ANIMAL & DAIRY SCIENCES



MISSISSIPPI STATE UNIVERSITY

Features

INFLUENCE EPISODE - 2

LIVESTOCK JUDGING CAMP UPDATE - 3

HORSE AUCTION - 4

COW CAMP - 5

COW CAMP SCHEDULE - 6

UPCOMING EVENTS - 7

INFLUENCE EPISODE



MSU College of Agriculture and Life Sciences
June 26 at 10:36 AM ⋅ ♠

Faculty and students in the Mississippi State University Animal & Dairy Sciences took a recent trip to Brazil to study cattle. We learn about their adventure on this episode of Influence. Check back to catch the episode. Thanks to our guest Dr Trent Smith and Renee Anderson. #MSUAg



CAMP UPDATE



Mississippi State University Livestock Judging added 7 new photos.

June 25 at 1:17 PM · 🚱

We had 63 entries from 4 states in this year's camps. Those were spread over 3 camps, two 3-day camps and one "day camp". In the short time that's elapsed since camp, this year's participants have gone on to be members of Mississippi's state winning junior team, the second placed senior team that's headed to represent MS in Denver and both the state winning FFA and 4H teams in Alabama. In the Alabama 4H contest, 3 of the top 5 high individual senior division honors went to participants from this year's camps! We know that their coaches at home make these things happen and are honored to get contribute!



HORSE AUCTION

We sent 4 horses to sell in Lufkin, TX last Saturday. Two interns Anna Grace Davis and Keyton Stone and their teacher Clay Cavinder, rode and fit these horses for auction. This sale allowed them to expose our breeding program to a larger audience and definitely stimulated an interest in our horse program outside the borders of Mississippi.



COW CAMP 2018



BEARDEN DAIRY RESEARCH CENTER 2128 TURKEY CREEK RD, STARKVILLE, MS 39759

COW CAMP 2018

| JULY 16, 2018 AT 1 PM TO JULY 18, 2018 AT 12 PM |



Registration and a registration fee are required.

> Both must be received by June 30th.

A room block is available at \$99 per night. m blocks will be released June 30th Breakfast is provided by the hotel.

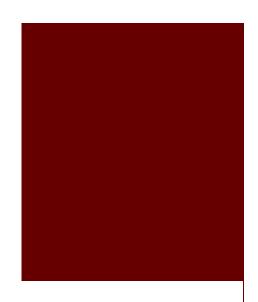
Registration is

\$100 per attendee.
This includes dinner on 7/16 and lunch and dinner on

LEARN HOW TO:

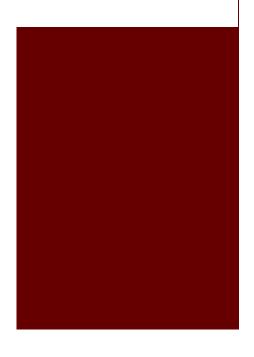
- · Properly groom and fit
- · Provide calves and cows with proper nutrition
- · Prevent and detect common

COW CAMP 2018 SCHEDULE



2018 Cow Camp Schedule

Date	Time	Activity	Presenter
Monday July 16	11:00 AM - 12:30 PM	Registration; lunch on own	
	1:00 PM	"Fun with milk" (making liquid nitrogen	Dr. Bob Horton (4H Extension Specialist,
		ice cream and cheese)	Ohio State University)
	3:00 PM	MSU dairy tour	Kenneth Graves (MSU Dairy Manager)
	6:00 PM	Dinner	
Tuesday July 17	6:30 – 8:00 AM	Breakfast	
	8:30 AM	MAFES cheese plant tour	Eric Goan (MSU Cheese Plant Manager)
	10:30 AM	Fitting demo, showmanship and grooming	Wesley Blankenship (Blankenship Jerseys,
		discussion	Jackson, TN)
	12:00 PM	Lunch	
	1:00 PM	Hands-on cow clipping and grooming	Wesley Blankenship (Blankenship Jerseys,
			Jackson, TN)
	4:00 PM	Quiz Bowl and games	Tentative: Charlie Crave (Owner, Crave
		Tentative: Charlie Crave speaking	Brothers Farmstead Cheese, Waterloo, WI)
	6:00 PM	Dinner	
Wednesday July 18	6:30 – 8:00 AM	Breakfast	
	8:30 AM	Ensuring healthy cattle	Dr. Darren McGee (veterinarian, Elanco
			Animal Health)
	10:30 AM	Feeding cattle	Scott Hardin (nutritionist, dairy nutrition
			consultant)
	12:00 PM	End of program; lunch on own	



BEEF EXTENSION - Dr. Brandi Karisch and Cobie Rutherford



July 13: Deep South Stocker Conference Greenboro, AL

EQUINE EVENTS - Dr. Clay Cavinder



For info on Events, call (662) 325-7466 or email clay.cavinder@msstate.edu

4-H EVENTS - Dr. Dean Jousan



July 26: Neshoba State Fall Dairy Show July 27: Newton State Fall Dairy Show

DAIRY EXTENSION - Dr. Amanda Stone



July 16-July 18: Cow Camp 2018, Bearden Dairy, Starkville August 25: Ice Cream & a Moo-vie, Bearden Dairy, Starkville September 20: Calf College 2018- in Brookhaven & September 21 in Starkville

September 27-29: Breakfast on the Farm, Bearden

Dairy, Starkville



2018 Refereed Publications

- Griffin, Courtney M., BS; Jenna A. Scott, BS; Brandi B. Karisch, MS, PhD; Amelia R. Woolums, DVM, MVSc, PhD, DACVIM, DACVIM; John R. Blanton, MS, PhD; Ray M. Kaplan, DVM, PhD, DEVPC, DACVM; William B. Epperson, DVM, MS, DACVPM (Epidemiology); David R. Smith, DVM, PhD, DACVPM (Epidemiology). A randomized controlled trial to test the effect of on-arrival vaccination and deworming on stocker cattle health and growth performance. The Bovine Practitioner, Vol. 52, No. 1.
- Sun, Yuhang, Jin Liu, Gengping Ye, Fang Gan, Mohammed Hamid, Shengfa Liao, Kehe Huang. Protective effects of zymosan on heat stress-induced immunosuppression and apoptosis in dairy cows and peripheral blood mononuclear cells. Cell Stress and Chaperones. https://doi.org/10.1007/s12192-018-0916-z.
- Woolums, Amelia R., Brandi B. Karisch, Jonathan G. Frye, William Epperson, David R. Smith, John Blanton Jr., Frank Austin, Ray Kaplan, Lari Hiott, Tiffanie Woodley, Sushim K. Gupta, Charlene R. Jackson, Michael McClelland. Multidrug-resistant Mannheimia haemolytica isolated from high-risk beef stocker cattle after antimicrobial metaphylaxis and treatment of bovine respiratory disease. Veterinary Microbiology 221 (2018) 143-152. https:// doi.org/10.1016/jvetmic.2018.06.005.
- Sukumaran, Anuraj T., Alexander J. Holtcamp, Yan L. Campbell, Derris Burnett, Mark W. Schilling, Thu T.N. Dinh. Technological characteristics of pre- and post-rigor deboned beef mixtures from Holstein steers and quality attributes of cooked beef sausage. Meat Science. 145 (2018) 71–78. https://doi.org/10.1016/ j.meatsci.2018.06.001.
- Hart, CG, BE Voelz, KE Brockus, CO Lemley. Hepatic steroid inactivating enzymes, hepatic portal blood flow and corpus luteum blood perfusion in cattle. Reproduction in Domestic Animals. 2018;53:751–758.
- Camacho, L.E., C.O. Lemley, S.T. Dorsam, K.C. Swanson, K.A. Vonnahme. Effects of maternal nutrient restriction followed by realimentation during early and mid-gestation in beef cows. II. Placental development, umbilical blood flow, and uterine blood flow responses to diet alterations. Theriogenology. https://doi.org/10.1016/ j.theriogenology.2018.04.013.
- Lemley, C.O., L.E. Camacho, D.M. Hallford, K.A. Vonnahme. Uteroplacental secretion of progesterone and estradiol 17beta in an ovine model of intrauterine growth restriction. *Animal Reproduction Science*. 193 (2018) 68-78. https://doi.org/10.1016/j.anireprosci.2018.04.001.
- T. Williams, B. Rude, S. Liao, C. Mochal-King, M. Nicodemus. Effects of fat supplementation on plasma glucose, insulin and fatty acid analysis in ponies maintained on a forage-based diet. *Journal of Animal Physiology and Animal Nutrition*. 2018;1–8. DOI: 10.1111/jpn.12905.
- Gastal, G.D.A., J.M. Feugang, F.L.N. Aguiar, A.P.R. Rodrigues, J.M. Scimeca, G.A. Apgar, W.J. Banz, E.L. Gastal. Cryopreservation and in vitro culture of white-tailed deer ovarian tissue. *Theriogenology*. 113 (2018) 253-260.
- Velho, Ana Luiza Cazaux, Einko Topper, Erika Menezes, Thu Dinh, Abdullah Kaya, Arlindo Alencar Moura, Erdogan Memili. Metabolomic markers of fertility in bull seminal plasma. PLOS ONE. https://doi.org/10.1371/journal.pone.0195279.
- Owen, MPT, EN Ferjak, CA Cavinder, KJ McCarty, KC Yankey, CG Hart, DD Burnett, TTN Dinh, CO Lemley. Effects of body condition score (BCS) on steroid- and eicosanoid- metabolizing enzyme activity in various mare tissues during winter anoestrus. Reproduction in Domestic Animals. 2018;53:296–303. https://doi.org/10.1111/ rda.13104.

2018 Refereed Publications

- Park, Seong B., Scott T. Willard, Christy S. Steadman, Atul A. Chaudhari, Shreekumar R. Pillai, Shree R. Singh, Peter L. Ryan and Jean M. Feugang. Proteomic analysis of antimicrobial effects of pegylated silver coated carbon nanotubes in Salmonella enterica serovar Typhimurium. Journal of Nanobiotechnology. (2018) 16:31 https://doi.org/10.1186/s12951-018-0355-0.
- Cavinder, C. A., PAS, E. N. Ferjak, C. A. Phillips, D. D. Burnett, and T. T. N. Dinh. REVIEW: The importance of overall body fat content in horses. *The Professional Animal Scientist* 34:125–132. https://doi.org/10.15232/pas.2017-01708.
- Sukumaran, Anuraj T., Alexander J. Holtcamp, April K. Englishbey, Yan L. Campbell, Taejo Kim, Mark W. Schilling, Thu T.N. Dinh. Effect of deboning time on the growth of Salmonella, E. coli, aerobic, and lactic acid bacteria during beef sausage processing and storage. Meat Science 139 (2018) 49–55.
- Wang, T., M. A. Crenshaw, N. Regmi, B. J. Rude, M. S. Hasan, A. T. Sukumaran, T. Dinh, and S. F. Liao. 2018. Effects of dietary lysine level on the content and fatty acid composition of the intramuscular fat in late-stage finishing pigs. Canadian Journal of Animal Science. 98: 241-249. DOI: dx.doi.org/10.1139/cjas-2017-0083.
- Owen, M.P.T., K.J. McCarty, C.G. Hart, C.S. Steadman, C.O. Lemley. Endometrial blood perfusion as assessed using a novel laser Doppler technique in Angus cows. Animal Reproduction Science. 190 (2018) 119-126. https:// doi.org/10.1016/j.anireprosci.2018.01.015.
- Feugang, Jean M., Shengfa F. Liao, Scott T. Willard, and Peter L. Ryan. In-depth proteomic analysis of boar spermatozoa through shotgun and gel-based methods. BMC Genomics. (2018) 19:62 DOI 10.1186/s12864-018-4442-2.
- Liao, Shengfa F., Naresh Regmi, Guoyao Wu. Homeostatic Regulation of Plasma Amino Acid Concentrations. Frontiers in Bioscience, Landmark. 23, 640-655, January 1, 2018.
- Feugang, Jean M., Shengfa F. Liao, Scott T. Willard, and Peter L. Ryan. In-depth proteomic analysis of boar spermatozoa through shotgun and gel-based methods. BMC Genomics. (2018) 19:62 DOI 10.1186/s12864-018-4442-2.
- Liao, Shengfa F., Naresh Regmi, Guoyao Wu. Homeostatic Regulation of Plasma Amino Acid Concentrations. Frontiers in Bioscience, Landmark. 23, 640-655, January 1, 2018.

2018 Book Chapters:

Jain, Sapna, Seong B. Park, Shreekmar R. Pillai, Peter L. Ryan, Scott T. Willard and Jean M. Feugang. Applications of Fluorescent Quantum Dots for Reproductive Medicine and Disease Detection. In Unraveling the Safety Profile of Nanoscale Particles and Materials—From Biomedical to Environmental Applications, Chapter 6, pp. 133-148, http://dx.doi.org/10.5772/intechopen.72978.