

Animal & Dairy Sciences Newsletter Vol. 88



MISSISSIPPI STATE UNIVERSITY

Features

NOXUBEE HIGH SCHOOL TOUR - 2

CONGRATS RHIAN - 3

FRIGOBOM VISIT IN BRAZIL - 4

MAGAZINE SPOTLIGHT - 5

BRAZILIAN SNAPCHAT UPDATES - 6

**MSU PROFESSORSHIP FOCUSES ON
BEEF CATTLE PRODUCTION IN THE
SOUTHEAST - 7**

WELCOME NEW FOAL, NOLAN - 8

UPCOMING EVENTS - 9

NOXUBEE HIGH SCHOOL TOURS FARM AND DAIRY



20 students and 4 teachers from Noxubee High School visited Thursday, May 10th to learn more about animal agriculture and the many career opportunities available for students.

Jessica Graves provided the group with a tour of the South Farm and Dairy, where students and teachers alike had questions about the daily operations of each unit.

At the dairy, the group was able to interact with the dairy cows in the free-stall barn, which seemed to be the highlight of their trip!

CONGRATS, RHIAN ON WINNING THE GOLD MEDAL!



Rhian Price-Weimer (middle)

Congratulations to Dr. Brian Rude's Graduate student, Rhian Price-Weimer!

Rhian Price-Weimer added a Conference Title, to go with her 2015 NCAA Crown, in the 1500m run at the 2018 SEC Track and Field Outdoor Championship

MSU COLLEGIATE CATTLEMEN VISIT FRIGOBOM



A group of students and teachers from our university visited FrigoBom to make a technical visit and know a little more of their procedures.

FrigoBom, in Matto Grosso, Brazil, is a farm to table beef company. They are known for "Feeding Generations."

MAGAZINE SPOTLIGHT



SO excited to have the MSU Extension Apprenticeship Program & 2017 students featured in the current MSU DAFVM magazine, Landmarks!

And the 2018 cohort is starting in a few days!!! Check out the full article - <https://bit.ly/2FA1HPO>

BRAZILIAN SNAPCHAT UPDATES!

Be sure to follow us on Snapchat to keep up with what we are doing in Brazil!



MSU PROFESSORSHIP FOCUSES ON BEEF CATTLE PRODUCTION IN THE SOUTHEAST

A new Mississippi State University professorship will focus on advancing beef cattle production in the state and the Southeast. Brandi Karisch, an associate extension and research professor in the Department of Animal and Dairy Sciences, is the inaugural Milton Sundbeck Endowed Professor in Southeastern Cattle Management.

Established by Milton Sundbeck, founder and owner of West Point-based Southern Ionics Incorporated, the new endowment in the university's College of Agriculture and Life Sciences will facilitate getting research into the hands of producers.

Sundbeck is a beef cattle producer and owner of Town Creek Farm, a large beef cattle operation. The farm is dedicated to producing registered Brangus and Ultrablack cattle, hay and wildlife management.

George Hopper, dean of the College of Agriculture and Life Sciences and director of the Mississippi Agricultural and Forestry Experiment Station, spoke to the importance of the endowment.



Photo By: David Ammon. Pictured: Brandi Karisch, Milton Sundbeck, John Blanton Jr.

"We are grateful to Milton Sundbeck for establishing the first endowed professorship in the Department of Animal and Dairy Sciences," Hopper said. "This gift will ensure that research and extension efforts in beef cattle production will address the needs of small producers to enhance their profitability."

John Blanton Jr., animal and dairy sciences professor and department head, said the gift will further advance the department's mission.

"The Department of Animal and Dairy Sciences is dedicated to developing science-based solutions to issues facing producers. The Milton Sundbeck Endowed Professorship in Southeastern Beef Cattle Management enables the department to advance this mission in beef cattle management," he said.

Blanton said that in selecting a scientist for the professorship, Karisch proved the perfect fit.

"We needed someone with a proven track record of research and outreach in forage-based beef cattle production with experience solving problems impacting producers in the Southeastern United States. Also, this person needed to have demonstrated success in grantsmanship, as well as having meaningful impacts on producers. Dr. Karisch met or exceeded all of these requirements," Blanton said.

Mississippi has 930,000 head of cattle across nearly 16,000 farms, and the combination of small farms, grass-based production systems and warm temperatures many times create challenges for producers in Mississippi and across the Southeast.

Karisch, a scientist in the university's Mississippi Agricultural and Forestry Experiment Station, addresses these concerns by researching techniques that producers can apply to their own practices. In addition, Karisch serves as an extension beef specialist, giving her the ability to translate science into best management practices that can be implemented on the farm.

"Smaller producers may not always have the means to put certain practices into place, and a goal is to help them find ways to better use their time and efforts. One of our current research initiatives is examining whether altering when vaccines are given can impact the health of calves. Producers understand the importance of vaccination, so this is a practice that can be applied by all producers to improve the health reputation of southeastern cattle," Karisch said.

One of her most common recommendations to producers is to use cattle breeds that are well suited to warmer climates. "Breed for your environment: if you live in a warm climate, select cattle that have shorter coats and can cope well with the heat."

Karisch regularly communicates research findings to producers in the form of programs and short courses, including an upcoming program aimed at female beef cattle farmers, highlighting handling techniques and other essential skills.

During extension programs that highlight new production techniques, Karisch also takes the time to listen to the producers' concerns and challenges, which then drives future research and extension efforts. "Our goal is to help improve the producers' bottom line," Karisch stated.

Karisch earned a bachelor's degree from Louisiana State University and master's and doctoral degrees from Texas A&M University.

The Department of Animal and Dairy Sciences offers a bachelor's degree with concentrations in business and industry, production management and science/veterinary science. Master's and doctoral degrees also are offered in agriculture and agricultural sciences. The department includes faculty members in the College of Agriculture and Life Sciences, the Mississippi Agricultural and Forestry Experiment Station and the MSU Extension Service. Learn more about the Department of Animal and Dairy Sciences at www.ads.msstate.edu.

WELCOME OUR NEWEST FOAL, NOLAN!



Mississippi State University Horse Unit

2 hrs · 🌐



Welcome to the world Nolan! A Winning Invitation x Don't Flash Me born this morning.



👍 Like

💬 Comment

➦ Share



The ADS Horse Unit welcomed a new member to the family, Nolan!

Bred from A Winning Invitation and Don't Flash Me

**BEEF EXTENSION - Dr. Brandi Karisch and
Cobie Rutherford**



**June 20-23 Beef Improvement Federation
Meetings, Loveland, CO**

**July 13 Deep South Stocker Conference
Greenboro, AL**

EQUINE EVENTS - Dr. Clay Cavinder



**June 1-3 Youth Horse Judging Camp,
MSU, Starkville**

4-H EVENTS - Dr. Dean Jousan



**May 19 4-H Livestock Judging Contest,
MSU South Farm**

**June 7-8 District 4-H Horse Show and
Judging Contest in Jackson,
Tunica, Gulfport, Verona**

DAIRY EXTENSION - Dr. Amanda Stone



**October 27-28 Breakfast on the Farm,
Bearden Dairy, Starkville**

UPCOMING EVENTS

2018 Refereed Publications

- 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, Elnko 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>.
- 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](https://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.

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>.