

• Teaching • Research • Extension • Departmental Activities



Dr. Brandi Karisch, Mrs. Jessica Graves and ADS 4221 Capstone Students

# **AFTERNOON ON THE FARM**

### Submitted by Dr. Brandi Karisch

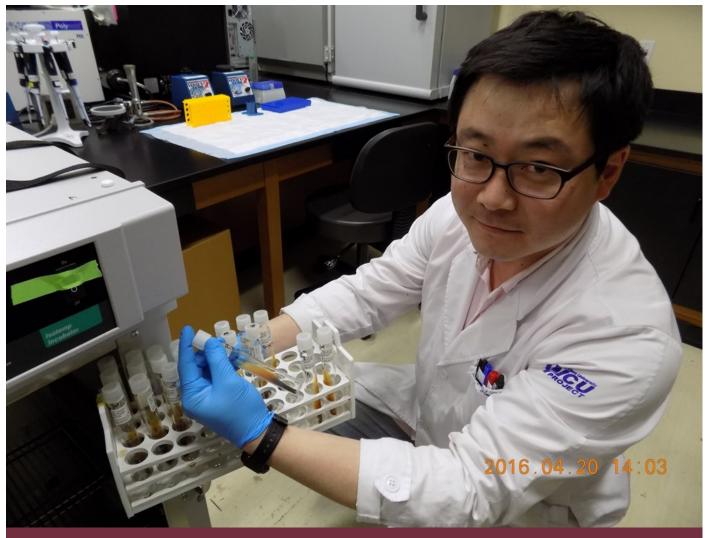


Students in the ADS 4221 Capstone in Animal and Dairy Sciences hosted 64 Kindergarteners from Starkville Academy for an Afternoon on the Farm. This served as the students' final project of the semester where they were tasked to create activities to teach youth about beef cattle, dairy cattle, pigs, and sheep. A great time was had by all! **Dr. Brandi Karisch and Mrs. Jessica Graves** co-teach this class.

#### CHECK US OUT ON FACEBOOK

Follow us on Facebook for the latest announcements and images from the department and its clubs.





### Dr. Seongbin Park, Postdoctoral Associate

### **Biophotonics Group**

### Submitted by Dr. Jean Feugang



Dr. Seongbin Park, a new postdoctoral Associate, joined the Biophonics Initiative Team in April 2016, to strengthen the microbiology research endeavors of the group. While his work will focus on the study of mycobacteria in animal systems, Dr. Seongbin (Binni) will assist in various ongoing research projects of the group members utilizing bio-imaging through organic and nanocrystal fluorochromes. Please join us in welcoming Dr. Seongbin Park to the Department of Animal and Dairy Sciences. He will be sharing an office with Mrs. Christy Steadman and Mrs. Caitlin Hart.

### LATEST PUBLICATION

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.



Mrs. Emily Bucak, CVM sophomore

### Summer Research Experience (SRE)



#### Submitted by Dr. Erdogan Memili

Through an NIH/Merial fellowship from MSU CVM's Summer Research Experience (SRE) for the students of veterinary medicine, Mrs. Emily Bucak, a sophomore at the CVM, is pursuing her research in the Department of Animal and Dairy Sciences. The SRE is a 12-week program that empowers students with knowledge and skills in biomedical research and in scientific communication.

Emily's research in Dr. Memili's laboratory is aimed at identification of microbiota of reproductive tissues associated with bull fertility using diverse approaches including microbiology, cell biology, and metagenomics. Her mentored research is a collaboration among faculty from the CVM, Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology. Emily plans to complete her research by July and present it at the 2016 Merial-NIH National Veterinary Scholars Symposium at Ohio State University.

As a former ADS graduate, Emily plans to pursue both research and veterinary medicine following her graduation from MSU CVM.

### LATEST PUBLICATION

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

## **Summer Horsemanship Camps**

### Submitted by Dr. Clay Cavinder

Summer Horsemanship camps will be held throughout the state in July. These camps are for youth and adults. Currently camps are scheduled for July 7 in Winona, July 18-19 in Canton and July 18-19 in Starkville. Agents are encouraged to contact Dr. Cavinder to schedule clinicians to teach clinics in interested locations.

## **MSU Online Horse Judging**

### Submitted by Dr. Clay Cavinder

isit the Horse Production page and click on "online horse judging" to register. Site consists of numerous 4-horse classes to judge along with officials and example sets of reasons.

http://extension.msstate.edu/msu-online-horse-judgingeducational-page MSU will be sending 3 students and 2 instructors to teach clinics in Europe in June. Clay Cavinder and Ashley Shiffler will be leading the team of Hannah Miller, Samantha Miller and Ashley Palmer to clinics in Austria, Italy, Slovakia, and Germany.



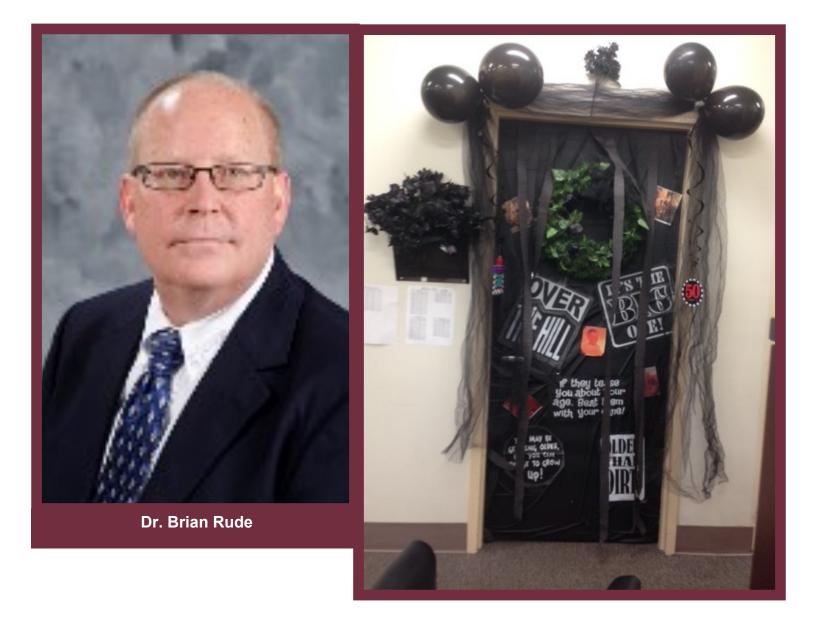


# The Mane Event

### Submitted by Dr. Clay Cavinder

The Mane Event is posting monthly short videos on numerous horse related topics. Please visit the Horse Production page to access new and archived videos.

### http://extension.msstate.edu/node/25616



## **Professor reaches half-century mark**

### Submitted by Lauren Hodge, Graduate Student

On May 5, 2016, Dr. Brian Rude, Professor of Ruminant Nutrition and Graduate Coordinator, celebrated his 50th birthday. In honor of this occasion, students decorated his office with black balloons, black flowers, a coffin and a mock grave. For the full effect, please view the video on Facebook at this link: https://www.facebook.com/lanna.durst

### 2016 Refereed Publications:

- 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 insulincontaining 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.