

### Teaching Research Extension Departmental Activities

### **2nd Place Poster Presentation**

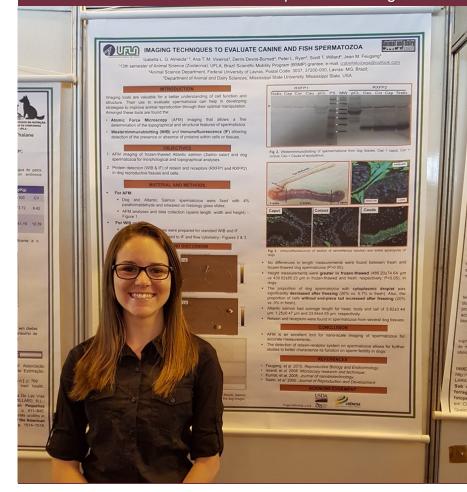
MISSISSIPPI STATE

Submitted by Dr. Jean Feugang



Dr. Jean Feugang strives to empower students to achieve their scholarly goals through hands-on research experience. Recently, he received Mrs. Izabella G. Almeida, an undergraduate student beneficiary of the Brazilian Scientific Mobility Program (BSMP) for a one-year study in the United States. She joined our laboratory from Rutgers University, NJ, for a summer research internship in May 2016. Her work focused on the study of the biology of canine spermatozoa. Preliminary data were presented at the 2016 Mississippi State University summer Undergraduate Research Symposium (MSU-URS), where Izabella won the second place for poster presentation in the Biological Sciences and Engineering section.

Back at her home institution, The Federal University of Lavras (State of Minas Gerais, Brazil), Izabella was invited to showcase her research experience during the local equivalent of the MSU-URS event (CIUFLA,



for Congresso de Iniciação Científica da UFLA). Numerous participants showed interest in her poster entitled "Imaging Techniques to Evaluate Canine and Fish Spermatozoa" and I received the following feedback from her: "The best part about the poster presentation was to talk with other people about my experience in the United States and in Mississippi and showing them what we can study and research out of our country", "People were interested on the topic of my research and thought the techniques we used were interesting", "Overall. this poster presentation was good not only to showcase the results of the research I did but also to showcase the Biophotonics Group and MSU".

# **SEC Visiting Faculty Travel Grant**

#### Submitted by Dr. Jean Feugang

Dr. Jean M Feugang is one of the eight faculty recipients of the 2016-2017 Southeastern Conference (SEC) Visiting Faculty Travel Grants offered by the Office of Research and Economic Development (ORED). Dr. Feugang will collaborate with colleagues at Auburn University in developing novel nanotechnology approaches to enhance transgenesis success in livestock animals.

Full announcement can be found at http://www.memo.msstate.edu/story.php?id=3707

### Dr. Rhonda Vann's Research at Brown Loam



#### **Balanced Cows, Better Beef**



The personality of livestock may seem secondary to productiveness, but research shows that the two may be connected. Cow temperament is correlated with how much money the cow brings in and how frequently it gets sick. Poor-tempered cattle are also known to produce less marbling and tougher beef. In an on-going study at the Brown Loam

Research Station, researchers have studied the link between a cow's temperament and performance. Dr. Rhonda Vann, research professor in the Department of Animal and Dairy Sciences and the Experiment Station, pioneered work on this front.

Read more at the ADS website: http://www.ads.msstate.edu/research.asp



### **Upcoming Extension Events**

#### Beef Extension – Dr. Brandi Karisch Cobie Rutherford

- MSU Artificial Insemination School, Oct. 13-15, 2016
- Mississippi Cattlemen's Association Cattlemen's College, Oct. 27, 2017, Hattiesburg
- Mississippi Cattlemen's Association Cattlemen's College, Oct. 28, 2017, Batesville

#### Equine Events – Dr. Clay Cavinder

• **Ranch Horse Clinic** series is coming to Starkville in Spring 2017. Be on the lookout for the official dates.

#### 4-H Events – Dr. Dean Jousan

- Mississippi State Fair: October 6 17, 2016
- National Association of Extension 4-H Agents (NAE4-HA) Annual Conference, New Orleans, LA, Oct. 9-13, 2016
- 4-H Day at the State Fair, Oct. 15, 2016

#### Dairy Events – Dr. Amanda Stone

- Dairy Science Field Day: March 17, 2017, Starkville
- Bearden Dairy Research Center Open House: May 20, 2017







## ADS CLUBS and ORGANIZATIONS

Mississippi State University's

# **Equestrian** Team

**Fall Show Dates** 

September 24: Berry College 2 Western

October 15-16: Berry College 2 Hunt Seat, 1 Western

October 29-30: Auburn University 1 Hunt Seat, 2 Western

November 12: Georgia College 1 Hunt Seat





#### Mississippi State University Animal & Dairy Sciences Yesterday at 2:40pm · 🚱

ADS Senior and recruitment intern, Beth Orr, interacting with 8th grade students at the 2016 Imagine the Possibilities event.



#### 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 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.