

• Teaching • Research • Extension • Departmental Activities

Research Collaboration

Submitted by Dr. Shengfa Liao and Md Shamimul Hasan



In search of conducting collaborative research projects with the faculty at the Department of Animal and Dairy Sciences, Dr. San (Chris) Ching, Technical Research Manager, from Amlan International, a wholly owned subsidiary of Oil-Dri Corporation of America (Vernon Hills, IL), visited our department at Mississippi State University on September 22-23, 2016. During his visit, Dr. Ching toured the university campus in Starkville, the Leveck Animal Research Center, and the ADS departmental laboratories located in the Wise Center building. On the second day of his visit, Dr. Ching shared his company research findings with our faculty, staff, and students with an informative seminar titled “*Clay Application and Animal Gut Health.*” Amlan International is a feed additive company dedicated to animal health and provides natural disease management solutions for the livestock industries. Details about Amlan International can be found at <http://www.amlan.com/english/index.html>.



Cattlemen's College 2016

October 27th

Southeast MS Livestock Barn
Hwy. 49 N • Hattiesburg

October 28th

In conjunction with the North MS Beef Expo.
Batesville Civic Center
290 Civic Center Drive • Batesville

Program begins at 8 a.m. for both locations • Free to the public

Lunch will be provided • Don't miss the trade show



Program Highlights

Dr. Brian Williams – Mississippi State University
"Cattle Market Outlook"

Dr. James Rogers – Noble Foundation
"Forage 365"

James Ward - USDA-AMS
"Hands-on Cattle Grading Demonstration"

Jennifer Houston, NCBA Policy Division Chairman
"NCBA Updates & Policy Issues"

Jeffery Hall, Silvus - Silveous Insurance
"Crop Insurance"

Dr. Blaine Corners - Zoetis
"Veterinary Feed Directive Update"

Dr. Derrell Peel – Oklahoma State University
"Cattle Market Outlook"

Dr. Jane Parrish – Mississippi State University
"Premiums and Discounts from Mississippi Auctions"

James Ward, USDA-AMS
"Hands-on Cattle Grading Demonstration"

Cattle Producer Panel
"The Pros and Cons of Cattle Marketing Methods"

Dr. James Rogers – Noble Foundation
"Forage 365"

Dr. Blaine Corners - Zoetis
"Veterinary Feed Directive Update"

Dr. Carla Huston - Mississippi State University
"Cattle Veterinarian Practices Demonstration"

Sponsored by:

Zoetis • National Grazing Lands Coalition
Mississippi Cattlemen's Association •
Natural Resources Conservation
Service • National Cattlemen's Beef Association •
Mississippi State University Extension Service

Sponsored by:

Zoetis • National Grazing Lands Coalition • Mississippi
Cattlemen's Association • Natural Resources Conservation
Service • National Cattlemen's Beef Association •
Mississippi State University Extension Service • Mississippi
Farm Bureau • Wade Equipment •
Heafner Automotive and Hallmark Ford

Please RSVP to Mississippi Cattlemen's Association
www.ms cattlemen.org or (601) 354-8951 to plan for meals

Upcoming Extension Events

Beef Extension – Dr. Brandi Karisch Cobie Rutherford



- Mississippi Cattlemen's Association Cattlemen's College, Oct. 27, 2016, Hattiesburg
- Mississippi Cattlemen's Association Cattlemen's College, Oct. 28, 2016, 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

- National Association of Extension 4-H Agents (NAE4-HA)
Annual Conference, Portland, OR., Oct. 25-29, 2016
- State 4H Staff Conference, Oct. 29, 2016



Dairy Events – Dr. Amanda Stone

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



MSU Dairy Show Team at the Mississippi State Fair

1st Place Herdsmanship

2nd Place Holstein Fall Calf, exhibited by
Kessy Stevens

2nd Place Jersey Sr 2 Year Old,
exhibited by Kaleb Morgan

3rd Place Jersey Sr 2 Year Old, exhibited
by Abigail Jenkins

4th Place Holstein Fall Calf, exhibited by
Malik Travis

4th Place Holstein Sr 2 Year Old,
exhibited by Olivia Hall

8th Place Jersey Winter Calf, exhibited
by Randi Benefield



* Coaches are Jessica and Kenneth Graves and Megan Kludt *



Front row (l-r): Malik Travis, Randi Benefield. Back row (l-r): Olivia Hall, Alyssa Rulewicz, Halle Wilson, Abigail Jenkins, Kessy Stevens, Anna Wilson, and Kaleb Morgan

ADS CLUBS and ORGANIZATIONS

MSU Equestrian Team Show Results

Berry College in Rome, GA on Oct. 15-16

--Western Results--

Reserve High Point Overall Team

Gentry Clark- 2nd in Open Reining, 2nd in Open Horsemanship

Mary Claire Cornett- 2nd in Advanced Horsemanship

Joshua Boyd- 2nd in Beginner Walk Trot Horsemanship

Sabrina Turner- 3rd in Advanced Horsemanship

Hart Daniels- 4th in Advanced Horsemanship

Madison Eckloff- 4th in Intermediate Horsemanship

Ashley Beyer- 5th in Beginner Walk Trot Horsemanship

Ashley Greene- 5th in Intermediate 2 Horsemanship

--English Results--

Emili McClure- 2nd Beginner Walk Trot Canter Equitation

Danielle Hodges- 2nd Open Over Fences

Marie Leathers- 3rd Beginner Walk Trot Canter Equitation

Sydney Bauer- 3rd Intermediate Over Fences, 5th Intermediate Equitation

Katie Rose Anthony- 4th Novice Equitation

Devin Parrish- 4th Novice Equitation, 5th Novice Over Fences

Ashley Greene- 5th Advanced Walk Trot Canter Equitation

MaeLena Apperson- 5th Novice Equitation, 6th Novice Equitation, 4th Novice Over Fences

Samantha Mooneyham- 5th Intermediate Equitation



Mississippi State University Equestrian Team



Home 20+



Mississippi
State University
Equestrian
Team



ADS CLUBS and ORGANIZATIONS

MSU Meat Chemistry and Cuisine Club Fundraiser

Our meatheads will be outside of Ballew Hall cooking some samples and selling ready-to-cook meats and pork-stuffed spring rolls every Tuesday at 4 PM. If you would like to purchase our products, please come during the sampling event every Tuesday or email Alex Holtcamp (ajh420@msstate.edu) or Anuraj Sukumaran (at1179@msstate.edu). Meats and spring rolls will be available for pick up from Monday to Friday in Ballew Hall.

SAMPLE MENU:

6 4-oz dry-rub pork chops in vacuum package for \$8

6 spring rolls in vacuum package for \$6

FREE SAMPLES

EVERY TUESDAY at 4 pm outside BALLEW HALL



2016 Refereed Publications:

- Larson, J.E.** Incorporating Writing-to-Learn Strategies into an Animal Reproduction Course. *NACTA Journal*, September 2016, Vol 60(3), 303-306.
- 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.