Acid Composition of Milk and Serum From Mares and Foals. *Journal of Equine Veterinary Science*. 51 (2017) 70–78.
- Littlejohn, B. P., M. C. Roberts, M. N. Bedenbaugh, A. W. Lewis, D. A. Neuendorff, D. G. Riley, J. A. Carroll, **R. C. Vann**, M. Amstalden, R. D. Randel, T. H. Welsh, Jr. (2017). Evaluation of the influence of prenatal transportation stress on GnRH-stimulated luteinizing hormone and testosterone secretion in sexually mature Brahman Bulls. *Journal of Animal Science*, 95, 129-138. www.animalsciencepublications.org/publications/jas.

2017 Book Chapters: