

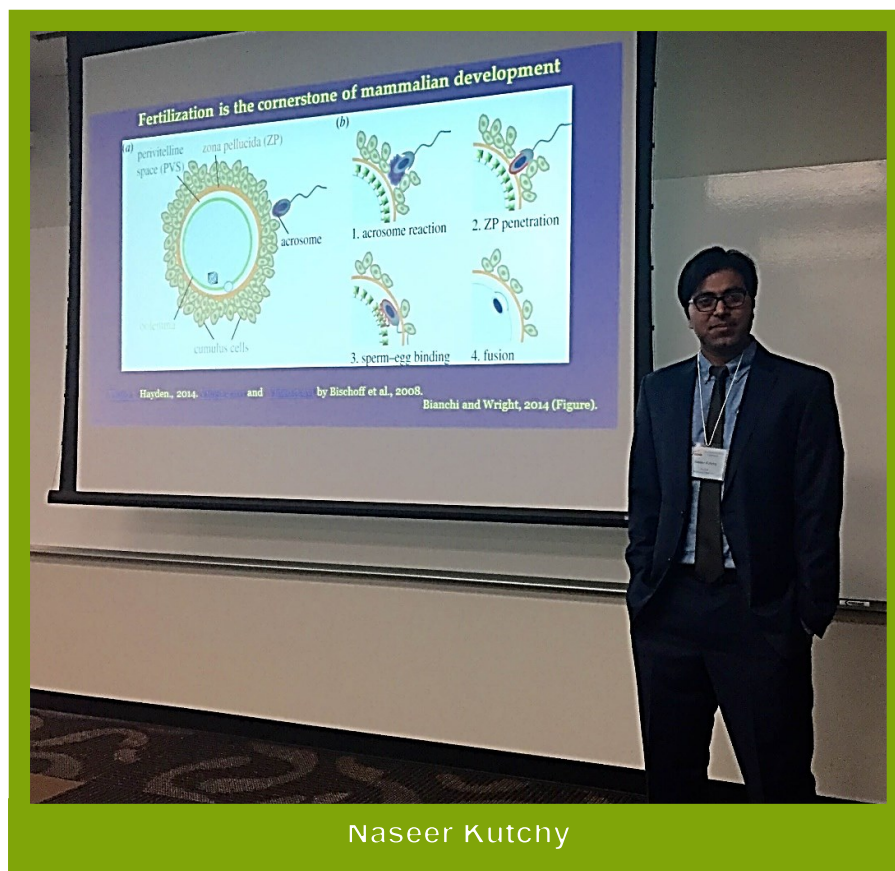


• Teaching • Research • Extension • Departmental Activities

Teaching

Naseer A. Kutchy received conference fellowship (award for conference registration, travel and lodging) for Midsouth Computational Biology and Bioinformatics Society's 13th Annual Meeting which was held in Memphis, TN, March 3-5, 2016. At the Conference, Naseer gave an oral platform presentation "Comparative Functional Genomics of Mammalian Sperm *th2b*, Regulator of Sperm Chromatin Dynamics and Male Fertility".

Naseer is a Ph.D. student majoring in Agriculture/Animal and Dairy Sciences and pursuing his dissertation research "Sperm genetic and epigenetic mechanisms regulating bull fertility" in Dr. Memili's laboratory.



Teaching

Capstone students, under the guidance of **Dr. Brandi Karisch** and **Mrs. Jessica Graves**, traveled to Oktibbeha, Clay, Lowndes, and Webster counties to present their prop boxes this week to 4-H Cloverbud and Kindergarten students. The students were assigned an animal species (beef dairy, swine, sheep/

goat) and then tasked with creating a prop box of activities targeted toward children ages 5-7. As you can see from the pictures from the Webster county presentation, the students and kids enjoyed the presentations, and they were well received.



Capstone and Webster county students

Research

Mrs. **Caitlin Hart** is a Research Associate I on the USDA's Agricultural Research Service, Biophotonics Initiative.

Caitlin transferred to Mississippi State University after graduating from Jones County Junior College with her Associate of Arts degree. After completing her Bachelor of Science degree in Animal and Dairy Sciences, she decided to pursue a Master of Science degree under the guidance of **Dr. Caleb Lemley**. She enjoyed working with Dr. Lemley so much that she decided to apply for the research associate position that she currently holds.

Caitlin works directly with Dr. Lemley's graduate and undergraduate students, as well as other graduate students within the department of Animal and Dairy Sciences. In addition, they are collaborating with principle investigators at North Dakota State University, South Dakota State University, Oklahoma

State University, University of Nebraska, University of Connecticut, and New Mexico State University.

Caitlin's thesis research involved characterizing hepatic steroid metabolizing enzyme activity in cattle during early, mid, and late gestation. She has also co-authored five refereed journal publications, two of which were based on Dr. Lemley's continued research in melatonin supplementation and its effects on uterine artery blood flow and fetal programming.

Caitlin is currently assisting on research concerning extrahepatic steroid inactivating enzyme activity and will assist on a therapeutic supplementation study beginning this summer.

Caitlin's favorite part of her job is being involved in every aspect of research: from applying treatments and collecting data on the farm, to performing assays in the laboratory, to preparing manuscripts for publication.

Looking at the positive global impact that their research will have is what motivates her to

strive for excellence. Her future goals include perfecting her current techniques as well as learning and mastering new research methods.

Caitlin is originally from Hattiesburg, MS. She has been married to her husband Seth for seven years and has a seven month old son, Jensen. She has two dogs, Ringo and Sam, and a cat, Landon. Her hobbies include spending time with friends and family, reading, crafting, and gardening.



Caitlin Hart

Research



Graduate and undergraduate students clean and restore the pristine working conditions of

Lab 4033

Extension

The Mississippi Beef Cattle Improvement Association wrapped up its Spring Bull Sale on March 3, 2016 in conjunction with the Hinds Community College Bull Test Sale.

The MBCIA Spring Sale featured 14 performance-backed bulls from breeders across the state. The top-selling lot was GCC Mr. Gunman 401P, a Charolais bull that sold for \$4,700. GCC Mr. Gunman 401P was consigned by Good Cattle Company of Macon, Mississippi.

Other breeders marketing cattle in the MBCIA sale included Barry Farms, Gary Powell, Good Cattle Company, Ingram Livestock, MBK Cattle and Bourg Farms, and MSU Beef Unit. Sale receipts on 14 bulls totaled \$43,100 for a sale average price of \$2,693.75.

	All breeds	Angus	Charolais	Simmental	SimAngus
Number of bulls sold	16	9	1	2	4
Gross receipts	\$43,100	\$25,400	\$4,700	\$4,600	\$8,400
Average price	\$2,693.75	\$2,822	\$4,700	\$2,300	\$2,100
High selling lot price	\$4,700	\$3,700	\$4,700	\$2,400	\$2,300



Extension

4-H Events:

- April 8th - **4-H Dairy Judging Contest** at the MSU Bearden Dairy.
- May 21st - **4-H Livestock Judging Contest** at the MSU Horse Park.
- For more events, go to [Mississippi 4-H Calendar of Events](#) or contact **Dean Jousan** dj230@msstate.edu

Beef Extension Events:

- March 15, 2016 - **BEEF 101**, Beef from the Rail to the Plate, Ballew Hall, Mississippi State, MS

For more events go to [Beef Cattle Calendar of Events](#) or contact **Brandi Karisch** brandi.karisch@msstate.edu or **Cobie Rutherford** cobie.rutherford@msstate.edu

Riding Clinics:

- **Horse Management 101 Clinic** in Winona, MS - This 8-wk course starts March 22 and runs from 6-9 PM each Tuesday night through May 10, 2016.
- April 2, 2016 - **Ranch Riding Clinic** in Richton, MS.
- July 2016 - **Basic Horsemanship Clinics** at the county/district level. Agents have been asked to organize riding clinics in their areas to address topics such as making a more enjoyable horse, leads and lead departures, side passing and two tracking, speed control, bridling up, stopping, and much more! Clinicians from MSU will teach these clinics. Please contact your county agent to organize one of these clinics if you are interested.

The Mane Event:

The MSU Extension Service is proud to introduce a new informational video series! The Mane Event is a monthly “how-to” video series concerning horse management, nutrition concerns, and training tips. These short informative videos provide a source of information to all who are interested in horse care, use, and riding.

- Neck Reining - February (newest video)
- Link to Video web page: [The Mane Event](#)

For more info, go to [Horse Production in Mississippi](#) or contact **Clay Cavinder** clay.cavinder@msstate.edu

Departmental Activities

MSU Animal and Dairy Sciences and CVM impact the International Dairy Market. Last year, we hosted 7 university personnel from the University of Veterinary and Animal Sciences in Lahore, Punjab, Pakistan. They attended a 3-week short course on Dairy Farm Management in preparation of receiving 60 Holstein heifers from the U.S.

The USDA Foreign Agricultural Service issued the following press release on March 4, 2016. Click on this link to read the article: [‘FAS Opens up New Market Opportunities for U.S. Dairy Cattle in Pakistan.’](#)



Ashleigh Muth-Spurlock teaching reproductive management

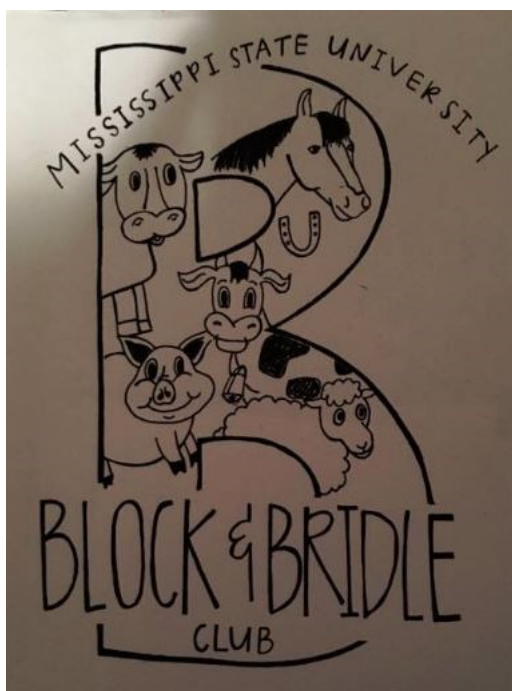


UVAS, Lahore, Pakistan group at the Bearden Dairy Research Center

Departmental Activities

Block and Bridle is hosting the **1st Annual ADS Ag Olympics** on April 22nd at Ballew Hall from 4:00 - 6:30 p.m. ADS clubs and organizations, faculty and graduate students are invited to enter teams. Each team must consist of 4 people. Each team will be required to pay a \$50 fee that can be made up by selling 25 raffle tickets for \$2 each.

The raffle ticket drawing will be held the day of the event. Winner of the raffle will receive 20% of the total profit from all raffle tickets sold. The team selling the most extra raffle tickets after the minimum of 25 tickets will receive extra points towards their teams overall score. Also, club spirit and audience participation on the sidelines is welcome.



Each team member will receive an Ag Olympics t-shirt and dinner.

Closed toe shoes are mandatory for each team member.

Games will consist of tug-of-war and relay style games.

A monetary prize will be awarded to the club of the overall champion team.

Entry deadline is April 8th to turn in all raffle tickets sold and t-shirt sizes.

Please email Savanna Williams with team member names, contact phone number, and t-shirt sizes at slw544@msstate.edu.

When team information and fee is received, raffle tickets will be made available.

Dr. Jamie Larson, club advisor, encourages faculty and grad students to join club teams.

The ADS meats group, **Meat Chemistry and Cuisine**, will be serving dinner at the conclusion of the event.

2016 Refereed Publications:

Brockus, K. E., C. G. Hart, C. L. Gilfeather, B. O. Fleming, **C. O. Lemley** (2016). Dietary melatonin alters uterine artery hemodynamics in pregnant Holstein heifers. *Domestic Animal Endocrinology*, 55, 1-10.

Kaya, A., **E. Memili**. Sperm macromolecules associated with bull fertility. *Animal Reproduction Science*. (2016), <http://dx.doi.org/10.1016/j.anireprosci.2016.02.015>

Hunt, M.R., J.F.Legako, **T.T.N. Dinh**, A.J.Garmyn, T.G.O'Quinn, C.H. Corbin, R.J. Rathmann, J.C. Brooks, M.F. Miller. Assessment of volatile compounds, neutral and polar lipid fatty acids of four beef muscles from USDA Choice and Select graded carcasses and their relationships with consumer palatability cores and intramuscular fat content. *Meat Science* 116 (2016) 91–101.