



MISSISSIPPI STATE
UNIVERSITY™

Animal and Dairy
SCIENCE
SCIENCE



VOL. 70 | NOVEMBER 13 | NEWSLETTER

IN THIS ISSUE:

- EQUESTRIAN TEAM SUCCESSFUL PERFORMANCE
- HOLIDAY MEAT SALE
- SUCCESSFUL DAIRY BREAKFAST
 - HORSE SALE
 - TRAIL CLINIC
- BCIA FALL MEETING
- UPCOMING EVENTS & PUBLICATIONS

Equestrian Team Successful Performance



Mississippi State University Equestrian Team added 3 new photos.

October 30 at 1:59pm · 🌐

The equestrian had an outstanding performance this weekend! The western team finished up 3rd overall for both of the competitions, and Mary Claire Cornett was named high point rider overall. The team also earned two more spots to compete at the regional championships!

Individual placings were:

Mary Claire Cornett 1st and 3rd open horsemanship

Mary Claire Cornett 2nd and 3rd reining

Anna Claire Tucker 4th and 4th open horsemanship

Hart Daniels 3rd and 5th open and advanced horsemanship

Tatem Reynolds 5th and 5th novice horsemanship

Madison Eckloff 3rd and 4th int 2 horsemanship

Juliann Scott 5th int 2 horsemanship

Taylor McNair 1st int 2 horsemanship

Savannah Yonge 4th int 2 horsemanship

Ashley Ackerman 5th int 2 horsemanship

Alex Blackburn 2nd and 2nd int 1 horsemanship

Ashley Beyer 6th beginner horsemanship

Joshua Bryant 5th beginner horsemanship

Kaitlyn Laurent 5th beginner horsemanship

Holiday Meat Sale



MISSISSIPPI STATE UNIVERSITY
MEAT CHEMISTRY AND CUISINE
HOLIDAY PACKAGE DEAL

Happy Holidays!
from Meat Chemistry and Cuisine

ONLY \$40

Our Package Includes:

- 5 lbs. Ground Beef
- 6 lbs. Dry-rub Pork Chops
- 3 lbs. Edam Cheese Bratwurst Sausage

We Also Have:

Edam Cheese Bratwurst Sausage: 12 lbs. or more for **\$4/lb.**
Ground Beef Package: 10 lbs. or more **\$2.50/lb.**

PICK UP FROM NOV. 14 TO NOV. 21
PAYMENT: CASH, CHECK, OR PAYPAL
MSMEATCHEMANDCUISINE@GMAIL.COM



Successful Dairy Breakfast on the Farm



Horse Sale

MSU Horse Sale

Bid November 24-26, 2017

Viewing at Horse Unit Open House 11/18 from 9-11 am

Athleticism

Quality

Versatility



Facebook: Mississippi State University Horse Unit
Contact: Ashley Shiffler - (580) 795-4349 - aes779@msstate.edu
Quick, Convenient Bidding At AUCTION.MSUCARES.COM

Bidding begins at 8 am the 24th and closes at 8 pm the 26th

Trail Clinic

Trail Clinic

Saturday, December 2, 2017

Prepare- Practice - Accomplish

49 Equine Arena

2285 Hwy 49 South, Florence, MS

Shawn Hays: AQHA/NSBA Judge

2 sessions: Youth 9am-noon; Adults 1pm-4pm

\$60 per person: 8 spots available for each session

deadline to register & pay is November 20th

There will be a waiting list for each group in case we have cancellations,
but money must be sent in by deadline

for more information contact Katrina Owens 662-746-2453/ katrina.owens@msstate.edu



We are an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Mississippi State University Extension will provide reasonable accommodations to persons with disabilities or special needs. Please contact the Yazoo County office of MSU Extension at 662-746-2453 prior to a program or event to request reasonable accommodation.


MISSISSIPPI STATE
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EXTENSION



Grad Students Having



Some Fun This Halloween

BCIA Fall Meeting



Mississippi State University
Extension Beef



Like This Page · November 3 ·

Thanks Dr. [Josh Maples](#) for speaking on cattle markets at the Mississippi BCIA Fall meeting.



Agricultural Agents Communication Awards

MISSISSIPPI ASSOCIATION OF COUNTY AGRICULTURAL AGENTS COMMUNICATION AWARDS COMMITTEE 2017 ANNUAL REPORT

Mississippi Association of County Agriculture Agents
Communication Awards Committee
2017 Annual Report

There were 54 entries submitted in 13 categories. The MACAA Communication Award Program Winners are listed below.

Communication Award Categories

Audio Recording

1st Gary Bachman
2nd Jason Barrett
3rd Brandi Karisch

Published Photo/Caption

1st Gary Bachman
2nd Rocky Lemus

Computer Generated

1st Brandi Karisch
2nd Brady Self
3rd Ruby Rankin

Program Promotional

1st Jason Barrett
2nd Cobie Rutherford
3rd Brandi Karisch

Personal Column

1st Cobie Rutherford
2nd Pat Drackett
3rd Gary Bachman

Feature Story

1st Pat Drackett
2nd Alex Deason
3rd Jason Barrett

Ind. Newsletter

1st Rocky Lemus
2nd Pat Drackett
3rd Heather Jennings

Team Newsletter

1st Eddie Smith
2nd Cobie Rutherford
3rd Thomas Brewer

Video Recording

1st Gary Bachman
2nd Jason Barrett
3rd Brandi Karisch

Fact Sheet

1st Jason Barrett
2nd Heather Jennings
3rd Brandi Karisch

Publication

1st Rebecca Melanson
2nd Brady Self
3rd David P. Russell

Web Site

1st Craig Hankins
2nd Brandi Karisch
3rd Cobie Rutherford

Learning Module/Notebook

1st Brady Self

Specialist/District Communicators of the Year

Northeast Region: Trent Barnett
Coastal Region: Eddie Smith
Specialist: Jason Barrett

Delta Region: Craig Hankins
Southwest Region: Heather Jennings

State Communicator of the Year: Jason Barrett

Regional Finalist:

Computer Generated Graphic
Published Photo and Caption

Brandi Karisch
Gary Bachman

National Finalist:

Audio Recording

Gary Bachman

Welcome Baby Lemley!



Congratulations to the Lemley family on their newest arrival. Neil Miner Lemley arrived October 31st at 5:44 PM. He weighed 6 lbs 12 oz and was 20.5 inches long.

Upcoming Events

BEEF EXTENSION - DR. BRANDI KARISCH & COBIE RUTHERFORD

- Mississippi State University Artificial Insemination School, October 26-28, Animal and Dairy Sciences Department, Mississippi State, MS
- Grass Fed Beef Conference, Purvis, December 7-8



EQUINE EVENTS - DR. CLAY CAVINDER

- Upcoming programs and publications are online at <http://extension.msstate.edu/agriculture/livestock/equine/upcoming-programs>
- For more info, contact Dr. Cavinder at clay.cavinder@msstate.edu



4-H EVENTS - DR. DEAN JOUSAN

- For publications and upcoming events go to: <http://extension.msstate.edu/4-h>
- Or contact Dr. Dean Jousan at dj230@msstate.edu



DAIRY EVENTS - DR. AMANDA STONE

- Upcoming programs and publications are online at <http://extension.msstate.edu/dairy>
- For more info, contact Dr. Stone at amanda.stone@msstate.edu



2017 Refereed Publications

Kutchy, N.A. , E. S. B. Menezes, A. Chiappetta, W. Tan, R. W. Wills, A. Kaya, E. Topper, A. A. Moura, A. D. Perkins, **E. Memili**. Acetylation and methylation of sperm histone 3 lysine 27 (H3K27ac and H3K27me3) are associated with bull fertility. *Andrologia*. 2017;e12915. <https://doi.org/10.1111/and.12915>.

Durfey, Casey L., **Derris D. Burnett, Shengfa F. Liao, Christy S. Steadman, Mark A. Crenshaw**, Henry J. Clemente, **Scott T. Willard, Peter L. Ryan, Jean M. Feugang**. Nanotechnology-based selection of boar spermatozoa: growth development and health assessments of produced offspring. *Livestock Science*. 205 (2017) 137-142. <http://dx.doi.org/10.1016/j.livsci.2017.09.024>

Liao, Shengfa F., Martin Nyachoti. Using probiotics to improve swine gut health and nutrient utilization. *Animal Nutrition*. (2017) 1-13. <http://dx.doi.org/10.1016/j.aninu.2017.06.007>.

Kutchy, Naseer A., Ana Velho, Erika S. B. Menezes, Marie Jacobsen, Giselle Thibaudeau, Arlindo Moura, Abdullah Kaya, Andy Perkins, and **Erdogan Memili**, Robert W. Wills. Testis specific histone 2B is associated with sperm chromatin dynamics and bull fertility-a pilot study. *Journal of Reproductive Biology and Endocrinology*. (2017) 15:59. DOI 10.1186/s12958-017-0274-1.

Lemley, Caleb O. Investigating reproductive organ blood flow and blood perfusion to ensure healthy offspring. *Animal Frontiers*. doi:10.2527/af.2017-0124.

Keomanivong, F. E., L. E. Camacho, **C. O. Lemley**, E. A. Kuemper, R. D. Yunusova, P. P. Borowicz, J. D. Kirsch, K. A. Vonnahme, J. S. Caton and K. C. Swanson. Effects of realimentation after nutrient restriction during mid- to late gestation on pancreatic digestive enzymes, serum insulin and glucose levels, and insulin-containing cell cluster morphology. *Journal of Animal Physiology and Animal Nutrition*. 101 (2017) 589–604. DOI: 10.1111/jpn.12480.

Menezes, E.B., R.V. de Oliveira, M.F. van Tilburg, E.A. Barbosa, N.V. Nascimento, A.L.M.C.S. Velho, F.B. Moreno, R.A. Moreira, A.C.O. Monteiro-Moreira, G.M.C. Carvalho, A.F. Ramos, **E. Memili**, A.A. Moura. Proteomic analysis of seminal plasma from locally-adapted “Curraleiro Pé-Duro bulls” (*Bos taurus*): identifying biomarkers involved in sperm physiology in endangered animals for conservation of biodiversity. *Animal Reproduction Science*. <http://dx.doi.org/10.1016/j.anireprosci.2017.05.014>.

Cavinder, C. A., A. Sear, R. Valdez, L. White. Utilization of Social Media as a Marketing Tool for Equine Businesses: An Exploratory Study. *North American Colleges and Teachers of Agriculture Journal*. June 2017, Vol 61(2).

Gastal, G. D. A., A. Hamilton, B. G. Alves, S. G. S. de Tarso, **J. M. Feugang**, G. A. Apgar, C. K. Nielsen, E. L. Gastal, W. J. Banz. Ovarian features in white-tailed deer (*Odocoileus virginianus*) fawns and does. *PLOS ONE*. 12 (5):30177357. <https://doi.org/10.1371/journal.pone.0177357>.

2017 Refereed Publications:

Aguiar, F.L.N., G.D.A. Gastal, G.M. Ishak, M.O. Gastal, D.I.A. Teixeira, J.R. Figueiredo, E.L. Gastal, **J.M. Feugang**. Effects of FSH addition to an enriched medium containing insulin and EGF after long-term culture on functionality of equine ovarian biopsy tissue. *Theriogenology* 99 (2017) 124-133.

Feugang, Jean M. Novel agents for sperm purification, sorting and imaging. *Molecular Reproduction Development*. 2017. 9999:1-10. DOI: 10.1002/mrd.22831.

Borchers, M. R., Y. M. Chang, K. L. Proudfoot, B. A. Wadsworth, **A. E. Stone**, and J. M. Bewley. Machine-learning-based calving prediction from activity, lying, and ruminating behaviors in dairy cattle. *Journal of Dairy Sciences*, Vol.100:1-11. 2017. <https://doi.org/10.3168/jds.2016-11526>.

Lemley, C. O. and K. A. Vonnahme. PHYSIOLOGY AND ENDOCRINOLOGY SYMPOSIUM: Alterations in uteroplacental hemodynamics during melatonin supplementation in sheep and cattle. *Journal of Animal Science* 2017.95:2211-2221. doi:10.2527/jas2016.1151.

Gastal, G.D.A., F.L.N. Aguiar, B.G. Alves, K.A. Alves, S.G.S. de Tarso, G.M. Ishak, **C.A. Cavinder**, **J.M. Feugang**, E.L. Gastal. Equine ovarian tissue viability after cryopreservation and in vitro Culture. *Theriogenology* 97 (2017) 139-147.

Maki, C R, S Allen, M Wang, SH Ward, **BJ Rude**, HR Bailey, RB Harvey and TD Phillips. Calcium Montmorillonite Clay for the Reduction of Aflatoxin Residues in Milk and Dairy Products. *Journal of Dairy and Veterinary Sciences*. 2017; 2*3): 555587.

Regmi, N., T. Wang, **M. A. Crenshaw**, **B. J. Rude**, **S. F. Liao**. Effects of dietary lysine levels on the concentrations of selected nutrient metabolites in blood plasma of late-stage finishing pigs. *Journal of Animal Physiology and Animal Nutrition*. 2017; 1-7. DOI: 10.1111/jpn.12714.

Wang, Taiji, **Jean M. Feugang**, **Mark A. Crenshaw**, Naresh Regmi, **John R. Blanton Jr.** and **Shengfa F. Liao**. A Systems Biology Approach Using Transcriptomic Data Reveals Genes and Pathways in Porcine Skeletal Muscle Affected by Dietary Lysine. *International Journal of Molecular Sciences* (2017) 18, 885.

Cain, Amanda J., **Caleb O. Lemley**, F. Kevin Walters, David L. Christiansen, E. Heath King, Richard M. Hopper. Pre-breeding beef heifer management and season affect mid to late gestation uterine artery hemodynamics. *Theriogenology* 87 (2017) 9–15.

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.

