

MISSISSIPPI STATE UNIVERSITY

ANIMAL & DAIRY SCIENCES

Mississippi State
FAIR 2018



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► 2018 MISSISSIPPI STATE FAIR WINNERS

The 2018 Mississippi State Fair junior livestock shows were outstanding and a showcase for the junior livestock program in Mississippi. Extension agents, FFA advisors, leaders, parents and exhibitors are to be commended on their fine cooperation and dedicated work put into this event to make it successful.

Number of Exhibits at the Mississippi State Fair (2009-2018)

Contest	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Beef Breeding	400	442	457	453	490	542	556	546	602	578
Commercial Beef Heifers	136	156	143	158	155	149	158	190	163	177
Steers	70	76	76	89	99	69	59	77	74	70
Lambs	199	204	181	142	108	113	120	114	102	92
Wether Dams	-----	-----	-----	-----	-----	-----	-----	-----	-----	23
Swine	40	30	34	31	29	20	42	37	39	24
Market Goats	207	198	210	177	142	165	129	140	102	93
Commercial Meat Goat Does	142	164	203	198	195	177	149	174	140	138
Dairy Goats	101	113	85	90	60	82	93	121	131	107
Purebred Dairy Animals	142	128	119	104	123	72	122	102	103	130
Commercial Dairy Heifers	18	12	22	35	31	34	20	13	25	26
TOTAL ANIMALS EXHIBITED	1455	1523	1530	1477	1432	1423	1448	1514	1481	1458
Pretty Cow Contest	14	13	21	21	18	17	7	8	10	24
Sweetheart/Princess Contests	24	28	30	23	18	18	32	28	18	15
Jr. Dairy Cattle Quiz Bowl	6	8	10	14	6	4	6	6	4	0
GRAND TOTAL PARTICIPATION	1499	1572	1591	1535	1474	1462	1493	1556	1513	1497

NUMBER OF YOUTH AND LIVESTOCK AT THE MISSISSIPPI STATE FAIR

Show	4-H Youth	4-H Animals	FFA Youth	FFA Animals	Total Youth	Total Animals
Beef Breeding	246	468	69	110	315	578
Commercial Beef Heifers	119	122	51	55	170	177
Steers	43	44	25	26	68	70
Lambs	42	75	11	17	53	92
Wether Dams	20	18	4	5	24	23
Hogs	24	24	0	0	24	24
Dairy Cattle	47	111	6	19	53	130
Commercial Dairy Heifers	19	19	5	7	24	26
Market Goats	48	63	24	30	72	93
Commercial Meat Goat Does	59	79	41	59	100	138
Dairy Goats	35	104	2	3	37	107
TOTALS	702	1127	238	331	940	1458

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Jeff L. Heman

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BEEF BREEDING WINNERS

<u>AWARD</u>	<u>EXHIBITOR</u>	<u>BREED</u>	<u>COUNTY</u>
SUPREME CHAMPION HEIFER	Dalton Cooper	Hereford	Union 4-H
RESERVE SUPREME CHAMPION HEIFER	Hannah Buse	Percentage Simmental	Jones 4-H
BEST 5 HEAD – BEEF HEIFER	Amelia Buckley	Beefmaster	Covington 4-H
BEST 5 HEAD – BEEF HEIFER	Dalton Cooper	Angus	Union 4-H
BEST 5 HEAD – BEEF HEIFER	Owen Tolar	Red Angus	Smith 4-H

<u>AWARD</u>	<u>EXHIBITOR</u>	<u>BREED</u>	<u>COUNTY</u>
SUPREME CHAMPION BULL	Anna Beth Blackwell	Percentage Simmental	Raleigh FFA
RESERVE SUPREME CHAMPION BULL	Rylie/Stran Melancon	Hereford	Lincoln 4-H
BEST 5 HEAD – BEEF BULL	Jenna Fullington	OB - Brahman	Hinds 4-H
BEST 5 HEAD – BEEF BULL	Emma Marie Malley	Angus	Pearl River 4-H
BEST 5 HEAD – BEEF BULL	Tyler Diffey	Simmental	Holmes 4-H

COMMERCIAL BEEF HEIFER WINNERS

SUPREME CHAMPION COMMERCIAL BEEF HEIFER	Rylie/Stran Melancon	Lincoln 4-H
RESERVE SUPREME CHAMPION COMMERCIAL BEEF HEIFER	Kylie Roberts	Smith 4-H

MARKET STEER WINNERS

Grand Champion Prospect Steer	Faith/Jake Sullivan	Mize FFA
Res Champion Prospect Steer	Anna Beth/Aimry Blackwell	Raleigh FFA
Grand Champion Progress Steer	Ruslan/Julia Saucier	Forrest 4-H
Reserve Champion Progress Steer	Jenna/Wyatt Fullington	Hinds 4-H

MARKET LAMB WINNERS

Grand Champion	Jacob/Joshua Bell	Hinds 4-H
Reserve Grand Champion	Avery Wood	Montgomery 4-H
State Bred Grand Champion	Jacob/Joshua Bell	Hinds 4-H
State Bred Res. Grand Champion	Dane/Vivien Stevens	Rankin 4-H

WETHER DAM WINNERS

Grand Champion	Jacob/Joshua Bell	Hinds 4-H
Reserve Grand Champion	Jorja/Roxie Roberson	Union 4-H
State Bred Grand Champion	Jacob/Joshua Bell	Hinds 4-H
State Bred Res. Grand Champion	Elizabeth Grace Nichols	Pontotoc 4-H

MARKET SWINE WINNERS

Grand Champion	Jaylynn/Breelynn/Layton/Payton Cloy	Lincoln 4-H
Res. Grand Champion	Savana/Ada/Millie Ashley	Wilkinson 4-H
MS Bred Grand Champion	Jaylynn/Breelynn/Layton/Payton Cloy	Lincoln 4-H
MS Bred Reserve Grand Champion	Savana/Ada/Millie Ashley	Wilkinson 4-H



DAIRY CATTLE WINNERS

HOLSTEIN

Grand Champion	Lee Taylor	Prentiss 4-H
Reserve Grand Champion	Madi Ard	Lincoln 4-H

JERSEY

Grand Champion	Lauren Bryant	Tippah 4-H
Reserve Grand Champion	Carl Taylor	Prentiss 4-H

OTHER PUREBREDS

Grand Champion	Kaleigh Robinson	Lincoln 4-H
Reserve Grand Champion	Mallory Ard	Lincoln 4-H

JUNIOR COMMERCIAL DAIRY HEIFER SHOW

Champion Commercial Dairy Heifer	Hunter Taylor	Independence FFA/Tate 4-H
Reserve Champion Commercial Dairy Heifer	John-Rivers/Ramsey Brown	Lincoln 4-H

MARKET GOAT WINNERS

Grand Champion	Cassidy Turbville	Madison 4-H
Reserve Grand Champion	Shae/Trevor Philips	Lee 4-H
MS Bred Grand Champion	Cassidy Turbville	Madison 4-H
Reserve MS Bred Grand Champion	Shae/Trevor Philips	Lee 4-H

COMMERCIAL MEAT GOAT DOE WINNERS

Grand Champion	Cassidy Turbville	Madison 4-H
Reserve Grand Champion	Cassidy Turbville	Madison 4-H
MS Bred Grand Champion	Adam/Brady Cornelius	Nettleton FFA
Reserve MS Bred Grand Champion	Mikayla/Conner Shelton	Calhoun 4-H

DAIRY GOAT WINNERS

Best in Show Senior Doe	Kaitlyn Anne Skelton	Hinds 4-H
Reserve Best in Show Senior Doe	Mason Lane Williams	Hinds 4-H
Best in Show Junior Doe	Amanda Johnson	Lee 4-H
Reserve Best in Show Junior Doe	Amanda Johnson	Lee 4-H

For a more extensive list of winners from the 2018 Mississippi State Fair, access the full version of the October 2018 Animal Lines Newsletter at <http://extension.msstate.edu/newsletters/4h-animal-lines-newsletters>.

ANIMAL AGRICULTURE IN CHINA

A Study Abroad Course:

- GA 4710/6710 Study Tour - Animal Agriculture in China (3 credit hours)
- Stationed at Anhui Agricultural University in Hefei, Anhui, China, the world's 2nd-largest economy, for 3 weeks, students will learn a great deal of China's animal agricultural practices, animal product consumption patterns, and its veterinary service
- To experience Chinese culture, cuisine, language, and its several very attractive sights



Application Deadline

March 8, 2019

Program Dates

May 8 – 29, 2019

Eligibility/Prerequisites

All undergraduate and graduate students with at least a 2.5 GPA are encouraged to participate



Contact:

Dr. Liao: s.liao@msstate.edu

Price: \$2,290

March 8, 2019 – Application fee: \$150

March 22, 2019 – Program fee: \$2,140



UPCOMING EXTENSION EVENTS

Beef Extension - Dr. Brandi Karisch & Cobie Rutherford

- November 12-13: Cattlemen's College, West Point and Hattiesburg

Phone: (662) 325-7465 or brandi.karisch@msstate.edu (662) 325-4344 or cobie.rutherford@msstate.edu

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

Dairy Events - 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

- November 12-14: National 4-H Skill-a-thon Contest, Louisville, KY

Phone: (662) 325-2424

Email: dj230@msstate.edu [www.http://extension.msstate.edu/4-h](http://extension.msstate.edu/4-h)

Equine Events - Dr. Clay Cavinder

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>

2018 Refereed Publications

- KAYA, Abdullah, Erdoğan GÜNEŞ, **Erdoğan MEMİLİ**. Application of reproductive biotechnologies for sustainable production of livestock in Turkey. *Turkish Journal of Veterinary and Animal Sciences*. (2018) 42: doi:10.3906/vet-1706-66/
- Moura. Arlindo Alencar, Ana Luiza Cazaux Velho, **Erdogan Memili**, Antônia Moemia Rodrigues Portela, Arabela Guedes Viana, Maria Júlia Barbosa Bezerra, Fábio Róger Vasconcelos. Seminal plasma proteins and metabolites: effects on sperm function and potential as fertility markers. *Proceedings of the 10th International Ruminant Reproduction Symposium (IRRS 2018)*; Foz do Iguaçu, PR, Brazil, September 16th to 20th, 2018.
- Viana. A. G. A. , A. M. A. Martins, A. H. Pontes, W. Fontes, M. S. Castro, C. A. O. Ricart, M. V. Sousa, A. Kaya, E. Topper, **E. Memili** & A. A. Moura. Proteomic landscape of seminal plasma associated with dairy bull fertility. *Scientific Reports*. (2018) 8:16323 | DOI:10.1038/s41598-018-34152-w
- Park, Seong B., **Shecoya B. White**, Christy S. Steadman, **Clay A. Cavinder**, **Scott T. Willard**, **Peter L. Ryan**, and **Jean M. Feugang**. Real-Time Bioluminescence Analysis of Escherichia coli O157:H7 Survival on Livestock Meats Stored Fresh, Cold, or Frozen. *Journal of Food Protection*, Vol. 81, No. 11, 2018, Pages 1906–1912. doi:10.4315/0362-028X.JFP-18-207.
- Dinh. T.T.N.**, J.F. Legako, M.F. Miller, J.C. Brooks. Effects of USDA quality grade and cooking on water-soluble precursors of beef flavor. *Meat Science*. 146 (2018) 122-130. <https://doi.org/10.1016/j.meatsci.2018.08.008>.
- Littlejohn, Brittni P., David G. Riley, Thomas H. Welsh, Jr, Ronald D. Randel, **Scott T. Willard**, and **Rhonda C. Vann**. Use of random regression to estimate genetic parameters of temperament across an age continuum in a crossbred cattle population. *Journal of Animal Science*. 2018. 96:2607–2621. doi: 10.1093/jas/sky180.
- Vu, P. T. T., A. J. Holtcamp, A. T. Sukumaran, M. V. V. Le, D. H. Nguyen, & **T. T. N. Dinh**. (2018). Effects of market type and time of purchase on oxidative status and descriptive off-odors and off-flavors of beef in Vietnam. *Meat science*, 145, 399-406. <https://doi.org/10.1016/j.meatsci.2018.07.018>.
- Ishak, G. M. , S. T. Bashir, G. A. Dutra, G. D. A. Gastal, M. O. Gastal, **C. A. Cavinder**, **J. M. Feugang**, and E. L. Gastal. In vivo antral follicle wall biopsy: a new research technique to study ovarian function at the cellular and molecular levels. *Reproductive Biology and Endocrinology* (2018) 16:71. <https://doi.org/10.1186/s12958-018-0380-8>.
- Humphrey, R. M., Z. Yang, M. S. Hasan, **M. A. Crenshaw**, **D. D. Burnett**, J. K. Htoo and **S. F. Liao**. The compensatorily -gained pigs resulted from feeding a methionine-deficient diet had more fat and less lean body mass. *Journal of Applied Animal Nutrition*, Vol. 6; e6; page 1 of 7. <https://doi.org/10.1017/JAN.2018.5>.
- Griffin, Courtney M. , BS; Jenna A. Scott, BS; **Brandi B. Karisch, MS, PhD**; Amelia R. Woolums, DVM, MVSc, PhD, DACVIM, DACVM; **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>.

2018 Refereed Publications

- 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/j.vetmic.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>.
- 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>.

2018 Refereed Publications

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>.