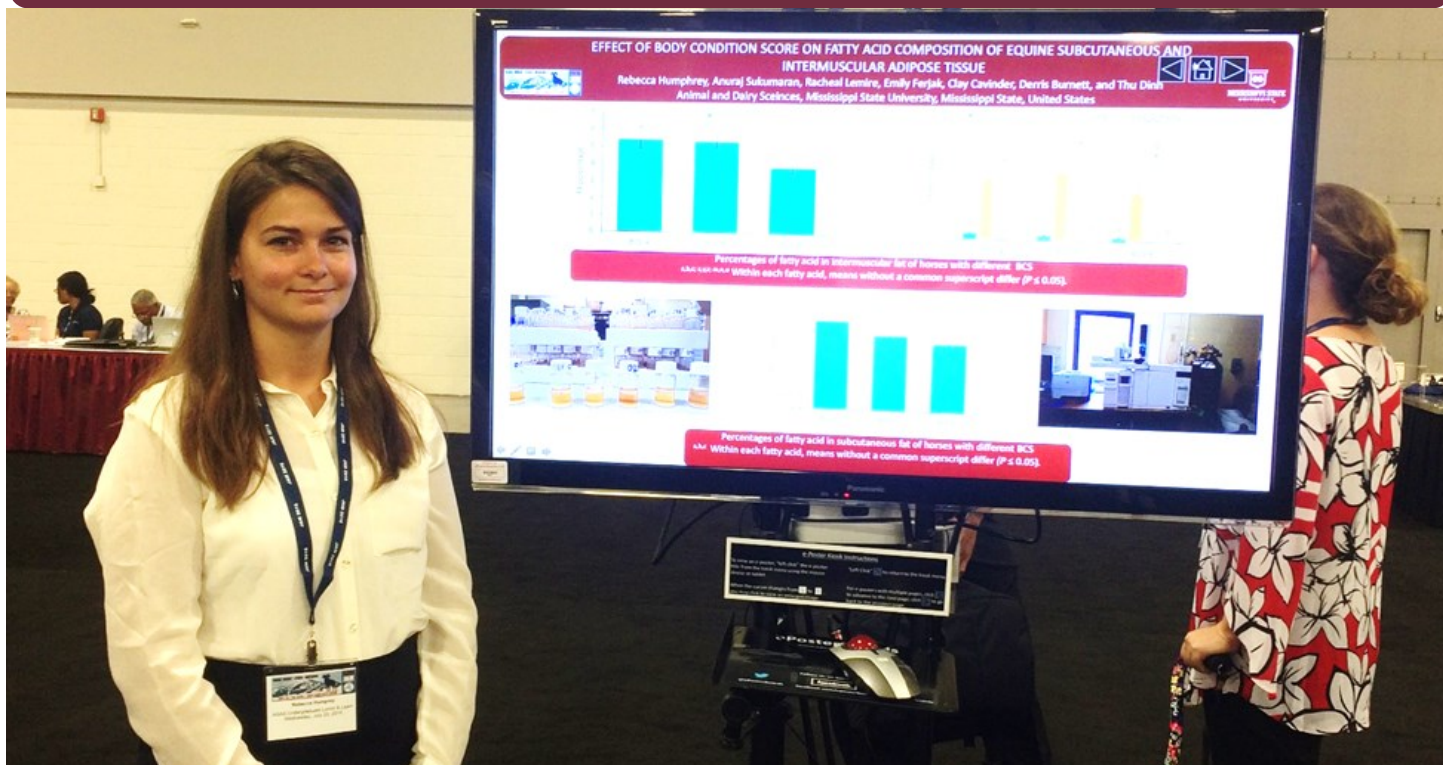
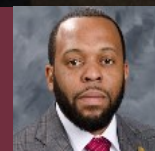


- Teaching
- Research
- Extension
- Departmental Activities

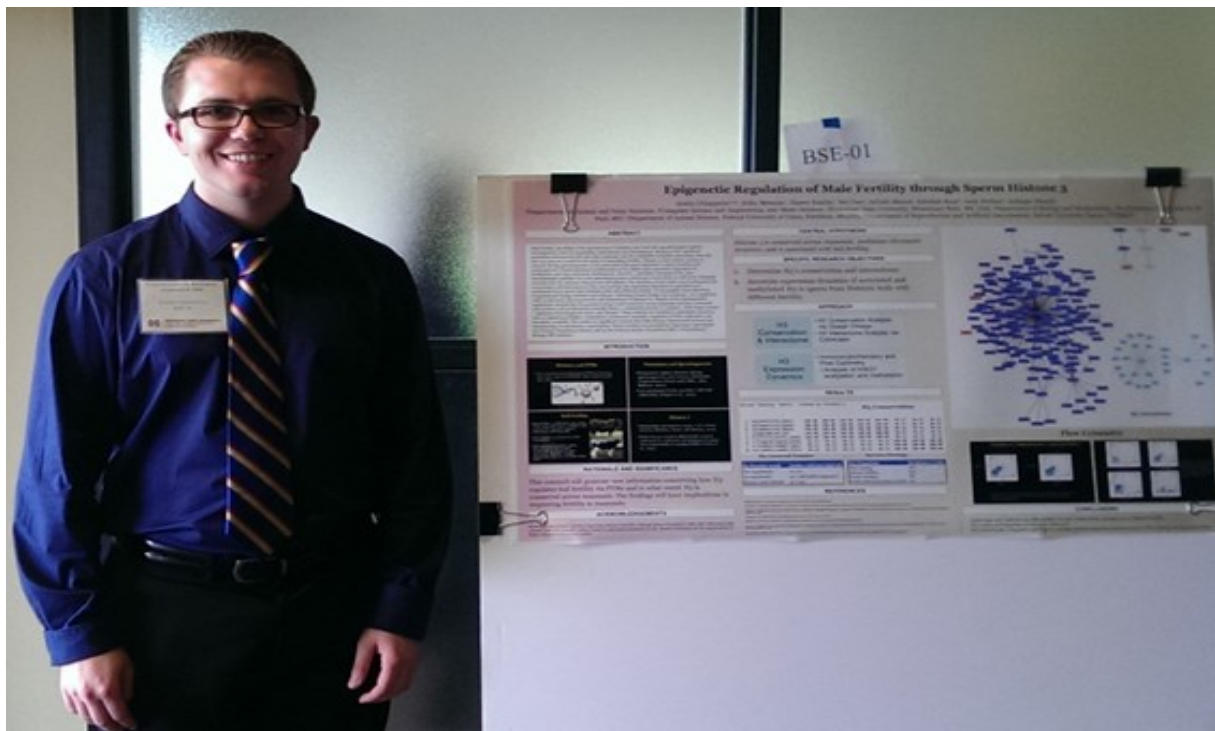


## Undergraduate Scientist in the Spotlight

Submitted by Dr. Derris Burnett



Ms. Rebecca Humphrey is a Junior majoring in Animal and Dairy Sciences and has recently undertaken several research projects with the Meat Science and Muscle Biology research group under the guidance of **Dr. Derris Burnett** and **Dr. Thu Dinh**. Rebecca started as a volunteer in our lab in January 2016 and has since co-authored 2 peer reviewed abstracts and prepared 2 posters for presentation at the 2016 Joint Annual Meetings for the American Society of Animal Science in Salt Lake City, Utah. She has become very familiar with the analytical techniques used in our lab and is a sponge for new knowledge and information. Rebecca has also been awarded an Undergraduate Research Scholars Program grant in the amount of \$5000 and will continue to work with the Meat Science and Muscle Biology group through the next academic year on a range of projects. With these accomplishments so early in her academic career, Rebecca has demonstrated a passion for science and a commitment to excellence that will propel her to success upon graduation. We are proud to have Rebecca on our team as an Undergraduate Researcher and look forward to watching her career continue to blossom as an Animal Scientist!



## MSU Summer Undergraduate Research Symposium

Submitted by Dr. Erdogan Memili

Austin Chiappetta, a junior biology and biochemistry double-major at the University of Northwestern in St. Paul, MN, has completed research in **Dr. Memili's** laboratory at the Department of Animal and Dairy Sciences (ADS). Austin presented his poster "Epigenetic Regulation of Male Fertility through Sperm H3" at the Summer Undergraduate Research Symposium at Mississippi State University on Friday July 29, 2016. His research and fellowship were funded by the National Science Foundation's Research Experiences for Undergraduates Program on Computational Biology directed by Dr. Andy Perkins of MSU's Department of Computer Science and Engineering (CSE). Austin's research was a collaboration between ADS and CSE and he plans to present his findings to his peers in the classroom at his home institution and at an international scientific conference in the United States.



### Who's on Twitter?

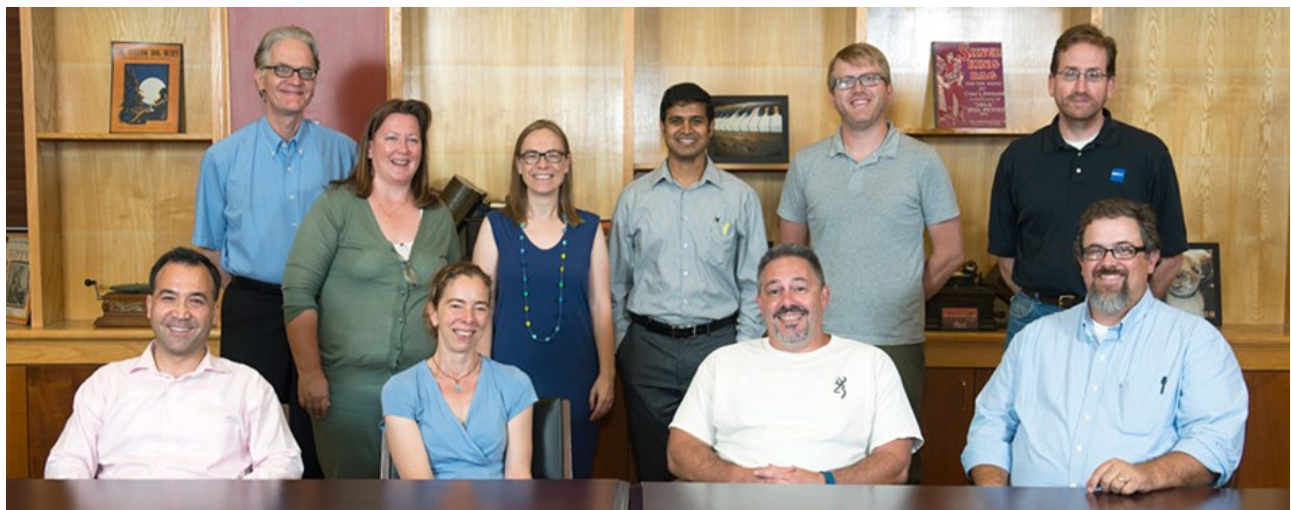
Dr. Gary Jackson @MSUextDirector \* MSU CALS/MAFES @MSU\_AG

Richard Swann @rswann24 \* FARMtastic @FARMtastic\_MS \* MSU Extension @MSUExtService

Kipp Brown @BrownKipp \* Maroon & Write @MSUQEP \* Brandi Bourg Karisch @BrandiKarisch

Julie White @MSFarmMom \* Cobie Rutherford @CobieRutherford \* John Blanton @Jrblantonjr





Eleven MSU faculty members are new graduates of a summer program designed to help them better incorporate writing strategies into class assignments. They include (seated, l-r) Erdoğan Memili, Kristin Boyce, Jarrod Fogarty and Charles Fulford (standing, l-r) James Sobaskie, Leslie Baker, Kasia Gallo, Veera Gnanaswar Gude, Brandon Barton and Mike Duff. Not pictured is James Dunne. (Photo by Megan Bean)

## MSU's Maroon Institute for Writing Excellence announces 2016 graduates



Submitted by Dr. Erdogan Memili

STARKVILLE, Miss.—Eleven Mississippi State faculty members are new graduates of the university's Maroon Institute for Writing Excellence program.

Now in its fourth year, the three-week intensive institute recently trained teachers from nearly a dozen university departments to modify course syllabi to incorporate more writing-to-learn strategies into class assignments.

The professional development program is part of "Maroon and Write," which is the university's quality enhancement plan—QEP, for short—to improve undergraduate writing and learning skills across all colleges, curricula and class levels. The QEP is required to maintain accreditation with the Southern Association of Colleges and Schools.

As part of the 30-plus hour workshop held during May, participants read a variety of theory-related literature selections and engaged in activities such as journaling, free-writing, peer-evaluation and reflective essay development. In coming semesters, they will incorporate many of the activities into their respective courses.

In addition to teaching one QEP course that incorporates writing-to-learn techniques and a formal writing component, MIWE graduates will continue interacting with the Maroon and Write QEP staff throughout the school year.

Learn more about MIWE and Maroon and Write QEP at [www.qep.msstate.edu](http://www.qep.msstate.edu), [www.facebook.com/QEPMSU](https://www.facebook.com/QEPMSU) and [www.twitter.com/MSUQEP](https://www.twitter.com/MSUQEP).

# Mississippi State Summer Horsemanship Clinics



Submitted by Dr. Clay Cavinder

To prepare MS 4-Her's for the Southern Regionals, two clinics were held in Starkville and Canton, both on July 18-19. The first photo is from the Starkville clinic with 11 youth riders participating. Clinicians were ADS students, Jillian Hatcher and Hannah Miller. The second photo is from the Canton clinic with 17 youth riders participating. The Clinicians were ADS students, Samantha Miller and Ashley Palmer.



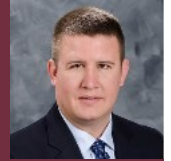
**Starkville Summer Horsemanship Clinic**



**Canton Summer Horsemanship Clinic**



# Homeplace Producers Feeder Calf Board Sale



Submitted by Cobie Rutherford

On August 1st, **Dr. Brandi Karisch**, **Cobie Rutherford**, **Dr. John Blanton** and **Liz Caldwell** attended calf sale in Hattiesburg, MS. In attendance were nearly 40 producers, extension agents, and spectators. Videos are posted on Facebook at <https://www.facebook.com/MSStateExtBeef/>

 **Mississippi State University Extension Beef** was live.  
August 1 at 8:57pm · 🌐

Live at the board sale



 **Mississippi State University Extension Beef**  
August 5 at 8:58am · 🌐

This morning at the Deep South Stocker Conference Dr. Ron Gill is demonstrating cattle handling. Some great points but this one really hits home "Cattle can only think one thought at a time, and we have to set them up to be successful."



# Deep South Stocker Conference



Submitted by Dr. Cobie Rutherford

The 2016 Deep South Stocker Conference was held on August 3rd and 4th in Carrollton, Georgia. Representing the Animal and Dairy Sciences Department was **Dr. Brandi Karisch**, **Cobie Rutherford**, **Tucker Wagner**, and **Liz Caldwell**. Hosted by the University of Georgia, the conference offered participants new knowledge on stocker production economics, managing stocker health, Veterinary Feed Directive usage, and forages – specifically summer annuals. Attendees also heard from acclaimed cattle handling expert, Dr. Ron Gill from Texas A&M. The conference wrapped-up with a tour of an order buying operation in Georgia.



## Conference Speaker in Tours, France



Submitted by Dr. Erdogan Memili

As an invited key note speaker, Dr. **Erdogan Memili** presented “Sperm macromolecules associated with bull fertility” at the 10th Biannual Conference of Association for Applied Animal Andrology (AAAA) in Tours, France, between June 24 and 26. **Dr. Memili** was funded through conference support by AAAA and the Society for the Study of Reproduction (SSR). Although Dr. Memili’s talk was last on the agenda for the day, it was well attended. This is a testament to the interest in the quality research conducted in our Department.

Mississippi State University Animal & Dairy Sciences

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- ADS Student Summer Internship Updates
- Study Abroad
- Fun with Food Summer Camp

## 2016 Refereed Publications:

- Lamb, G. C., PAS, V. R. G. Mercadante, D. D. Henry, P. L. P. Fontes, C. R. Dahlen, **J. E. Larson**, and N. DiLorenzo. Invited Review: Advantages of current and future reproductive technologies for beef cattle production. *The Professional Animal Scientist* 32 (2016):162–171; <http://dx.doi.org/10.15232/pas.2015-01455>.
- Regmi, Naresh, Taiji Wang, **Mark A. Crenshaw**, **Brian J. Rude**, Guoyao Wu, **Shengfa F. Liao**. Effects of dietary lysine levels on plasma free amino acid profile in late-stage finishing pigs. *SpringerPlus* (2016) 5:888, DOI 10.1186/s40064-016-2463-3.
- Mayer, J. J., J. D. Davis, J. L. Purswell, E. J. Koury, N. H. Younan, **J. E. Larson**, and T. M. Brown-Brandl. 2016. Development and characterization of a continuous tympanic temperature logging (CTTL) probe for bovine animals. *Transactions of the ASABE*. 59:703-714. (DOI: 10.13031/trans.59.11367).
- Gilfeather, CL and **CO Lemley**. 2016. Effects of Interferon-Tau and Steroids on Cytochrome P450 Activity in Bovine Endometrial Epithelial Cells. *Reproduction in Domestic Animals*, 51, 415–420 (2016); doi: 10.1111/rda.12695.
- Prezotto, L. D., L. E. Camacho, **C. O. Lemley**, F. E. Keomanivong, K. A. Vonnahme and K. C. Swanson, J. S. Caton. Nutrient restriction and realimentation in beef cows during early and mid-gestation and maternal and fetal hepatic and small intestinal in vitro oxygen consumption. *The Animal Consortium* 2015. doi:10.1017/S1751731115002645.
- Ye, G., J. Liu, Y. Liu, X. Chen, **S. F. Liao**, D. Huang, and K. Huang. 2016. Feeding glycerol-enriched yeast culture improves lactation performance, energy status, and hepatic gluconeogenic enzyme expression of dairy cows during the transition period. *J. Anim. Sci.* doi: 10.2527/jas.2015-0021.
- Cline, G. F., A. M. Muth-Spurlock, B. E. Voelz, **C. O. Lemley**, and **J. E. Larson**. 2016. Evaluating blood perfusion of the corpus luteum in beef cows during fescue toxicosis. *J. Anim. Sci.* 94:90-95.
- Brockus, K. E., C. G. Hart, C. L. Gilfeather, B. O. Fleming, **C. O. Lemley** (2016). Dietary melatonin alters uterine artery hemodynamics in pregnant Holstein heifers. *Domestic Animal Endocrinology*, 55, 1-10.
- Kaya, A., **E. Memili**. Sperm macromolecules associated with bull fertility. *Animal Reproduction Science*. (2016), <http://dx.doi.org/10.1016/j.anireprosci.2016.02.015>
- Hunt, M.R., J.F.Legako, **T.T.N. Dinh**, A.J.Garmyn, T.G.O'Quinn, C.H. Corbin, R.J. Rathmann, J.C. Brooks, M.F. Miller. Assessment of volatile compounds, neutral and polar lipid fatty acids of four beef muscles from USDA Choice and Select graded carcasses and their relationships with consumer palatability cores and intramuscular fat content. *Meat Science* 116 (2016) 91–101.
- Keomanivong, F. E., **C. O. Lemley**, L. E. Camacho, R. Yunusova, P. P. Borowicz, J. S. Caton, A. M. Meyer, K. A. Vonnahme and K. C. Swanson. Influence of nutrient restriction and melatonin supplementation of pregnant ewes on maternal and fetal pancreatic digestive enzymes and insulin-containing clusters. *Animal* (2016), 10:3, pp 440–448.

Brockus, KE, CG Hart, BO Fleming, T Smith, **SH Ward** and **CO Lemley**. Effects of Supplementing Holstein Heifers with Dietary Melatonin during Late Gestation on Growth and Cardiovascular Measurements of their Offspring. *Reproduction in Domestic Animals*. 51, 240–247 (2016); doi: 10.1111/rda.12672 ISSN

Vasquez, Erick S., **Jean M. Feugang**, **Scott T. Willard**, **Peter L. Ryan** and Keisha B. Walters. Bioluminescent magnetic nanoparticles as potential imaging agents for mammalian spermatozoa. *Journal of Nanobiotechnology*. (2016) 14:20.