



MISSISSIPPI STATE UNIVERSITY™

DEPARTMENT OF ANIMAL AND DAIRY SCIENCES



**Dr. Thu Dinh, recipient of the
Outstanding Scientific Publication Award**



**Dr. Caleb Lemley, recipient of the
MAFES Excellence in Research Faculty Award**

Our Mission:

Our faculty are committed to serving the citizens of this state through teaching, research and extension programs. Research and extension centers are located strategically throughout the state. Animal research facilities at the Leveck Animal Research Center, Bearden Dairy Cattle Research Center, Prairie Research Unit, Brown Loam Research Station, and the White Sands Unit give faculty opportunities to investigate the challenges facing the livestock industry.

Our Mission is to provide science-based solutions for animal agriculture through innovative and effective education, research and extension programming. Our Vision is Building the Future of Agriculture.

IN THIS ISSUE:

**AMSA 2019 Student Leadership
Conference**

Equine Industry Careers

Faculty Leadership Development

Animal Shelter Tours

Livestock Judging Contest

Horse Hoof Anatomy & Care

2019 Award Recognition

**Swine Nutrition Graduate
Students Present Research**

MANRRS Rib Sale

Upcoming Extension Events

2019 Refereed Publications



AMERICAN MEAT SCIENCE ASSOCIATION AMSA 2019 STUDENT LEADERSHIP CONFERENCE



Dishnu Sajeew and Caitlyn Haines, in Dr. Thu Dinh's research group, traveled to the American Meat Science Association 2019 Student Leadership Conference on March 15 – 16 in Louisville, KY. They visited JBS Pork Plant, Churchill Downs, and Jim Beam. They also interacted with other students, industry professionals from CTI Foods, Nestle Purina, Kentucky Beef Council, JBS, JBT Corp, and Sealed Air, and learned about setting career goals before and after graduation and job opportunities in the industry.

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ADS 3223 Explore Equine Industry Careers



Final class projects consist of discussing various careers in the equine industry. To obtain firsthand knowledge, students volunteered at the Mississippi Quarter Horse Association (MQHA) Roland Stacey Memorial Horse Show and the Heart of Dixie Palomino Exhibitors Association (HOPE)/Mississippi Pinto Horse Association (MsPthA) Azalea Classic Horse Show.

Students worked side-by-side with professionals running the show including show managers, ring stewards, judges, pattern designers, facilities management, and show secretaries. Student workers were coordinated through directors of the various breed associations including Mrs. Suzy McBeath and Ms. Anna McRaney for the MQHA show and Ms. Helen Fleming and Mrs. Tootsie North for the HOPE/MsPthA show.

Several students visited with these breed association representatives about internship opportunities associated with these organizations.

HOPE offers yearly a student scholarship for MSU students in which the students at the show got an opportunity to learn more about the scholarship program.

For individuals interested in the ADS 3223 course, they can contact course instructor Dr. Molly Nicodemus at mnicodemus@ads.msstate.edu.





Dr. Memili receiving his certificate from the workshop director, Dr. Carl Cohen and workshop co-facilitator Dr. Suzanne Cohen.

Faculty Leadership Development

Dr. Erdogan Memili completed the Cold Spring Harbor Laboratory's "Workshop on Leadership in Bioscience" in Cold Spring Harbor, NY between March 22 and 25, 2019.

During the four-day comprehensive and interactive workshop, participants received training in management and leadership in science at academia and industry.

(<https://meetings.cshl.edu/index.aspx>).





Left: ADS 2221 students meeting the adoptable dogs at the Oktibbeha County Animal Shelter.

Below: ADS 2221 students touring the cat room at the Oktibbeha County Animal Shelter.

ADS 2221 Students Learn More about Shelters

The new companion animal course, ADS 2221 Companion Animal Management Laboratory, is wrapping up its inaugural semester by touring the Oktibbeha County Animal Shelter in Starkville, MS. Students met with the shelter manager Camille Cotton this past Thursday. Mrs. Cotton covered shelter management, grant funding, fostering, adopting, and volunteering.

As a part of the ADS 2221 community-engagement activities, students will volunteer here and at the Louisville Animal Shelter in Louisville, MS. In the final class meetings, the students will hear from graduate students in the Animal & Dairy Sciences department that have expertise in a variety of areas in the companion animal industry including, Muhammet Ugur, DVM, discussing basic healthcare for cats; Courtney Heaton, discussing training and managing the agility dog; and Holly Evans, discussing showing and managing rabbits.

For interested individuals, contact course instructor Dr. Molly Nicodemus at mnicodemus@ads.msstate.edu.





Eligible participants: Youth ages 8-18, all states are welcome! *Cost: Non-refundable fee of \$30/contestant (includes lunch)

Make checks payable to: MSU Foundation.

Mail entries to:
Mississippi State University
Animal & Dairy Sciences-Wise Center
Attention: Brett Crow
Box 9815
Mississippi State, MS 39762

Deadline: May 3, 2019

Location: Check-in will be from 8:00-8:30 a.m. at 240 Wise Center Drive on the campus of Mississippi State University with the contest beginning at 9:00 a.m. on the MSU South Farm.

MSU ADS Livestock Judging Contest

We are hosting a livestock judging contest in May that's open to all states! Even individuals who are not part of a team can compete!

Contact Brett Crow at brett.crow@msstate.edu

Visit the website below to get more information & to register!

<https://www.ads.msstate.edu/docs/pdf/maroon-white-livestock-judging.pdf>

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ADS 3221 Students Learn About Hoof Anatomy & Care

ADS 3221 Practices in Horse Care & Management is a laboratory course that is offered both the fall and spring semesters through the Animal & Dairy Sciences department. As a part of the course, students get an opportunity to tour facilities and meet with professionals in the horse industry.

The most recent tour was of the Blacksmith Shop at the CVM Equine Clinics with Dr. Ben Nabors, MSU CVM Clinical Instructor and certified farrier. During the tour and demonstration, Dr. Nabors discussed hoof anatomy and various health conditions impacting distal limb health where the farrier would have to take a critical role in helping with the soundness of the horse. Students were able to review x-rays of these conditions and watched a corrective trimming and shoeing of a horse suffering from one of these conditions.

Students also learned about opportunities in the veterinary school for those veterinary students wanting to specialize in treatment of these hoof conditions. The ADS 3221 laboratory is taught by Ms. Alicia Gilmore, ADS graduate student and teaching assistant, and by Dr. Molly Nicodemus, ADS faculty member.

For further information about ADS 3221, individuals can contact Dr. Nicodemus at mnicodemus@ads.msstate.edu.

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Animal and Dairy



Cordially Invites You to Attend the

2019 Award Recognition

in conjunction with our

Alumni South Farm

Hoe-down

Friday April 26

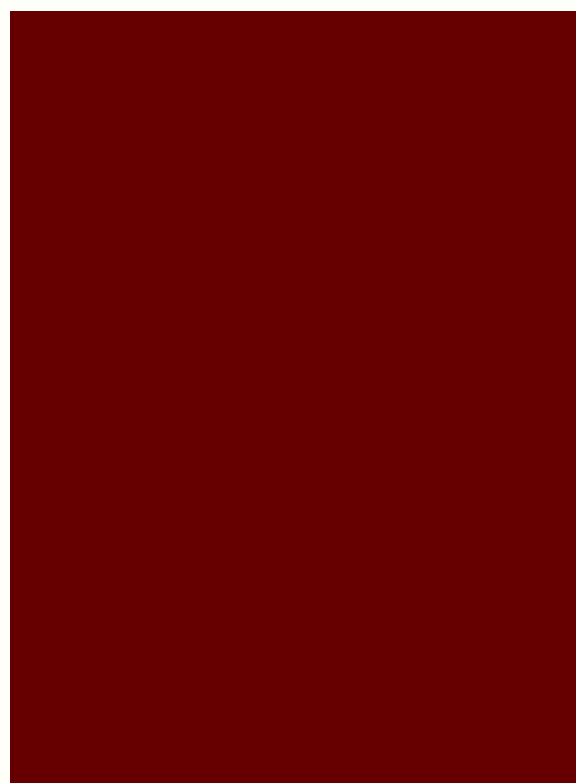
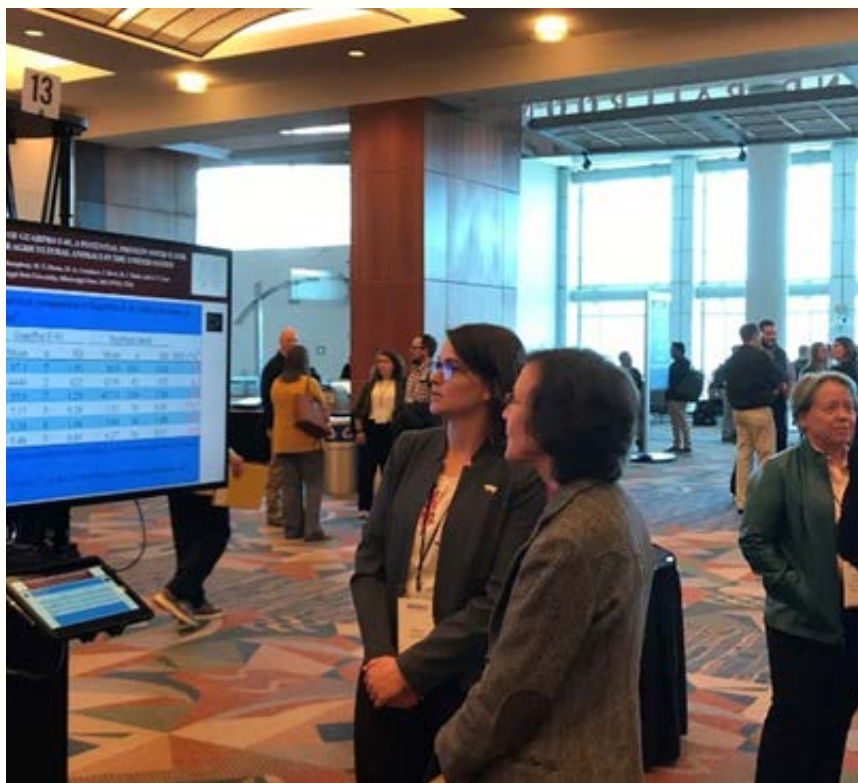


Recognition Program at 6:30

Live music and crawfish at 7:00

Beef Unit—Leveck Animal Research Center, MSU

RSVP by April 19 to M.Quinn@ads.msstate.edu



Swine Nutrition Graduate Students Present Research Findings at the Midwest Meeting

Graduate students, Mr. Md Shamimul Hasan and Ms. Rebecca M. Humphrey, studying Swine Nutrition in the Department of Animal & Dairy Sciences, presented their research findings at the 2019 Joint Meeting of American Society of Animal Science Midwest Section and American Dairy Science Association Midwest Branch, held in Omaha, Nebraska, on March 11 to 13. PhD degree candidate, Mr. Hasan, orally presented one abstract entitled “Inclusion of GuarPro F-71 in a corn and soybean meal based diet: Effects on growth performance and nutrient metabolism in growing pigs”.

Master of Science degree candidate, Ms. Humphrey, also presented one abstract entitled “Amino acid profile of GuarPro F-81, a potential protein source for swine and other agricultural animals in the United States”. The co-authors of the abstracts include Alexandra McCafferty, Mark Crenshaw, Brian Rude, James Brett, and Shengfa Liao. More information about the Midwest meeting can be found at: <https://www.asas.org/sections/midwest-section>.



MS STATE MANRRS RIB SALE

**SUPPORT THE MS STATE MANRRS CHAPTER
DURING SUPER BULLDOG WEEKEND!**

FULL SLABS: \$20

HALF SLABS: \$10

SALE DATES: NOW - APRIL 10

PICK UP OR DELIVERY: APRIL 12, 2 pm - 4 pm



For more info, visit
MSSTATEMANRRS.BIGCARTEL.COM or
scan the QR Code



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UPCOMING EXTENSION EVENTS

Beef Extension - Dr. Brandi Karisch

April 26-27: ADS Alumni Weekend, Mississippi State, MS

May 17: Beef 101, MSU Meat Science Laboratory, Mississippi State, MS

Phone: (662) 325-7465 Email: brandi.karisch@msstate.edu

Beef Calendar: <http://extension.msstate.edu/livestock/beef/beef-calendar>

Dairy Extension - Dr. Amanda Stone

Phone: (662) 325-8773 Email: amanda.stone@msstate.edu

Website: <http://extension.msstate.edu/dairy>

4-H Events - Dr. Dean Jousan

Phone: (662) 325-2424

Email: dj230@msstate.edu www

Website: <http://extension.msstate.edu/4-h>

Equine Events - Dr. Clay Cavinder

Contact Dr. Cavinder for information about programs and events at (662) 325-7566 or

Email: clay.cavinder@msstate.edu

Website: <http://extension.msstate.edu/agriculture/livestock/equine/upcomingprograms>

2019 Refereed Publications

- El Debaky, Hazem A., Naseer A. Kutchy, Asma Ul-Husna, Rhesti Indriastuti, Shamim Akhter, Bambang Purwantara, and **Erdogan Memili**. Review: Potential of water buffalo in world agriculture: Challenges and opportunities. *Applied Animal Science* 35:255–268. <https://doi.org/10.15232/aas.2018-01810>
- Ferjak, E.N., **C.A. Cavinder**, A.T. Sukumaran, **D.D. Burnett**, **C.O. Lemley**, **T.T.N. Dinh**. Fatty acid composition of mesenteric, cardiac, abdominal, intermuscular, and subcutaneous adipose tissues from horses of three body composition scores. *Livestock Science* 223 (2019) 116-123. <https://doi.org/10.1016/j.livsci.2019.02.01>
- Dutra, G. A., G. M. Ishak, O. Pechanova, T. Pechan, D. G. Peterson, J. C. F. Jacob, **S. T. Willard**, **P. L. Ryan**, E. L. Gastal, and **J. M. Feugang**. Seasonal variation in equine follicular fluid proteome. *Reproductive Biology and Endocrinology*. (2019) 17:29. <https://doi.org/10.1186/s12958-019-0473-z>
- Casey L. Durfey, Sabrina E. Swistek, **Shengfa F. Liao**, **Mark A. Crenshaw**, Henry J. Clemente, Rooban V. K. G. Thirumalai, Christy S. Steadman, **Peter L. Ryan**, **Scott T. Willard** and **Jean M. Feugang**. Nanotechnology-based approach for safer enrichment of semen with best spermatozoa. *Journal of Animal Science and Biotechnology*. (2019) 10:14. <https://doi.org/10.1186/s40104-018-0307-4>.
- Mayo, L. M., W. J. Silvia, D. L. Ray, B. W. Jones, **A. E. Stone**, I. C. Tsai, J. D. Clark, J. M. Bewley, and G. Heersche Jr. Automated estrous detection using multiple commercial precision dairy monitoring technologies in synchronized dairy cows. *Journal of Dairy Sciences*. 2019. J. Dairy Sci. 102:1–12. <https://doi.org/10.3168/jds.2018-14738>
- Yang, Zhongyue, Md. Shamimul Hasan, John K. Htoo, **Derris D. Burnett**, **Jean M. Feugang**, **Mark A. Crenshaw**, and **Shengfa F. Liao**. Effects of dietary supplementation of L-methionine vs. DL-methionine on performance, plasma concentrations of free amino acids and other metabolites, and myogenesis gene expression in young growing pigs. *Translational Animal Science*. Transl. Anim. Sci. 2019.3:113–123. doi: 10.1093/tas/txy109.
- Gastal, G.D.A., **J.M. Feugang**, F.L.N. Aguiar, G.M. Ishak, **C.A. Cavinder**, **S.T. Willard**, **P.L. Ryan**, E.L. Gastal. Effect of cryopreservation techniques on proliferation and apoptosis of cultured equine ovarian tissue. *Theriogenology*. <https://doi.org/10.1016/j.theriogenology.2018.11.034>.