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# ANIMAL & DAIRY SCIENCES

Mississippi State University


Champion American Steer
Sire: Sugar Bear
Congratulations Anna Beth/Aimry Blackwell!

## Dixie National Junior Round Up and open Livestock Shows

MISSISSIPPI STATE UNIVERSITY™
DEPARTMENT OF ANIMAL AND DAIRY SCIENCES

## IN THIS ISSUE:

# ADS 2221 STUDENTS LEARN FIRSTHAND ABOUT ANIMAL ASSISTED ACTIVITIES & THERAPY

ADS 2221 Companion Animal Management Laboratory is a new course in the Animal & Dairy Sciences curriculum. This laboratory course complements the ADS 2223 Companion Animal lecture course and offers students with a companion animal interest another course where they can focus on companion animals.

This semester is the first time the course has been offered with the semester consisting of tours and guest speakers. The first section of the course focuses on animal assisted activities and therapy (AAAT). Students got a chance to learn firsthand about AAAT by touring the Elizabeth A. Howard 4-H Arena in West Point, MS and meeting with the volunteer coordinator of the MSU Extension Equine Assisted Therapy (EAT) Program Mrs. Lori Irvin.

Mrs. Irvin discussed the facilities and some of the tack and equipment utilized by the program and about her experiences working with both horses and dogs in various aspects of AAAT. As a part of the course, students will be involved in community-engaged learning including volunteering with the MSU Extension EAT Program. The course is taught by Dr. Molly Nicodemus and graduate teaching assistant Dr. Muhammet Ugur.

Individuals interested in learning more about ADS 2221 can contact Dr. Nicodemus at mnicodemus@ads.msstate.edu.

ADS 2221 Students learning about EAT tack during the MSU Extension EAT Program tour

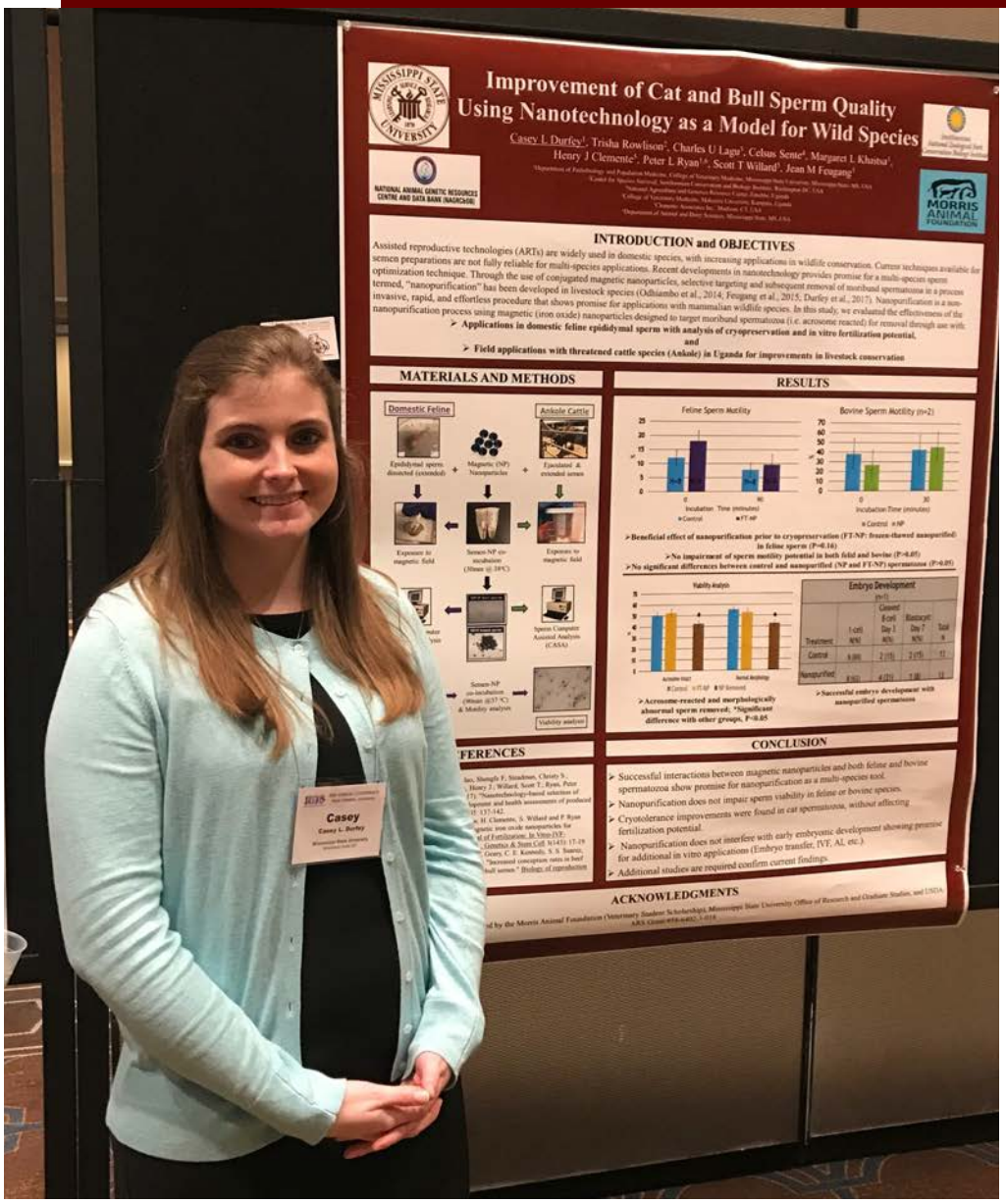
ADS 2221 Students learning about EAT equipment during the MSU Extension EAT Program tour

# CASEY DURFEY PRESENTS POSTER AT THE INTERNATIONAL EMBRO TRANSFER SOCIETY CONFERENCE

Casey Durfey, former M.S. student and mentoree of Dr. Jean Feugang, during the 2018 CVM-Summer Research Experience (SRE) was selected to present her poster within the DABE (Domestic Animal Biomedical Embryology) poster competition during the International Embryo Technology Society (IETS) meeting, held in New Orleans, from Jan 19 to Jan 23.

Her project was very well received and was even referenced to in one of the keynote speeches.

Casey presented her poster twice, during the main poster session and during the DABE preconference, where she was placed 3rd.



# DR. JEAN FEUGANG HOSTS DR. PASCALE CHAVATTE-PALMER

On January 24th, Dr. Pascale Chavatte-Palmer, DVM, PhD, a Research Director at the French National Institute of Agriculture Research (INRA, Jouy-en-Josas, Paris) and newly Elected President of the International Embryo Technology Society (IETS) was a guest of Dr. Jean M Feugang at Mississippi State University.

She gave an comprehensive seminar entitled “Effects of exposure to diesel exhaust over two generations: insight from a rabbit model.”

She had the opportunity to discuss with various faculty members of the ADS department and visited the South farm research facilities and the new MSU Meat Science and Muscle Biology Laboratory, for eventual collaboration on livestock animal research.

Malik Holmes, Meat Science student gives Dr. Chavatte-Palmer a tour of the Abattoir

# DR. HITIT JOINS THE MEMILI LAB TO PURSUE FUNCTIONAL GENOMICS AND EPIGENOMICS RESEARCH


Dr. Mustafa Hitit has just arrived on campus as a postdoctoral researcher in the Department of Animal and Dairy Sciences. He will join the research group of Dr. Erdogan Memili.

With a DVM and Ph.D. from Ataturk and Selcuk Universities in Turkey, respectively, Dr. Hitit is pursuing functional genomics and epigenomics research which will enable farmers to enhance reproduction and production efficiency of cattle and small ruminants with superior fertility, heat tolerance and other important traits for one year of research in the Department at MSU,

Mustafa was awarded a fully funded competitive postdoctoral fellowship from The Scientific and Technological Research Council of Turkey (TUBITAK), one of the foremost scientific bodies in that country.

# MEMILI PRESENTS COLLABORATIVE RESEARCH AND CO-CHAIRS AT THE INTERNATIONAL CONFERENCE OF THE INTERNATIONAL EMBRYO TECHNOLOGY SOCIETY (IETS) IN NEW ORLEANS, LA JAN 20-24

Sperm Metabolomic Landscape Associated with Bull Fertility
1,*Menezes E, 1,2,*Velho A, 1,2,*Santos F, 1Dinh T, 3,4Kaya A, 3Topper E, 3Didion B, 2Moura A, 1,+Memili E.

1Department of Animal and Dairy Sciences, Mississippi State University, Mississippi State, MS USA; 2Department of Animal Sciences, Federal University of Ceara, Fortaleza, BRAZIL; 3Alta Genetic Inc., Watertown, WI; 4Department of Reproduction and Artificial Insemination, Selcuk University, Konya, TURKEY

1Grant support: This project was supported by Agriculture and Food Research Initiative Competitive Grant no. 2017-67016-26507 from the USDA National Institute of Food and Agriculture (NIFA). Partial funding was also provided by Mississippi Agricultural Experiment Station, Alta Genetics Inc., Hatch project under accession number 1005778 from the USDA NIFA, and by Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) of Brazil. F. Santos, A. Velho and E. Menezes were funded by competitive fellowships from Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) of Brazil. *Equal contributions.



Read Abstract at this link:
https://www.publish.csiro.au/rd/Fulltext/RDV31N1AB153

# UPCOMING EXTENSION EVENTS

## Beef Extension - Dr. Brandi Karisch

Jan. 31 - Feb. 11: Dixie National Junior Round Up and open Livestock Shows, Jackson
Feb. 8 - Feb. 9:  Mississippi Cattlemen's Association Convention, Jackson
Mar. 7: Hinds Bull Test & Spring BCIA Bull Sale, Raymond
Mar. 14 - Mar. 16: MSU Artificial Insemination School, Mississippi State

Phone: (662) 325-7465 or brandi.karisch@msstate.edu
Beef Calendar: http://extension.msstate.edu/livestock/beef/beef-calendar

## Dairy Extension - Dr. Amanda Stone

Phone: (662) 325-8773 or Email: amanda.stone@msstate.edu Website: http://extension.msstate.edu/dairy

## 4-H Events - Dr. Dean Jousan

February 2 - 17, 2019: Dixie National Livestock Show and Rodeo, MS State Fairgrounds, Jackson,
February 7, 2019:  2019 Dixie National Sale of Junior Champions, MS State Fairgrounds, Jackson,

Phone: (662) 325-2424
Email: dj230@msstate.edu www.http://extension.msstate.edu/4-h

## Equine Events - Dr. Clay Cavinder

April 6, 2019: HANDS ON HORSES, MAFES Horse Unit, Starkville, MS

Contact Dr. Cavinder for information about programs and events. Phone: (662) 325-7566 or clay.cavinder@msstate.edu Website http://extension.msstate.edu/agriculture/livestock/equine/upcomingprograms

## 2019 Refereed Publications

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.