

Animal and Dairy Sciences

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MISSISSIPPI STATE
UNIVERSITY™

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4-H HORSE SHOW PREPARATION CLINIC

Dr. Clay Cavinder was the clinician at a 4-H horse show preparation clinic in Tippah County.

Tori Stroupe and Brandon Albertson were the Extension agents who organized the clinic.

They had 12 youth participate along with 15 adults.



SPEAKING AT THE FEED ADDITIVES AMERICAS 2019

Dr. Shengfa Liao was invited by Feedinfo News Service (London, UK), a division of AgriBriefing (<https://www.agribriefing.com/>), as a speaker for the Feed Additives Americas 2019 that was held at Miami, FL on November 13-15, 2019 (<https://www.feedadditives-americas.com/speakers/>).

The title of Dr. Liao's presentation was "Reducing Protein Content for Optimal Diet Formulation: Growing Pigs." Feedinfo News Service is the world's leading provider of business and financial information for global corporations serving the agribusiness, feed additives and biotechnology sectors, with special insight into the animal nutrition and animal health industries. <https://marketing.feedinfo.com/>





4-H NATIONAL SKILLATHON CONTEST

Team Mississippi placed 8th Overall at the 2019 National 4-H Livestock Skillathon Contest held during the North American International Livestock Exposition in Louisville, KY! There were 21 teams in competition this year from across the United States.

Congratulations to team members Jace Welborn, Katie Norris, Savana Ashley, Mary Beth Ainsworth and Jacob Johnson! As a team, Mississippi placed 6th in the Identification Phase, 9th in the Evaluation Phase and 6th in the Quality Assurance Phase.

Mary Beth Ainsworth was the 6th Overall High Point Individual and placed 11th in the Identification Phase and 8th in the Quality Assurance Phase!

Thanks to the many people who provided livestock knowledge, experiences and support to this team since early March as they prepared for this competition, especially Heather Jennings and Jennifer Williams.

*Great job by all and
I look forward to working
with the 2020 team.
Dean Jousan*

2019 MISSISSIPPI STATE FAIR

PARTICIPATION RESULTS

The 2019 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 (2010-2019)

Contest	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Beef Breeding	442	457	453	490	542	556	546	602	578	545
Commercial Beef Heifers	156	143	158	155	149	158	190	163	177	134
Steers	76	76	89	99	69	59	77	74	70	79
Lambs	204	181	142	108	113	120	114	102	92	71
Wether Dams	----	----	----	----	----	----	----	----	23	30
Swine	30	34	31	29	20	42	37	39	24	28
Market Goats	198	210	177	142	165	129	140	102	93	110
Commercial Meat Goat Does	164	203	198	195	177	149	174	140	138	147
Dairy Goats	113	85	90	60	82	93	121	131	107	119
Purebred Dairy Animals	128	119	104	123	72	122	102	103	130	107
Commercial Dairy Heifers	12	22	35	31	34	20	13	25	26	25
TOTAL ANIMALS EXHIBITED	1523	1530	1477	1432	1423	1448	1514	1481	1458	1395
Pretty Cow Contest	13	21	21	18	17	7	8	10	24	25
Sweetheart/Princess Contests	28	30	23	18	18	32	28	18	15	17
Jr. Dairy Cattle Quiz Bowl	8	10	14	6	4	6	6	4	0	0
GRAND TOTAL PARTICIPATION	1572	1591	1535	1474	1462	1493	1556	1513	1497	1437

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	230	414	76	131	306	545
Commercial Beef Heifers	88	91	39	43	127	134
Steers	53	52	29	27	82	79
Lambs	40	62	11	9	51	71
Wether Dams	14	20	10	10	24	30
Hogs	24	26	2	2	26	28
Dairy Cattle	40	98	5	9	45	107
Commercial Dairy Heifers	17	15	7	10	24	25
Market Goats	59	82	23	28	82	110
Commercial Meat Goat Does	64	94	33	53	97	147
Dairy Goats	41	105	6	14	47	119
TOTALS	670	1059	241	336	911	1395



COLLEGE OF
**AGRICULTURE
& LIFE SCIENCES**

Art Exhibition

exploring the farm and livestock

DECEMBER 6, 2019

Cullis Wade Depot Gallery

Reception: 5:30 p.m. - 7:00 p.m.

Award Ceremony: 6:30 p.m.

on view from December 5-6, 2019

SPONSORED BY:



2019 Refereed Publications

- Kutchy, Naseer A., Erika S.B. Menezes, Muhammet R. Ugur, Asma Ul Husna, Hazem ElDebaky, Holly C. Evans, Emily Beaty, Fagner C. Santos, Wei Tan, Robert W. Wills, Einko Topper, Abdullah Kaya, Arlindo A. Moura, **Erdogan Memili**. Sperm Cellular and nuclear dynamics associated with bull fertility. *Animal Reproduction Science*. 211 (2019) 106203. <https://doi.org/10.1016/j.anireprosci.2019.106203>.
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- Ward, S. H., Jenna M. Guinn, D. T. Nolan, P. D. Krawczel, C. S. Petersson-Wolfe, G. M. Pighetti, **A. E. Stone**, J. M. Bewley, and Joao H. C. Costa. Comparing dairy farm milk yield and components, somatic cell score, and reproductive performance among Unites States regions using summer to winter ratios. *Journal of Dairy Science*, 102. <https://doi.org/10.3168/jds.2018-16170>.
- Evans, Holly, **Dean Jousan**, **Erdogan Memili**, Leigh Beckman, **Molly Nicodemus**. Life Skill Development and Financial Impact Associated with a Youth Livestock Sales Program. *Journal of Youth Development*. Vol. 14 Issue 3 DOI 10.5195/jyd.2019.720. <http://jyd.pitt.edu>.
- E. B. Menezes, A. L. C. Velho, F. Santos, **T. Dinh**, A. Kaya, E. Topper, A. A. Moura and **E. Memili**. Uncovering sperm metabolome to discover biomarkers for bull fertility. *BMC Genomics*. (2019) 20:714 <https://doi.org/10.1186/s12864-019-6074-6>.
- Ishak, G.M., S.B. Park, G.A. Dutra, G.D.A. Gastal, M.E. Elcombe, M.O. Gastal, **J.M. Feugang**, E.L. Gastal. Deficiency in proliferative, angiogenic, and LH receptors in the follicle wall: implications of season toward the anovulatory condition. *Domestic Animal Endocrinology* 70 (2020) 106382. <https://doi.org/10.1016/j.domaniend.2019.07.010>.
- Ishak, Ghassan M. A., Gabriel A. Dutra, Gustavo D. A. Gastal, Melba O. Gastal, **Jean M. Feugang**, Eduardo L. Gastal. Transition to the ovulatory season in mares: An investigation of antral follicle receptor gene expression in vivo. *Journal of Molecular Reproduction and Development*. 2019;1–14. DOI: 10.1002/mrd.23277.
- Ugur, Muhammet Rasit, Amal Saber Abdelrahman, Holly C. Evans, Alicia A. Gilmore, Mustafa Hitit, Raden Iis Arifiantin, Bambang Purwantara, Abdullah Kaya and **Erdogan Memili**. Advances in Cryopreservation of Bull Sperm. *Frontiers in Veterinary Science*, 6:268. doi: 10.3389/fvets.2019.00268.
- Hasan, M Shamimul, **Jean M Feugang**, and **Shengfa F Liao**. A Nutrigenomics Approach Using RNA Sequencing Technology to Study Nutrient–Gene Interactions in Agricultural Animals. *Current Developments in Nutrition*, 2019;3:nzz082.
- Ugur, Muhammet Rasit, Naseer Ahmad Kutchy, Erika Bezerra de Menezes, Asma Ul-Husna, Bethany Peyton Haynes, Alper Uzun, Abdullah Kaya, Einko Topper, Arlindo Moura and **Erdogan Memili**. Retained Acetylated Histone Four in Bull Sperm Associated With Fertility. *Frontiers in Veterinary Science*, July 2019 | Volume 6 | Article 223, doi: 10.3389/fvets.2019.00223.

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- Feugang, Jean M.**, Carley E. Rhoads, Popoola A. Mustapha, Steve Tardif, John J. Parrish, **Scott T. Willard**, **Peter L. Ryan**. Treatment of boar sperm with nanoparticles for improved fertility. *Theriogenology*, 137 (2019) 75-81, <https://doi.org/10.1016/j.theriogenology.2019.05.040>.
- Chilling, M. W. S, A. J. Pham-Mondala, N. Dhowlaghar, Y. L. Campbell, **T. T. Dinh**, A.C. Tolentino, J. B. Williams, Y. L. Xiong. Changes in the Volatile Composition of Fresh Pork Sausage with Natural Antioxidants During Long-Term Frozen Storage. *Meat Science and Muscle Biology*, 3(1):194–209 (2019), doi:10.22175/mmb2019.03.0007.
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- Hatcher, Jillian, **Clay Cavinder**, Courtney P. Heaton, Lesli Figueredo, Alex Holtcamp and **Thu Dinh**. Physiological and Physical Benefits of Interactions with Horses. *Journal of Extension*, 2019, Vol 57, Number 3, Article # 3RIB6.
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- Ferguson, Treena L. , **Brian J. Rude**, and D. Tommy King. American White Pelican (*Pelecanus erythrorhynchos*) Growth, Nutrition, and Immunology. *BioOne Complete*. Waterbirds, 42(1) : 61-69. URL: <https://doi.org/10.1675/063.042.0107>.
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- Velho, Ana, Hongfeng Wang, Leslie Koenig, Kamilah E. Grant, Erika S. Menezes, Abdullah Kaya, Arlindo Moura, **Erdogan Memili**. Expression dynamics of integrin subunit beta 5 in bovine gametes and embryos imply functions in male fertility and early embryonic development. *Andrologia*. 2019;00:e13305. <https://doi.org/10.1111/and.13305>
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