MISSISSIPPI STATE UNIVERSITY. Animal and Dairy MARINE Current Events Vol. 29 May 13, 2016

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Grace Christian School 3rd & 5th Graders with Dr. Molly Nicodemus

Early Recruiting for MSU Equine Students

Submitted by Dr. Molly Nicodemus

This week students from Grace Christian School in Louisville, Mississippi got a chance to learn more about horses. Dr. Molly Nicodemus spent Wednesday afternoon with the 3rd and 5th graders from the local elementary school discussing horse identification, care, and training. Students got a chance to handle equipment used in caring and training horses as they asked questions about owning a horse and about college life as an equine student at Mississippi State University. At the end of the presentation, students were asked by Dr. Nicodemus which students planned to go to college at MSU, of which most all students raised their hands. A barn tour with Dr. Nicodemus is being scheduled for students at GCS.

Courses **Dr. Nicodemus** teaches: Intro to Horsemanship Advanced Horsemanship Advanced Horsemanship II Equine Assisted Therapy Equine Behavior & Training Equine Conformation & Performance Evaluation Advanced Equine Evaluation Horse Management Horse Show Marketing & Management Equine Exercise Physiology

Dairy Tour

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Submitted by Jessica Graves

On Thursday afternoon, students from the Child Development and Family Studies Center visited the MSU Dairy for a hands-on learning experience to enhance their lesson on "farm animals" at school this week. The students got to see the entire operation from tractors and irrigation pivots to growing heifers and milking cows. Students were accompanied by their parents (mostly moms) and teachers, who about also learned the daily activities required on the farm. Kenneth and Jessica Graves hosted the group, whose son, was more than excited to Bryar, share with his classmates about life on the dairy farm. We look forward to sharing this experience with more young students in the future.



Ms. Kristen Armstrong, teacher, milking a cow for the first time!





Fagner Santos, senior Ph.D. student

Ph.D. Student Research

Submitted by Dr. Erdogan Memili



Fagner Santos, a senior Ph.D. student at the Federal University of Ceara in Brazil, has just started pursuing part of his dissertation research in Dr. Memili's laboratory at the Department of Animal and Dairy Sciences (ADS). Funded through a competitive fellowship from "Programa de Doutorado Integrado em Zootecnia – PDIZ/UFC and Conselho Nacional de Desenvolvimeno Científico e Tecnológico – CNPq", Fagner will conduct research on reproductive biotechnology at MSU for seven months. His research is a collaboration among Drs. Arlindo Moura of the Federal University of Ceara, **Dr. Thu Dinh** and **Dr. Erdogan Memili** in the ADS department.





Wil Moorhead, second year DVM student

Biophotonics Group

Submitted by Dr. Jean Feugang



The Biophotonic Research group is partnering again this summer with the Mississippi State University-College of Veterinary Medicine Summer Research Experience (MSU-CVM SRE) Program by hosting Mr. Wil Moorhead, a native of South Carolina and second year DVM student. Mr. Moorhead is one of 22 students in the 2016 program, designed to inspire talented and motivated students to consider research in their veterinary career. Students are offered approximately 12 weeks of hands-on research experience, from May 3rd to July 15th.

Mr. Moorhead graduated from Auburn University before enrolling at MSU-CVM, with the goal of pursuing a career in Theriogenology, with a specific interest in large animal. By joining the Biophotonics Initiative Team, the student will have the opportunity to develop research skills in reproductive biology using a variety of cellular, molecular, and bio-imaging analytical tools. This mentored training will culminate with opportunities to develop scientific communication skills through presentations of research findings during the 2016 Merial-NIH national Veterinary Scholars Symposium (Poster: July 28-31, at the Ohio State University, OH), the CVM Oral presentation forum (Oral: July 15, MSU-CVM, MS), and the CVM Research Day (Oral: August, MSU-CVM, MS).

Mr. Moorhead will be working under the tutelage of **Dr. Jean Feugang** and **Dr. Peter Ryan**. Please join us in welcoming Wil to the Department of Animal and Dairy Sciences. He has been assigned a desk in the graduate office.



MSU Staff Appreciation Day

Thank you to all the ADS volunteers that served on the committee, cooked, served lunch and helped make today's Luncheon in the Junction fun for everyone!





Tim Armstrong James Cannon





Kenneth Graves D

Dr. Trent Smith

Thank you to ADS Student Volunteers:

- Joseph Mangano
- Tucker Wagner
- Alex Holtcamp and Katie Cagle Holtcamp
- Josh Vowell



Dr. Thu Dinh Dr. Derris Burnett



Caitlin Hart, Lori Jones & Christy Steadman Standing in line for Snow Cones at Luncheon in the Junction

2016 Refereed Publications:

- 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.