Sunday, January 26, 2020

SCC-81 SYMPOSIUM
Chair: Stephan Wildeus, Virginia State University
1:00 PM - 5:00 PM
Walker

1:00 p.m.  SCC-81 SYMPOSIUM WELCOME
Stephan Wildeus 1
1Virginia State University

1:05 p.m.  192 Towards Year-Round Grazing in the Southeastern U.S.
Gabriel J. Pent 1
1Virginia Tech - SVAREC

1:35 p.m.  178 Use of silvopastures and woodlands to expand the grazing opportunity for small ruminants
Uma Karki 1
1Tuskegee University

2:05 p.m.  SCC-81 SYMPOSIUM BREAK I

2:15 p.m.  193 Growth performance of lambs and kids on pasture
Susan Schoenian 1
1University of Maryland

2:45 p.m.  194 Carcass and Meat Quality of Pasture-raised Lamb and Goat
Jung H. Lee 1
1Fort Valley State University

3:15 p.m.  SCC-81 SYMPOSIUM BREAK II

3:25 p.m.  117 Organic and conventional pasture systems for lamb production in Southeastern U.S.
Joan M. Burke 1
1USDA ARS Dale Bumpers Small Farms Research Center

3:55 p.m.  195 Marketing options for pasture-raised lambs
Dahlia O’Brien 1, Stephan Wildeus 1
1Virginia State University

4:25 p.m.  SCC-81 SYMPOSIUM BREAK III

4:30 p.m.  SCC-81 SYMPOSIUM ROUNDTABLE
SERA 41 SYMPOSIUM INTRODUCTION
Chair: Daniel Rivera, Animal and Dairy Sciences Department Mississippi State University
1:00 PM - 5:00 PM
Ballroom 1

1:00 p.m. **SERA 41 SYMPOSIUM INTRODUCTION**
Daniel Rivera
Animal and Dairy Sciences Department Mississippi State University

1:05 p.m. 196 **Animal Nutrition: How are we serving our clientele through Extension?**
Kimberly Mullenix, Shane Gadberry, Robert Lawton Stewart
Auburn University, University of Arkansas, University of Georgia

1:50 p.m. 197 **Supplemental feeding, forage intake and animal performance – perspectives from research and the industry**
Daniel Rivera
Animal and Dairy Sciences Department Mississippi State University

2:35 p.m. 198 **Beef cattle support system modeling**
Robin R. White
Virginia Tech School of Animal Sciences

3:20 p.m. **SERA 41 SYMPOSIUM PANEL DISCUSSION**

3:40 p.m. **SERA 41 MEETING**

GRADUATE STUDENT COMPETITION - MS
Chair: Charles Rosenkrans, University of Arkansas System
3:00 PM - 4:30 PM
Ballroom 2

3:00 p.m. 166 **The effects of feeding lasalocid in combination with zeranol implants on performance and carcass traits in hair sheep**
Brittany A. Lippy, Blake K. Wilson, Jerry Fitch, Gretchen G. Mafi, Justin Crosswhite
Oklahoma State University

3:05 p.m. 80 **Evaluation of extended release eprinomectin efficacy on multiparous beef cow performance**
Laine Zammit, Jermey G. Powell, Reagan N. Cauble, Toby D. Lester, Callan Lichtenwalter, Ellen M. Herring, Clay McGuire, Autumn T. Pickett, Eva M. Wray, Chris Tucker
University of Arkansas, University of Arkansas System Division of Agriculture Department of Animal Science

3:10 p.m. 154 **The effect of number of cattle per pen on stocker cattle health and performance.**
Kirsten A. Midkiff, Brandi B. Karisch, Amelia Woolums
Mississippi State University Animal and Dairy Sciences, Mississippi State University
3:15 p.m. 92  Health and Performance of Ewes in Woodland and Silvopasture Systems
Nevershi Ellis 1, Uma Karki 1, Bidur Paneru 1, Lila B. Karki 1
1Tuskegee University

3:20 p.m. 185  Utilizing craft brewing side streams of trub, hops, and yeast mix (THYM) as a novel feed additive and an alternative to monensin in beef cattle diets
Kendra P. Phipps 1, Deidre D. Harmon 1, Matt H. Poore 2, Ethan Henderson 3, Robert Bryant 4, Brock Ashburn 5, April D. Shaeffer 2, Johnny R. Rogers 1
1North Carolina State University, 2NC State University, 3North Carolina Cooperative Extension, 4Warren Wilson College, 5Highland Brewing Company

3:25 p.m. 163  The effects of energy and lasalocid supplementation on forage intake and energetics of cattle grazing wheat pasture
Autumn T. Pickett 1, Beth B. Kegley 2, PAUL A. BECK 3, Stacey A. Gunter 4
1University of Arkansas, 2University of Arkansas Division of Agriculture, 3Oklahoma State University, Department of Animal & Food Sciences, 4USDA-ARS, Oklahoma and Central Plains Agricultural Research Center

3:30 p.m. 83  Evaluation of feeding immunoglobulin-Y to Holstein feeder cattle for the control of liver abscesses & reduction of macrolide-resistant bacteria dissemination
Miranda K. Stotz 1, Diego Casas Murillo 1, Darren D. Henry 1, Whitney L. Crossland 1
1Texas Tech University

3:35 p.m. 134  Public perceptions of equine processing and welfare
Kelly Melvin 1, Liesel G. Schneider 2, Jennie L. Ivey 3, Peter D. Krawczel 3
1University of Tennessee, 2Animal Science Department, University of Tennessee Institute of Agriculture, 3University of Tennessee Institute of Agriculture

3:40 p.m. 63  Effects of forage allowance and supplementation on performance of steers grazing wheat pasture.
Kynzie McNeill 1, Ryan R. Reuter 1, PAUL A. BECK 2
1Oklahoma State University, 2Oklahoma State University, Department of Animal & Food Sciences

3:45 p.m. 119  Palatability of Olive Pomace in Mozambique Tilapia (Oreochromis mossambicus)
Ethan Krasue 1, Benny J. Conn 1, Stanley F. Kelley 1, Marcy M. Beverly 1, Mark Anderson 1
1Sam Houston State University

3:50 p.m. 160  The effect on ADG, DMI, and blood metabolites of weaned Katahdin lambs offered chelated mineral with Ascophyllum nodosum on a high forage diet
Elizabeth Jolly 1, Jamie A. Boyd 1
1Sul Ross State University

3:55 p.m. 12  Carcass Attributes and Performance of Poultry (Gallus gallus domesticus) fed Olive Pomace
Benny J. Conn 1, Payton Snokhous 1, Ethan Carter 1, Phil Urso 2, Jerrad F. Legako 3, Stanley F. Kelley 1, Marcy M. Beverly 1, Mark Anderson 1
1Sam Houston State University, 2Texas Tech University, 3Texas Tech University, Department of Animal and Food Sciences
Comparing Natural Vegetation and Food Plot Preference against Supplemental Protein Pellets in Captive White-tailed Deer (*Odocoileus virginianus*) and Exotic Species
Robert W. McQueen 1, Marcy M. Beverly 1, Stanley F. Kelley 1, Mark Anderson 1
1Sam Houston State University

Defining Grazing Recommendations for Alfalfa-Bermudagrass Mixtures in the Southeastern U.S.
Kaylyn Groce 1, Jennifer J. J. Tucker 1, Katie Mason 2, Landon Marks 3, Kim K. Mullenix 4
1University of Georgia, 2University of Tennessee, 3Alabama Cooperative Extension, 4Auburn University

Effects of acclimation on cattle response to humans while being handled.
Corban H. Hemphill 1, Ryan R. Reuter 1, James P. Neel 2, Laura Goodman 1
1Oklahoma State University, 2USDA, ARS, Grazinglands Research Laboratory

The effects of fly control strategies on fly abundance, fly avoidance behaviors, and performance in feedlot bulls and steers
Courtney McNeff 1, Justin Talley 1, Colton A. Robison 1, Blake K. Wilson 1
1Oklahoma State University

Comparison of vaginal microbiome and concentrations of estradiol at artificial insemination in Brangus heifers
Riley D. Messman 1, Zully E. Contreras-Correa 1, Henry A. Paz 1, George Perry 2, Caleb O. Lemley 1
1Mississippi State University, 2South Dakota State University

The effect of bunk preference on performance, intake, and efficiency of feedlot steers using an automated individual feeding system
Kaitlyn N. Pierce 1, Ryan R. Reuter 1, Colton A. Robison 1, Blake K. Wilson 1
1Oklahoma State University

UNDERGRADUATE STUDENT COMPETITION
Chair: Blake Wilson, Oklahoma State University; Andrea Warner, Oklahoma State University
4:30 PM - 5:45 PM

Determination of Optimal Harvest Weight for Mangalica Pigs Using a Serial Harvest Approach to Measure Growth Performance and Carcass Characteristics
Maegan A. Reeves 1, Courtney E. Charlton 1, Shannon R. Wilkerson 1, John G. Rehm 2, Terry D. Brandebourg 1
1Auburn University, 2Department of Animal Sciences, Auburn University

Impacts of Phosphorus Intake on Beef Heifer Growth Performance and Reproductive Tract Scores
Hailey Hilfiker 1, Beth B. Kegley 2, Rick W. Rorie 3, Pete A. Hornsby 1, Jana L. Reynolds 4, Benjamin P. Shoulders 4, Reagan N. Cauble 3, Jeromy G. Powell 3
1University of Arkansas Division of Agriculture Dept. of Animal Science, 2University of Arkansas Division of Agriculture, 3University of Arkansas, 4University of Arkansas System Division of Agriculture
4:40 p.m. 153 The Effect of Nerve Growth Factor Beta on Embryonic Cleavage Rates
Kayla Jones 1
1North Carolina A&T State University

4:45 p.m. 18 Comparing stress indicators of horses used for therapy in riding activities and groundwork activities
Gabrielle Abbott 1, Kathi Jogan 1, Erin L. Oberhaus 2, Jason Apple 3, Charles F Rosenkrans 4
1University of Arkansas, 2Louisiana State University Agricultural Center, 3Texas A&M University-Kingsville, 4Animal and Veterinary Sciences Department, Clemson University

4:50 p.m. 183 Utilizing Breeding Indictors for an Effective AI Program in Brahman Cows
Emily K. DeShazo 1, Sydney T. Reese 2, Gessica A. Franco-Johannsen 3, Don A. Neuendorff 4, Ron Randel 2, Ky G. Pohler 2
1Mississippi State University, 2Texas A&M University, 3Texas &M University, 4Texas A&M AgriLife Research & Extension Center at Overton

4:55 p.m. 48 Effect of Zelnate administered at initial processing in high-risk, newly received beef calves on performance and morbidity
Brady E. Martin 1, Reagan N. Cauble 1, Beth B. Kegley 2, Jermey G. Powell 1
1University of Arkansas, 2University of Arkansas Division of Agriculture

5:00 p.m. 175 The Suitability of Autoclave and Pressure Cooker Washing Methods in Comparison to ANKOM200 to Determine Neutral Detergent Fiber Using Different Feedstuffs and Washing Solutions
Jordan Adams 1, Aaron B. Norris 2, Madeline E. Rivera 1, Luiz Fernando Dias Batista 1, Luis O. Tedeschi 1
1Texas A&M University, 2Texas Tech University

5:05 p.m. 95 Impact of daily movement with low or higher target residue on ewe weight gain and parasite infestation
Isabella Kukor-Laureano 1, Izzy Van Buren 1, Jay A. Daniel 1
1Berry College

5:10 p.m. 122 Physiological effects of low level laser therapy on exercised horses.
Ashley Rosenkrans 1, Carson Freeman 2, Erin L. Oberhaus 3, Palika Dias-Morse 4, Charles F Rosenkrans 5
1Purdue University, 2University of Missouri, 3Louisiana State University Agricultural Center, 4University of Arkansas Fayetteville, 5Animal and Veterinary Sciences Department, Clemson University

5:15 p.m. 39 Effect of Breed on Dairy Calf Vigor from Birth to Preweaning
Michelle P. Meza 1, Caitlin M. Turner 1, Chad M. Powers 1, Andrea K. Sexten 1
1Eastern Kentucky University

5:20 p.m. 171 The effects of supplementing a chelated mineral containing Ascophyllum nodosum on intake and performance of creep-fed hair lambs.
Victoria Romo 1, Jamie A. Boyd 1
1Sul Ross State University
5:25 p.m.  60  **Effects of exogenous glucocorticoid administration on leptin concentrations in perinatal dairy bull calves**
Camille Morris 1, Keelee J. McCarty 1, Nathan Long 1
1Clemson University

5:30 p.m.  103  **Impact of weaning strategy on beef cow-calf behavior and activity**
Molly K. Alexander 1, Carrie L. Pickworth 1, Mikayla Moore 2, Matt H. Poore 2
1North Carolina State University, 2NC State University

5:35 p.m.  74  **Epigenetic marks within the swine placenta are differentially expressed due to season**
Robin Cheek 1, Lea A. Rempel 2, Jeremy R. Miles 3
1TAMU-Kingsville, 2USDA, ARS, USMARC, 3USDA, ARS, U.S. Meat Animal Research Center

5:40 p.m.  100  **Impact of weaning strategy on beef cow and calf weight and body condition**
Mikayla Moore 1, Jordan Cox-O’Neill 1, Matt H. Poore 1, Carrie L. Pickworth 2
1NC State University, 2North Carolina State University

GRADUATE STUDENT COMPETITION - PHD
Chair: Charles Rosenkrans, University of Arkansas System
4:40 PM - 5:25 PM
Ballroom 2

4:40 p.m.  53  **Effects of an injectable zinc solution at weaning as an alternative castration method during the backgrounding period in beef bulls**
Reagan N. Cauble 1, Powell G. Powell 1, Beth B. Kegley 2, Shane Gadberry 1, PAUL A. BECK 3, Michael Sims 4, Cody Shelton 2
1University of Arkansas, 2University of Arkansas Division of Agriculture, 3Oklahoma State University, Department of Animal & Food Sciences, 4Oklahoma State University

4:45 p.m.  36  **Differential haptoglobin responsiveness to a Mannheimia haemolytica challenge altered immunologic, physiologic, and behavioral responses in beef steers**
Lauren Wottlin 1, Gordon E. Carstens 1, William Kayser 1, Thomas H. Welsh 2, William E. Pinchak 3
1Texas A&M University, 2Texas A&M University; Texas A&M AgriLife Research, College Station, 3Texas A&M AgriLife

4:50 p.m.  6  **Animal performance in grass monoculture or silvopasture systems using tree legumes**
Izabela Aline Gomes da Silva 1, Jose Carlos Batista Dubeux Jr. 2, Alexandre C. Leão de MELLO 1, Márcio Vieira da Cunha 1, Mércia Ferreira dos Santos 1, Valéria Oliveira Apolinário 3, Gleise Medeiros da Silva 4, Erinaldo Viana de Freitas 1, Nicolas DiLorenzo 5
1Federal Rural University of Pernambuco, 2University of Florida - North Florida Research and Education Center, 3Maranhao State University, 4ASAS, 5Department of Animal Sciences, North Florida Research and Education Center (NFREC), University of Florida, Marianna, FL
4:55 p.m.  57  Effects of Diploid and Tetraploid Annual Ryegrass Cultivars on Cattle Performance, Herbage Mass, and Nutritive Value
Sarah M. Montgomery-Williams 1, Brandi B. Karisch 1, Jane A. Parish 2, Jesse Morrison 1, Brian Baldwin 1
1Mississippi State University, 2North Mississippi Research and Extension Center, Mississippi State University

5:00 p.m.  64  Effects of grazing cool-season cover crops on forage and animal performance
Russell C. Carrell 1, Leanne L. Dillard 2, Kim K. Mullenix 2, Audrey Gamble 2, Russell B. Muntifering 2
1Cargill Animal Nutrition, 2Auburn University

5:05 p.m.  99  Impact of social mixing on feedlot steer eating and lying behavior
Amanda J. Hubbard 1, Jason Sawyer 2, Reinaldo F. Cooke 1, Jenny Jennings 3, Courtney L. Daigle 4
1Texas A&M University, 2Texas A&M University-Kingsville, 3Texas A&M AgriLife Research, 4Department of Animal Science, Texas A&M University

5:10 p.m.  130  Presynchronization with Prostaglandin F2α and prolonged exposure to exogenous progesterone impacts estrus expression and alters fertility in beef heifers
Nicky Oosthuizen 1, Pedro Fontes 2, Cliff Lamb 2
1ABS Global, 2Texas A&M University

5:15 p.m.  143  Rumen Fluid Metabolites as Potential Biomarkers of Feed Efficiency in Angus Steers
Brooke A. Clemmons 1, Joshua B. Powers 1, Shawn R. Campagna 1, Taylor B. Ault-Seay 2, Mallory M. Embree 3, Phillip R. Myer 4
1University of Tennessee Knoxville, 2University of Tennessee, Knoxville, 3Ascus Biosciences, Inc., 4Department of Animal Science- University of Tennessee

5:20 p.m.  77  Evaluating Nitrogen Management Strategies to Improve Southern Bermudagrass Grazing Systems
Justin C. Burt 1, Jennifer J. J. Tucker 1, Lisa Baxter 1
1University of Georgia

Monday, January 27, 2020

MEATS
Chair: Alexander Stelzleni, University of Georgia, Animal and Dairy Science; Brandie Preuss
8:00 AM - 8:45 AM
Walker

8:00 a.m.  110  Metmyoglobin reducing activity and oxygen consumption properties of atypical dark-cutting beef
Ranjith Ramanathan 1, Andrew M. Cassens 1, Laura Yoder 1, Gretchen G. Mafi 1
1Oklahoma State University
8:15 a.m. 25 Cooking method and muscle type impact volatile compound development in beef steaks
Kelly R. Vierck 1, Jerrad F. Legako 2, Chance Brooks 1
1Texas Tech University, 2Texas Tech University, Department of Animal and Food Sciences

8:30 a.m. 147 Tenderness and Retail Display Evaluation of Non-Enhanced, Enhanced and High-Quality Pork Chops
Andrew M. Cassens 1, Gretchen G. Mafi 1, Deb L. VanOverbeke 1, Ranjith Ramanathan 1
1Oklahoma State University

PHYSIOLOGY I
Chair: Daniel Poole, North Carolina State University; Nicky Oosthuizen, ABS Global
8:00 AM - 10:45 AM
Ballroom 3/4

8:00 a.m. 72 Endocrine and ovarian responses to combined estradiol benzoate-sulpiride in anestrous mares treated with kisspeptin
Victoria N. Bailey 1, Jennifer L. Sones 2, Caroline M. Camp 1, Erin L. Oberhaus 1
1Louisiana State University Agricultural Center, 2Louisiana State University School of Veterinary Medicine

8:15 a.m. 19 Comparing stress indicators of horses used for therapy in riding activities and groundwork activities
Gabrielle Abbott 1, Kathi Jogan 1, Erin L. Oberhaus 2, Jason Apple 3, Charles F Rosenkrans 4
1University of Arkansas, 2Louisiana State University Agricultural Center, 3Texas A&M University-Kingsville, 4Animal and Veterinary Sciences Department, Clemson University

8:30 a.m. 121 Physiological effects of low level laser therapy on exercised horses.
Ashley Rosenkrans 1, Carson Freeman 2, Erin L. Oberhaus 3, Palika Dias-Morse 4, Charles F Rosenkrans 5
1Purdue University, 2University of Missouri, 3Louisiana State University Agricultural Center, 4University of Arkansas Fayetteville, 5Animal and Veterinary Sciences Department, Clemson University

8:45 a.m. 8 Assessment of consistency in quantification of ribonucleic acid across multiple methods
Andrea N. DeCarlo 1, Joseph Parrish 1, William Bridges 1, Nathan Clemson University Long 1
1Clemson University

9:00 a.m. 132 Proportional tissue weights in male goats differing in genetic propensity to consume juniper.
Doug R. Tolleson 1, Thomas H. Welsh 2, Nick E. Garza 3, Kaylee Hollingsworth 1, John W. Walker 4
1Texas A&M University, 2Texas A&M University; Texas A&M AgriLife Research, College Station, 3Texas A&M AgriLife, Sonora, 4Texas A&M AgriLife

9:15 a.m. PHYSIOLOGY I BREAK

9:30 a.m. 109 Metabolic and endocrine indicators in male goats differing in genetic propensity to consume juniper.
Doug R. Tolleson ¹, Thomas H. Welsh ², John W. Walker ³  
¹Texas A&M University, ²Texas A&M University; Texas A&M AgriLife Research, College Station, ³Texas A&M AgriLife

9:45 a.m. 88 **Factors influencing mare milk composition and yield and foal digestive health**  
Morgan B. Pyles ¹, Ashley Fowler ¹, Andrea Crum ¹, Susan Hayes ¹, Rachel Schendel ², MICHAEL Flythe ³, Laurie Lawrence ¹  
¹University of Kentucky, ²University of Kentucky Department of Animal & Food Sciences, ³USDA/ARS

10:00 a.m. 14 **Characterization of adipose tissue extracellular matrix component mRNA expression during porcine adipogenesis using real-time PCR**  
Maegan A. Reeves ¹, Courtney E. Charlton ¹, Terry D. Brandebourg ¹  
¹Auburn University

10:15 a.m. 31 **Determination of Optimal Harvest Weight for Mangalica Pigs Using a Serial Harvest Approach to Measure Growth Performance and Carcass Characteristics**  
Maegan A. Reeves ¹, Courtney E. Charlton ¹, Shannon R. Wilkerson ¹, John G. Rehm ², Terry D. Brandebourg ¹  
¹Auburn University, ²Department of Animal Sciences, Auburn University

10:30 a.m. 75 **Epigenetic marks within the swine placenta are differentially expressed due to season**  
Robin Cheek ¹, Lea A. Rempel ², Jeremy R. Miles ³  
¹TAMU-Kingsville, ²USDA, ARS, USMARC, ³USDA, ARS, U.S. Meat Animal Research Center

10:45 a.m. 199 **Emerging Young Scholar Presentation: Evaluation of Chronic Ergot Alkaloid Exposure and Various Mitigation Strategies on Performance, Reproduction, and Immunity in Beef Cattle**  
Rebecca K. Poole ¹  
¹Texas A&M University

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**KUNKLE SYMPOSIUM**  
Chair: Shane Gadberry, University of Arkansas; Kirsten Midkiff, Mississippi State University  
Animal and Dairy Sciences  
8:30 AM - 11:30 AM  
Ballroom 2

8:30 a.m. **KUNKLE SYMPOSIUM INTRODUCTION**  
Shane Gadberry ¹  
¹University of Arkansas

8:40 a.m. 24 **Condensed tannins: structure, activity and characterization**  
Wayne Zeller ¹  
¹USDA-ARS

9:30 a.m. 180 **Using condensed tannins in plant materials more effectively with livestock**  
Scott L. Kronberg ¹  
¹USDA-Agricultural Research Service
10:20 a.m.  **KUNKLE SYMPOSIUM BREAK**

10:35 a.m.  4  **Agrochemical Residues, Product Quality, and Safety of Beef Fed Cotton Ginning and Other Byproduct Feeds**
David J. Smith 1  
1U.S. DEPARTMENT OF AGRICULTURE

**BREEDING AND GENETICS**
Chair: B Kutz, University of Arkansas; Taylor Ault-Seay, University of Tennessee, Knoxville  
1:15 PM - 2:45 PM  
Ballroom 3/4

1:15 p.m.  46  **Effect of the addition of α-tocopherol to in vitro maturation media of bovine oocytes.**
Theisy P. Acosta Pérez 1  
1Universidad Autonoma de Ciudad Juárez

1:30 p.m.  70  **Effects of the addition of Moringa oleifera seed extract to in vitro maturation of bovine oocyte media and its antimicrobial activity.**
Theisy P. Acosta Pérez 1  
1Universidad Autonoma de Ciudad Juárez

1:45 p.m.  84  **Evaluation of hair coat shedding ability as an adaptive trait in Angus cattle in the southern U.S.**
Randy H. Burnett 1, Morgan A. Duvic 2, B R. Kutz 3, Avert H. Brown, Jr. 3, Jerme G. Powell 3,  
Trent Smith 2, David G. Riley 4, R N. Cauble 3  
1Mississippi State University Animal and Dairy Sciences, 2Mississippi State University,  
3University of Arkansas, 4Texas A&M University

2:00 p.m.  128  **Pregnancy and calving rates of beef cows comparing the sex-selected semen to conventional semen using timed artificial insemination**
Jennifer McMurray 1, Andrea N. DeCarlo 1, Nathan Long 1, Nathan Clemson University Long 1  
1Clemson University

2:15 p.m.  139  **Relationship of winter hair growth and performance in Angus dams**
Morgan A. Duvic 1 , Randy H. Burnett 2, Cody Glenn 1, Trent Smith 1  
1Mississippi State University, 2Mississippi State University Animal and Dairy Sciences

2:30 p.m.  184  **Utilizing Breeding Indictors for an Effective AI Program in Brahman Cows**
Emily K. DeShazo 1, Sydney T. Reese 2, Gessica A. Franco-Johannsen 3, Don A. Neuendorff 4,  
Ron Randel 2, Ky G. Pohler 2  
1Mississippi State University, 2Texas A&M University, 3Texas &M University, 4Texas A&M AgriLife Research & Extension Center at Overton
PASTURES AND FORAGES I
Chair: Flint Harrelson, Morehead State University; Kristen June Jacobson
1:15 PM - 3:45 PM
Ballroom 2

1:15 p.m.  87  Evaluation of two stocking rates for grazing heifers on mixed sward native warm-season grass pastures in the Black Belt Prairie region
Jane A. Parish 1, Kalisha C. Yankey 2, Libby S. Durst 3
1North Mississippi Research and Extension Center, Mississippi State University, 2Prairie Research Unit, Mississippi State University, 3Mississippi State University

1:30 p.m. 115  Nitrogen fertilizer effects on above ground sward characteristics and beef heifer performance from native warm-season grass blends
Caroline Chappell 1, Landon Marks 2, Katie Mason 3, Kim K. Mullenix 4, Leanne L. Dillard 4, Russell B. Muntifering 4
1Auburn University/Alabama Cooperative Extension System, 2Alabama Cooperative Extension, 3University of Tennessee, 4Auburn University

1:45 p.m.  5  Animal performance in grass monoculture or silvopasture systems using tree legumes
Izabela Aline Gomes da Silva 1, Jose Carlos Batista Dubeux Jr. 2, Alexandre C. Leão de MELLO 1, Márcio Vieira da Cunha 1, Mércia Ferreira dos Santos 1, Valéria Oliveira Apolinário 3, Gleise Medeiros da Silva 4, Erinaldo Viana de Freitas 1, Nicolas DiLorenzo 5
1Federal Rural University of Pernambuco, 2University of Florida - North Florida Research and Education Center, 3Maranhao State University, 4ASAS, 5Department of Animal Sciences, North Florida Research and Education Center (NFREC), University of Florida, Marianna, FL

2:00 p.m.  16  Comparing Natural Vegetation and Food Plot Preference against Supplemental Protein Pellets in Captive White-tailed Deer (Odocoileus virginianus) and Exotic Species
Robert W. McQueen 1, Marcy M. Beverly 1, Stanley F. Kelley 1, Mark Anderson 1
1Sam Houston State University

2:15 p.m.  PASTURES AND FORAGES I BREAK

2:30 p.m.  20  Comparison of native warm-season grasses and bermudagrass for stocker calf grazing in the Black Belt Prairie region
Jane A. Parish 1, Kalisha C. Yankey 2, Libby S. Durst 3
1North Mississippi Research and Extension Center, Mississippi State University, 2Prairie Research Unit, Mississippi State University, 3Mississippi State University

2:45 p.m. 145  Stocker gains on diverse summer annual pastures
Kelly Mercier 1, Chris Teutsch 1, Ray Smith 1, Eric Vanzant 2, Kenny Burdine 1, Edwin Ritchey 1
1University of Kentucky, 2University of Kentucky Department of Animal & Food Sciences

3:00 p.m. 191  Yield and nutritive quality of summer annual forage mixtures
Serena Thompson 1, Leanne L. Dillard 1, Alana Jacobson 1, Jenny Koebernick 1, Grey Parks 1, Kim K. Mullenix 1
1Auburn University
3:15 p.m. 76 Evaluating Nitrogen Management Strategies to Improve Southern Bermudagrass Grazing Systems
Justin C. Burt 1, Jennifer J. J. Tucker 1, Lisa Baxter 1
1University of Georgia

3:30 p.m. 28 Defining Grazing Recommendations for Alfalfa-Bermudagrass Mixtures in the Southeastern U.S.
Kaylyn Groce 1, Jennifer J. J. Tucker 1, Katie Mason 2, Landon Marks 3, Kim K. Mullenix 4
1University of Georgia, 2University of Tennessee, 3Alabama Cooperative Extension, 4Auburn University

PHYSIOLOGY II: GENOMICS
Chair: Paul Broadway, USDA-ARS, Livestock Issues Research Unit; Autumn Pickett, University of Arkansas
1:15 PM - 4:15 PM
Roberts

1:15 p.m. 137 Randel Lecture: Genetic control of thermotolerance in cattle at the whole-animal and cellular level
Peter J. Hansen 1
1University of Florida

1:45 p.m. 13 Changes in Cytokine Profiles in Response to Ergovaline Exposure in Slick vs. Normal Hair Coat in Beef Heifers
Alecia R. Brown 1, McKenzie L. Haimon 1, Rebecca K. Poole 2, Matt H. Poore 3, Daniel H. Poole 4
1Dept of Animal Science - NC State University, 2Texas A&M University, 3NC State University, 4North Carolina State University

2:00 p.m. 86 Evaluation of the effect of prenatal transportation stress on endocrine and immune tissues of neonatal Brahman calves
Audrey L. Earnhardt-San 1, Catherine L. Wellman 2, Sarah M. West 3, Thomas B. Hairgrove 4, Rodolfo C. Cardoso 3, Charles R. Long 3, David G. Riley 3, Ron Randel 3, Thomas H. Welsh 5
1Texas A&M University and AgriLife Research, Department of Animal Science, 2Texas A&M AgriLife Research, 3Texas A&M University, 4Texas A&M AgriLife Extension, 5Texas A&M University; Texas A&M AgriLife Research, College Station

2:15 p.m. 2 Acute phase response to lipopolysaccharide challenge in beef steers supplemented with prebiotic blends
Nicole C. Burdick Sanchez 1, Paul R. Broadway 1, Jeffery A. Carroll 1, Devan M. Paulus Compart 2, J Chris Forcherio 3
1USDA-ARS, Livestock Issues Research Unit, 2PMI, 3Purina Animal Nutrition LLC

2:30 p.m. 35 Differential haptoglobin responsiveness to a Mannheimia haemolytica challenge altered immunologic, physiologic, and behavioral responses in beef steers
Lauren Wottlin 1, Gordon E. Carstens 1, William Kayser 1, Thomas H. Welsh 2, William E. Pinchak 3
1Texas A&M University, 2Texas A&M University; Texas A&M AgriLife Research, College Station, 3Texas A&M Agrilife
2:45 p.m.  PHYSIOLOGY II BREAK

3:00 p.m.  182  Uterine gene expression of beef cows in response to supplementation with calcium salts of soybean oil
Claire L. Timlin 1, Taylor Parrish 2, Nicholas W. Dias 2, Felipe Santili 2, Stefania Pancini 2, Vitor RG Mercadante 3
1Animal and Poultry Sciences, Virginia Tech, 2Virginia Tech, 3Animal and Poultry Sciences, Virginia Tech, Blacksburg, VA, USA.

3:15 p.m.  59  Effects of exogenous glucocorticoid administration on leptin concentrations in perinatal dairy bull calves
Camille Morris 1, Keelee J. McCarty 1, Nathan Long 1
1Clemson University

3:30 p.m.  140  Relaxin Regulates Porcine Adipose Tissue Development by Inhibiting Preadipocyte Number, Stimulating Lipolysis, and Upregulating mRNA Expression of Adipokine, Fatty Acid Metabolism and Extracellular Matrix Genes
Courtney E. Charlton 1, Maegan A. Reeves 1, Terry D. Brandebourg 1
1Auburn University

3:45 p.m.  173  The role of an intronic single nucleotide polymorphism within the dopamine receptor type-2 gene on pituitary prolactin protein expression in bulls
Andrea N. DeCarlo 1, Keelee J. McCarty 1, Sarah K. Richey 1, Nathan Long 1, Nathan Clemson University Long 1
1Clemson University

4:00 p.m.  133  Provision of Artificial Shade During Summer Reduced Vaginal Temperature and Improved Growth Performance of Pregnant Grazing Beef Heifers
Gleise Medeiros da Silva 1, Jimena Laporta 2, Jose Carlos Batista Dubeux Jr. 3, Ricardo Chebel 1, Nicolas DiLorenzo 4
1ASAS, 2University of Wisconsin-Madison, 3University of Florida - North Florida Research and Education Center, 4Department of Animal Sciences, North Florida Research and Education Center (NFREC), University of Florida, Marianna, FL

RUMINANT ANIMAL PRODUCTION II: METABOLISM AND PHYSIOLOGY
Chair: Shane Gadberry, University of Arkansas; Morgan Pyles, University of Kentucky
1:15 PM - 4:15 PM
Ballroom 1

1:15 p.m.  82  Evaluation of feeding immunoglobulin-Y to Holstein feeder cattle for the control of liver abscesses & reduction of macrolide-resistant bacteria dissemination
Miranda K. Stotz 1
1Texas Tech University

1:30 p.m.  44  Effect of Quebracho (Schinopsis balansae) extract inclusion in a high roughage diet upon in vitro gas production
Luiz Fernando Dias Batista 1, Madeline E. Rivera 1, Aaron B. Norris 2, Jordan Adams 1, Roberta Cracco 3, Morgan Jackson 1, Luis O. Tedeschi 1
1Texas A&M University, 2Texas Tech University, 3College of Animal Science and Food Engineering FZEA/USP
1:45 p.m.  49 Effects of in-vitro digestibility in cannulated steers when supplemented different levels of glycerol
Noheli Gutierrez 1, Jamie A. Boyd 1
1Sul Ross State University

2:00 p.m.  144 Rumen Fluid Metabolites as Potential Biomarkers of Feed Efficiency in Angus Steers
Brooke A. Clemmons 1, Joshua B. Powers 1, Shawn R. Campagna 1, Taylor B. Ault-Seay 2, Mallory M. Embree 3, Phillip R. Myer 4
1University of Tennessee Knoxville, 2University of Tennessee, Knoxville, 3Ascus Biosciences, Inc., 4Department of Animal Science- University of Tennessee

2:15 p.m.  85 Evaluation of methane concentration sampling methods of gas produced from in vitro fermentation
Genevieve M. D'Souza 1, Aaron B. Norris 2, Luis O. Tedeschi 1
1Texas A&M University, 2Texas Tech University

2:30 p.m.  157 The effect of sample handling methodology on ruminal redox potential measured in vivo and in vitro
Madeline E. Rivera 1, Aaron B. Norris 2, Luis O. Tedeschi 1
1Texas A&M University, 2Texas Tech University

3:00 p.m.  124 Polyclonal Antibody Preparations from Avian Origin Increased Fiber Digestibility of Beef Cattle Receiving a Backgrounding Diet
Gleise Medeiros da Silva 1, Tessa M. Schulmeister 2, Federico Tarnonsky 3, Federico Podversich 2, Mariana Eloisa Garcia-Ascolani 3, Nicolas DiLorenzo 4
1ASAS, 2University of Florida, 3University of Florida - North Florida Research and Education Center, 4Department of Animal Sciences, North Florida Research and Education Center (NFREC), University of Florida, Marianna, FL

3:15 p.m.  123 Polyclonal antibody preparations from avian origin did not reduce plasmatic haptoglobin concentrations but increased ruminal NH₃-N in beef steers during transition from forage to high-grain diets
Gleise Medeiros da Silva 1, Federico Podversich 2, Tessa M. Schulmeister 2, Erick Rodrigo Silva Santos 3, Carla Sanford 4, Michelle C. B. Siqueira 5, Federico Tarnonsky 3, Nicolas DiLorenzo 6
1ASAS, 2University of Florida, 3University of Florida - North Florida Research and Education Center, 4Montana State University, 5Federal Rural University of Pernambuco, 6Department of Animal Sciences, North Florida Research and Education Center (NFREC), University of Florida, Marianna, FL

3:30 p.m.  152 The Effect of Nerve Growth Factor Beta on Embryonic Cleavage Rates
Kayla Jones 1
1North Carolina A&T State University
3:45 p.m. 52 Effects of an energy or protein supplement on forage dry matter intake for steers grazing summer native range
Taylor C. Husz 1, Paul A. Beck 2, Andrew P. Foote 1, Ryan R. Reuter 1
1 Oklahoma State University, 2 Oklahoma State University, Department of Animal & Food Sciences

4:00 p.m. 101 Impact of weaning strategy on beef cow and calf weight and body condition
Mikayla Moore 1, Jordan Cox-O’Neill 1, Matt H. Poore 1, Carrie L. Pickworth 2
1 NC State University, 2 North Carolina State University

SMALL RUMINANT PRODUCTION I
Chair: Niki Whitley, Fort Valley State University; Megan Galvin, Department of Animal Science and Veterinary Technology, Tarleton State University
1:15 PM - 4:15 PM
Walker

1:15 p.m. 43 Effect of Mushroom Probiotic (Coriolus Versicolor) on Galectin Gene Secretion in Goat Blood
Kingsley E. Ekwemalor 1, Emmanuel K. Asiamah 2, Sarah Adjei-Fremah 1, Eboghoye Eliku-Okoludoh 1, Mulumebet Worku 3
1 North Carolina Agricultural and Technical State University, 2 University of Arkansas at Pine Bluff, 3 NC A&T State University

1:30 p.m. 21 Comparison of Savanna, Kiko, and Spanish Sires for Meat Goat Doe-Kid Traits
Lauren Stevens 1, Emily G. Hayes 1, Piush Khanal 1, Shaneqwa Thomas 1, Mozell Byars 1, Richard Browning, Jr 1
1 Tennessee State University

1:45 p.m. 159 The effect of sire FEC EBV on parasitism and survivability in grazing Katahdin lambs
Andrew R. Weaver 1, Joan M. Burke 2, Jim Morgan 3, Donald L. Wright 4, Scott P. Greiner 5, Scott A. Bowdridge 1
1 West Virginia University, 2 USDA ARS Dale Bumpers Small Farms Research Center, 3 Katahdin Hair Sheep International, 4 Virginia Tech, Southwest Virginia Agricultural Research and Extension Center, 5 Virginia Tech

2:00 p.m. 158 The effect of sire fecal egg count estimated breeding value on antibody production of grazing Katahdin lambs
Kelsey Bentley 1, Andrew R. Weaver 1, Joan M. Burke 2, Jim Morgan 3, Lee Wright 4, Scott P. Greiner 5, Scott A. Bowdridge 1
1 West Virginia University, 2 USDA ARS Dale Bumpers Small Farms Research Center, 3 Katahdin Hair Sheep International, 4 Virginia Tech University, 5 Virginia Tech

2:15 p.m. 45 Effect of terminal sire breed on grazing performance, parasitism, and market grade of crossbred lambs: year 2
Curtis Patton 1, Scott L. Bowdridge 1, Andrew R. Weaver 1, Scott P. Greiner 2, Scott A. Bowdridge 1
1 West Virginia University, 2 Virginia Tech
2:30 p.m.  SMALL RUMINANT PRODUCTION I BREAK

2:45 p.m.  26 Copper oxide wire particles to complement control of gastrointestinal nematodes with levamisole and/or albendazole in lambs
Joan M. Burke 1, Jim E. Miller 2, Mohan Acharya 3, Erin Wood 4
1USDA ARS Dale Bumpers Small Farms Research Center, 2Louisiana State University, 3Department of Animal Science, University of Arkansas, 4USDA-ARS

3:00 p.m.  177 Use of diatomaceous earth and copper oxide wire particles to control gastrointestinal nematodes in lambs
Olivia Jones 1, Joan M. Burke 2, Jim E. Miller 3, Charles F Rosenkrans 4
1University of Arkansas, 2USDA ARS Dale Bumpers Small Farms Research Center, 3Louisiana State University, 4Animal and Veterinary Sciences Department, Clemson University

3:15 p.m.  96 Impact of daily movement with low or higher target residue on ewe weight gain and parasite infestation
Isabella Kukor-Laureano 1, Izzy Van Buren 1, Jay A. Daniel 1
1Berry College

3:30 p.m.  93 Health and Performance of Ewes in Woodland and Silvopasture Systems
Nevershi Ellis 1, Uma Karki 1, Bidur Paneru 1, Lila B. Karki 1
1Tuskegee University

3:45 p.m.  10 Behavior and Landscape-Use Pattern of Small Ruminants Co-grazed in Woodlands with different Vegetation Characteristics
Bidur Paneru 1, Uma Karki 1, Nevershi Ellis 1, shailes Bhattai 2, Lila B. Karki 1
1Tuskegee University, 2University of Georgia

4:00 p.m.  91 Growth performance of landrace hair sheep lambs under different forage environments
Stephan Wildeus 1, Dahlia O'Brien 1, Gabriel J. Pent 2, Kathryn M. Payne 3
1Virginia State University, 2Virginia Tech, 3Southern Piedmont Agricultural Research and Extension Center, Virginia Tech

RUMINANT ANIMAL PRODUCTION I: GROWING CATTLE
Chair: Daniel Rivera, Animal and Dairy Sciences Department Mississippi State University; Abbigail Hines, Tarleton State University
1:15 PM - 4:30 PM
Rose

1:15 p.m.  164 The effects of energy and lasalocid supplementation on forage intake and energetics of cattle grazing wheat pasture
Autumn T. Pickett 1, Beth B. Kegley 2, PAUL A. BECK 3, Stacey A. Gunter 4
1University of Arkansas, 2University of Arkansas Division of Agriculture, 3Oklahoma State University, Department of Animal & Food Sciences, 4USDA-ARS, Oklahoma and Central Plains Agricultural Research Center
1:30 p.m. 169 The effects of once or twice daily feed delivery on the finishing performance and carcass characteristics of feedlot steers
Blake K. Wilson 1, Will Ryan 1, Chris Richards 1
1Oklahoma State University

1:45 p.m. 120 Performance Effects on Weaned Calves using 3 Weaning Strategies and Nutritional Supplementation
Meagan Hendricks 1, Douglas Eborn 2, Kaylee R. Kipp 1, Caleta M. Willis 1, Megan P. Owen 2
1Texas A&M University-Commerce, 2Texas A&M University Commerce

2:00 p.m. 113 Mineral Supplementation Effects in Stocker Cattle Performance Grazed on Wheat Seeded Native Pastures
Kaylee R. Kipp 1, Douglas Eborn 2, Megan P. Owen 2
1Texas A&M University-Commerce, 2Texas A&M University Commerce

2:15 p.m. 32 Determining the feeding value of corn gluten feed relative to corn when supplemented to beef calves grazed on stockpiled tall fescue pastures
Charles A. Zumbaugh 1, Adam R. Murray 1, Taylor A. Langford 2, Olivia M. Claire 1, Thomas B. Wilson 1
1Department of Animal and Poultry Sciences, Virginia Tech, 2Virginia Tech

2:30 p.m. 33 Determining the feeding value of hulless barley relative to corn in beef finishing rations
Gabriel J. Pent 1, Thomas B. Wilson 2
1Virginia Tech, 2Department of Animal and Poultry Sciences, Virginia Tech

2:45 p.m. RUMINANT ANIMAL PRODUCTION I BREAK

3:00 p.m. 179 Using a 100% Dried Distillers Grains Cube as a Supplement for Steers Grazing Mixed Grass Prairie in Oklahoma
Zane N. Grigsby 1, PAUL A. BECK 2, Stacey A. Gunter 3
1Oklahoma State University, 2Oklahoma State University, Department of Animal & Food Sciences, 3USDA-ARS, Oklahoma and Central Plains Agricultural Research Center

3:15 p.m. 186 Utilizing craft brewing side streams of trub, hops, and yeast mix (THYM) as a novel feed additive and an alternative to monensin in beef cattle diets
Kendra P. Phipps 1, Deidre D. Harmon 1, Matt H. Poore 2, Ethan Henderson 3, Robert Bryant 4, Brock Ashburn 5, April D. Shaeffer 2, Johnny R. Rogers 1
1North Carolina State University, 2NC State University, 3North Carolina Cooperative Extension, 4Warren Wilson College, 5Highland Brewing Company

3:30 p.m. 9 Backgrounding system diet effects on performance of beef calves during transportation and feedyard adaptation
Daniel A. Tigue 1, John G. Rehm 2, Alisha Kercklin 1, Soren P. Rodning 1, Kim K. Mullenix 1, Christy L. Bratcher 3
1Auburn University, 2Department of Animal Sciences, Auburn University, 3Texas Tech University, Department of Animal and Food Science
3:45 p.m. 54 Effects of an injectable zinc solution at weaning as an alternative castration method during the backgrounding period in beef bulls
Reagan N. Cauble 1, Powell G. Powell 1, Beth B. Kegley 2, Shane Gadberry 1, PAUL A. BECK 3, Michael Sims 4, Cody Shelton 2
1University of Arkansas, 2University of Arkansas Division of Agriculture, 3Oklahoma State University, 4Oklahoma State University

4:00 p.m. 112 Mineral supplement intake by weaned steers as affected by offering multiple salt sources
Jane A. Parish 1, Kalisha C. Yankey 2, Libby S. Durst 3
1North Mississippi Research and Extension Center, Mississippi State University, 2Prairie Research Unit, Mississippi State University, 3Mississippi State University

4:15 p.m. 47 Effect of Zelnate administered at initial processing in high-risk, newly received beef calves on performance and morbidity
Brady E. Martin 1, Reagan N. Cauble 1, Beth B. Kegley 2, Jermey G. Powell 1
1University of Arkansas, 2University of Arkansas Division of Agriculture

Tuesday, January 28, 2020

PASTURES AND FORAGES II
Chair: Jennifer J. Tucker, University of Georgia; Sarah Montgomery-Williams, Mississippi State University
8:00 AM - 10:30 AM
Ballroom 1

8:00 a.m. 61 Effects of fescue cultivar on performance of beef cow/calf pairs grazed on summer stockpiled tall fescue pastures
Taylor A. Langford 1, Keri N. Hardin 1, Adam R. Murray 2, Charles A. Zumbaugh 2, Olivia M. Claire 2, David A. Fiske 3, Gabriel J. Pent 1, Thomas B. Wilson 2
1Virginia Tech, 2Department of Animal and Poultry Sciences, Virginia Tech, 3Shenandoah Valley Agriculture Research and Extension Center

8:15 a.m. 111 Metsulfuron and variable nitrogen application rates on infected tall fescue: effects on stocker performance, forage yield, nutritive value, ergovaline concentration and botanical composition
Kevin R. MENG 1, Eric Bailey 1, Josh Zeltwanger 1, Hannah Allen 1, Mikaela Adams 1, Derek Brake 1
1University of Missouri

8:30 a.m. 68 Effects of Plant Growth-Promoting Rhizobacteria on Fall-Stockpiled Bermudagrass
Madison Cole 1, Megan E. Griffin 1, Leanne L. Dillard 1, Kim K. Mullenix 1, Russell B. Muntifering 1, David Held 1
1Auburn University

18
8:45 a.m.  62  Effects of forage allowance and supplementation on performance of steers grazing wheat pasture.
Kynzie McNeill ¹, Ryan R. Reuter ¹, PAUL A. BECK ²
¹Oklahoma State University, ²Oklahoma State University, Department of Animal & Food Sciences

9:00 a.m.  58  Effects of Diploid and Tetraploid Annual Ryegrass Cultivars on Cattle Performance, Herbage Mass, and Nutritive Value
Sarah M. Montgomery-Williams ¹, Brandi B. Karisch ¹, Jane A. Parish ², Jesse Morrison ¹, Brian Baldwin ¹
¹Mississippi State University, ²North Mississippi Research and Extension Center, Mississippi State University

9:15 a.m.  PASTURES AND FORAGES II BREAK

9:30 a.m.  65  Effects of grazing cool-season cover crops on forage and animal performance
Russell C. Carrell ¹, Leanne L. Dillard ², Kim K. Mullenix ², Audrey Gamble ², Russell B. Muntifering ²
¹Cargill Animal Nutrition, ²Auburn University

9:45 a.m.  89  Fermentation Kinetics of Different Cool-Season Annual Mixtures With or Without Silage Inoculant
Sarah L. Shoup ¹, Kim K. Mullenix ¹, Leanne L. Dillard ¹, Russell B. Muntifering ¹
¹Auburn University

10:00 a.m.  34  Developing criteria for forage finished beef in the Southeastern U.S.
Mohan Acharya ¹, Joan M. Burke ², Erin Wood ³, Janeal W. Yancey ⁴
¹Department of Animal Science, University of Arkansas, ²USDA ARS Dale Bumpers Small Farms Research Center, ³USDA-ARS, ⁴Department of Animal Science, Division of Agriculture, University of Arkansas System, Fayetteville

10:15 a.m.  97  Impact of Regionalized Forage Quality and Quantity and Feed Grain Water Use on the Daily Texas Beef Cattle Water Footprint and Supply Chain Efficiency
Hector M. Menendez ¹, Luis O. Tedeschi ²
¹Texas A&M, ²Texas A&M University

PHYSIOLOGY III: REPRODUCTIVE
Chair: Vitor R.G Mercadante, Virginia Tech; Audrey Earnhardt-San, Texas A&M University and AgriLife Research, Department of Animal Science
8:00 AM - 11:00 AM
Ballroom 3/4

8:00 a.m.  138  Randel Lecture: Reproductive Behavior – the basis of reproductive success
Brenda M. Alexander ¹
¹University of Wyoming
8:30 a.m.  37  **Early pregnancy detection in cattle by analysis of maternal circulating microRNA expression**  
Andrea N. DeCarlo \(^1\), Joseph Parrish \(^1\), Nathan Long \(^1\), Nathan Clemson University Long \(^1\)  
\(^1\)Clemson University

8:45 a.m.  42  **Effect of injectable trace mineral supplementation on beef cows fertility and overall mineral status**  
Stefania Pancini \(^1\), Jhon F. Currin \(^2\), Jamie L. Stewart \(^1\), Sherrie Clark-Deener \(^1\), Tracey Redifer \(^1\), Nicholas W. Dias \(^1\), Claire L. Timlin \(^3\), Alvaro Sales \(^4\), Vitor RG Mercadante \(^4\)  
\(^1\)Virginia Tech, \(^2\)Large animal Clinical Sciences, Virginia-Maryland College of Veterinary Medicine, Blacksburg, VA, USA, \(^3\)Animal and Poultry Sciences, Virginia Tech, \(^4\)Animal and Poultry Sciences, Virginia Tech, Blacksburg, VA, USA.

9:00 a.m.  69  **Effects of supplementing heifers with dietary quercetin during late-gestation**  
Zachary A. Hisaw \(^1\), Caleta M. Willis \(^2\), Kaylee R. Kipp \(^2\), Douglas Eborn \(^1\), Megan P. Owen \(^1\)  
\(^1\)Texas A&M University Commerce, \(^2\)Texas A&M University-Commerce

9:15 a.m.  136  **Quantitative and qualitative analysis of interferon stimulated genes MX2, OAS1, and ISG15 for detection of pregnancy in cattle**  
Andrea N. DeCarlo \(^1\), Joseph Parrish \(^1\), Nathan Long \(^1\), Nathan Clemson University Long \(^1\)  
\(^1\)Clemson University

9:30 a.m.  **PHYSIOLOGY III BREAK**

9:45 a.m.  181  **Uterine and vaginal bacteria and cytokine profiles prior to artificial insemination between resulting pregnant and open postpartum beef cows**  
Rebecca K. Poole \(^1\), Taylor B. Ault-Seay \(^2\), Phillip R. Myer \(^3\), Andrea S. Lear \(^4\), Ky G. Pohler \(^1\)  
\(^1\)Texas A&M University, \(^2\)University of Tennessee, Knoxville, \(^3\)Department of Animal Science-University of Tennessee, \(^4\)College of Veterinary Medicine, University of Tennessee

10:00 a.m.  22  **Comparison of vaginal microbiome and concentrations of estradiol at artificial insemination in Brangus heifers**  
Riley D. Messman \(^1\), Zully E. Contreras-Correa \(^1\), Henry A. Paz \(^1\), George Perry \(^2\), Caleb O. Lemley \(^1\)  
\(^1\)Mississippi State University, \(^2\)South Dakota State University

10:15 a.m.  129  **Presynchronization with Prostaglandin F\(_{2\alpha}\) and prolonged exposure to exogenous progesterone impacts estrus expression and alters fertility in beef heifers**  
Nicky Oosthuizen \(^1\), Pedro Fontes \(^2\), Cliff Lamb \(^2\)  
\(^1\)ABS Global, \(^2\)Texas A&M University

10:30 a.m.  106  **In Utero Exposure of Ergot Alkaloids does not Impact Heifer Growth and Reproductive Performance**  
McKenzie L. Haimon \(^1\), Alecia R. Brown \(^1\), Matt H. Poore \(^2\), Daniel H. Poole \(^3\)  
\(^1\)Dept of Animal Science - NC State University, \(^2\)NC State University, \(^3\)North Carolina State University
10:45 a.m. 107 Influence of chronic melatonin supplementation on bovine testis physiology
Brittni P. Littlejohn 1, Kayla B. Mercer 1, Karrigan J. Bowers 1, Riley D. Messman 2, Zully E. Contreras-Correa 2, Dana S. Reid 3, Jean M. Feugang 2, Rhonda C. Vann 4, Caleb O. Lemley 2
1Department of Animal and Dairy Sciences, Mississippi State University, Mississippi State, MS, 2Mississippi State University, 3Department of Animal and Dairy Sciences, Mississippi State University, 4Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, Raymond, MS

SMALL RUMINANT PRODUCTION II
Chair: Richard Browning, Jr, Tennessee State University; S. Maggie Justice, Clemson University
8:00 AM - 11:00 AM
Walker

8:00 a.m. 78 Evaluation of extended hair sheep ram semen stored as liquid at 5°C
Robert W. Godfrey 1, Sabrina Keiper 1, Sue A. Lakos 2
1University of the Virgin Islands, 2University of the Virgin Islands, Agricultural Experiment Station

8:15 a.m. 142 Reproductive performance of land race hair sheep ewes in different breeding seasons under a semi-continuous production
Stephan Wildeus 1, Dahlia O'Brien 1
1Virginia State University

8:30 a.m. 141 Reproductive characteristics of post-pubertal lambs after being rendered short scrotum
Dahlia O'Brien 1, Stephan Wildeus 1, Susan Schoenian 2, Maegan Perdue 2
1Virginia State University, 2University of Maryland

8:45 a.m. 90 Growth and carcass characteristics of ram, wether, and short-scrotum lambs: year 2
Susan Schoenian 1, Jeffery W. Semler 2, Mary Beth Bennett 3, Chris Anderson 1, Amanda M. Grev 2, Maegan Perdue 1
1University of Maryland, 2University of Maryland Extension, 3West Virginia University

9:00 a.m. 162 The Effects of a Saccharomyces Cerevisiae Fermentation Product on the Digestibility of an Annual Rye Grass Hay Based Finishing Diet for Lambs
Justin C. Burt 1, Jamie A. Boyd 2, Lisa Baxter 1, Brittany Perron 3
1University of Georgia, 2Sul Ross State University, 3Clemson University

9:15 a.m. 66 Effects of level of protein supplementation on intake of wheat straw and drinking water varying in salinity by Boer and Spanish goats
Chala Merera 1, Abdelhafid Keli 2, Ryszard Puchala 3, Adaven Scronce 4, Luana Ribeiro 2, Raquel Lourencoin 2, Wei Wang 3, Arthur L. Goetsch 3
1American Institute for Goat Research Langston University; Department of Animal Science, Ambo University, 2American Institute for Goat Research, Langston University, 3Langston University, 4American Institute for Goat Research, Langston University; Ambo University, Ambo, Ethiopia

9:30 a.m. SMALL RUMINANT PRODUCTION II BREAK
9:45 a.m.  56  Effects of creep feed supplementation and sire breed on the post-weaning performance of replacement doelings.
Emily G. Hayes 1, Lauren Stevens 1, Shaneqwa Thomas 1, Kaylee Hurt 1, Richard Browning, Jr 1
1Tennessee State University

10:00 a.m.  170  The effects of supplementing a chelated mineral containing Ascophyllum nodosum on intake and performance of creep-fed hair lambs.
Victoria Romo 1, Jamie A. Boyd 1
1Sul Ross State University

10:15 a.m.  161  The effect on ADG, DMI, and blood metabolites of weaned Katahdin lambs offered chelated mineral with Ascophyllum nodosum on a high forage diet
Elizabeth Jolly 1, Jamie A. Boyd 1
1Sul Ross State University

10:30 a.m.  165  The effects of feeding lasalocid in combination with zeranol implants on performance and carcass traits in hair sheep
Brittany A. Lippy 1, Blake K. Wilson 1, Jerry Fitch 1, Gretchen G. Mafi 1, Justin Crosswhite 1
1Oklahoma State University

10:45 a.m.  146  Survey of residual feed intake in Katahdin and Texel lambs in a feedlot environment
Scott L. Bowdridge 1, Andrew R. Weaver 1, Eugene Felton 1, Scott P. Greiner 2, Scott A. Bowdridge 1
1West Virginia University, 2Virginia Tech

RUMINANT ANIMAL PRODUCTION III: REPRODUCTIVE CATTLE
Chair: Ryon Walker, Texas A&M University; Gleise Medeiros da Silva, ASAS
8:00 AM - 11:15 AM
Ballroom 2

8:00 a.m.  127  Predicting Dry Matter Intake of Gestating and Lactating Beef Cows
Megan A. Gross 1, Claire Anderson 1, Amanda Holder 2, Alexi Moehlenpah 1, Carla Goad 1, Harvey Freety 3, PAUL A. BECK 4, Eric A. DeVuyst 1, David Lalman 1
1Oklahoma State University, 2College of the Ozarks, 3USDA, ARS, U.S. Meat Animal Research Center, 4Oklahoma State University, Department of Animal & Food Sciences

8:15 a.m.  188  Voluntary individual intake and performance of mature cows compared to primiparous heifers consuming a low quality forage
Amanda Holder 1, Claire Anderson 2, Megan A. Gross 2, Alexi Moehlenpah 2, David Lalman 2
1College of the Ozarks, 2Oklahoma State University

8:30 a.m.  41  Effect of grazing cotton crop residue versus Bermudagrass on performance and economic parameters in late gestation beef cows
Dylan Blake B. Davis 1, Shane R. Hernandez 2, Robert Lawton Stewart 1
1University of Georgia, 2University of Georgia, Animal and Dairy Science
8:45 a.m. 79 Evaluation of extended release eprinomectin efficacy on multiparous beef cow performance
Laine Zammit 1, Jermy G. Powell 1, Reagan N. Cauble 1, Toby D. Lester 1, Callan Lichtenwalter 1, Ellen M. Herring 2, Clay McGuire 1, Autumn T. Pickett 1, Eva M. Wray 1, Chris Tucker 1
1University of Arkansas, 2University of Arkansas System Division of Agriculture Department of Animal Science

9:00 a.m. 1 A survey of anthelmintic resistance in Angus bulls participating in centralized performance tests in Appalachia
Roger T. Rohrbaugh 1, Andrew R. Weaver 1, Scott P. Greiner 2, Scott A. Bowdridge 1
1West Virginia University, 2Virginia Tech

9:15 a.m. 40 Effect of calving season in an artificial insemination program on finishing performance and carcass traits
Taylor J. Garcia 1, Colton A. Robison 1, Paul A. Beck 2, Ryan R. Reuter 1, Blake K. Wilson 1, David Lalman 1
1Oklahoma State University, 2Oklahoma State University, Department of Animal & Food Sciences

9:30 a.m. 55 Effects of concentrate supplementation frequency and amount on growth and reproductive performance of Brangus heifers
Elizabeth A. Palmer 1, Marcelo Vedovatto 2, Juliana Ranches 3, Rhaiza A. Oliveira 4, John Arthington 5, Joao Vendramini 3, Philipe Moriel 6
1University of Florida - Range Cattle Research & Education Center, 2Faculdade de Medicina Veterinária e Zootecnia, Universidade Federal de Mato Grosso do Sul, 3UF/IFAS - Range Cattle Research & Education Center, 4University of Florida, IFAS – Range Cattle Research and Education Center, 5Department of Animal Sciences - University of Florida, 6University of Florida

9:45 a.m. RUMINANT ANIMAL PRODUCTION III BREAK

10:00 a.m. 71 Effects of timing of supplementation during late gestation in Bos indicus-influenced beef cows on post-weaning growth, immunity, and carcass characteristics of steer progeny
Elizabeth A. Palmer 1, Marcelo Vedovatto 2, Juliana Ranches 3, Vinicius N. Gouvea 4, Rhaiza A. Oliveira 5, John Arthington 6, Joao Vendramini 3, Matt H. Poore 7, Philipe Moriel 8
1University of Florida - Range Cattle Research & Education Center, 2Faculdade de Medicina Veterinária e Zootecnia, Universidade Federal de Mato Grosso do Sul, 3UF/IFAS - Range Cattle Research & Education Center, 4Texas A&M, 5University of Florida, IFAS – Range Cattle Research and Education Center, 6Department of Animal Sciences - University of Florida, 7NC State University, 8University of Florida

10:15 a.m. 108 Influence of Cow Body Weight Changes on Calf Growth during the Summer Grazing Period
Flint W. Harrelson 1, Joseph Fraley 1, Patricia L. Harrelson 1
1Morehead State University
10:30 a.m. 105 Impacts of Phosphorus Intake on Beef Heifer Growth Performance and Reproductive Tract Scores
Hailey Hilfiker 1, Beth B. Kegley 2, Rick W. Rorie 3, Pete A. Hornsby 1, Jana L. Reynolds 4, Benjamin P. Shoulders 4, Reagan N. Cauble 3, Jermey G. Powell 3
1University of Arkansas Division of Agriculture Dept. of Animal Science, 2University of Arkansas Division of Agriculture, 3University of Arkansas, 4University of Arkansas System Division of Agriculture

10:45 a.m. 126 Pre- and post-partum supplementation of molasses/urea, with or without methionine fortification, to enhance growth and physiology of Bos indicus-influenced primiparous cows and their offspring
Elizabeth A. Palmer 1, Marcelo Vedovatto 2, Juliana Ranches 3, Vinicius N. Gouvea 4, Rhaiza A. Oliveira 5, John Arthington 6, Joao Vendramini 3, Philippe Moriel 7
1University of Florida - Range Cattle Research & Education Center, 2Faculdade de Medicina Veterinária e Zootecnia, Universidade Federal de Mato Grosso do Sul, 3UF/IFAS - Range Cattle Research & Education Center, 4Texas A&M, 5University of Florida, IFAS – Range Cattle Research and Education Center, 6Department of Animal Sciences - University of Florida, 7University of Florida

11:00 a.m. 190 Fontenot Award Recipient: Winter vs. year-round supplementation of mature beef cows on feedlot performance and carcass characteristics of steer progeny
Elizabeth A. Palmer 1, Marcelo Vedovatto 2, Juliana Ranches 3, Vinicius N. Gouvea 4, Rhaiza A. Oliveira 5, Matt H. Poore 6, John Arthington 7, Joao Vendramini 3, Philippe Moriel 8
1University of Florida - Range Cattle Research & Education Center, 2Faculdade de Medicina Veterinária e Zootecnia, Universidade Federal de Mato Grosso do Sul, 3UF/IFAS - Range Cattle Research & Education Center, 4Texas A&M, 5University of Florida, IFAS – Range Cattle Research and Education Center, 6NC State University, 7Department of Animal Sciences - University of Florida, 8University of Florida

RUMINANT ANIMAL PRODUCTION IV: BEHAVIOR
Chair: Jhones Sarturi, Texas Tech University; Brooke Clemmons, University of Tennessee
Knoxville
8:00 AM - 11:15 AM

8:00 a.m. 189 What’s in a step? Evaluating the interrelationship between productivity and cattle behavior during a series of temperament tests
Courtney L. Daigle 1, Amanda J. Hubbard 2, Xandra Meneses 2, Temple Grandin 3
1Department of Animal Science, Texas A&M University, 2Texas A&M University, 3Colorado State University

8:15 a.m. 67 Effects of Maternal Disposition and Calf Chute Behavior at Weaning on Calf Finishing Performance
Michael Sims 1, PAUL A. BECK 2, Cyril B. Stewart 3, Cody Shelton 4, Reagan N. Cauble 5, Andrea L. Warner 1
1Oklahoma State University, 2Oklahoma State University, Department of Animal & Food Sciences, 3University of Arkansas SWREC, 4University of Arkansas Division of Agriculture, 5University of Arkansas
8:30 a.m.  51  Effects of acclimation on cattle response to humans while being handled.  
Corban H. Hemphill 1, Ryan R. Reuter 1, James P. Neel 2, Laura Goodman 1  
1Oklahoma State University, 2USDA, ARS, Grazinglands Research Laboratory

8:45 a.m.  155  The effect of number of cattle per pen on stocker cattle health and performance.  
Kirsten A. Midkiff 1, Brandi B. Karisch 2, Amelia Woolums 2  
1Mississippi State University Animal and Dairy Sciences, 2Mississippi State University

9:00 a.m.  98  Impact of social mixing on feedlot steer eating and lying behavior  
Amanda J. Hubbard 1, Jason Sawyer 2, Reinaldo F. Cooke 1, Jenny Jennings 3, Courtney L. Daigle 4  
1Texas A&M University, 2Texas A&M University-Kingsville, 3Texas A&M AgriLife Research, 4Department of Animal Science, Texas A&M University

9:15 a.m.  167  The effects of fly control strategies on fly abundance, fly avoidance behaviors, and performance in feedlot bulls and steers  
Courtney McNeff 1, Justin Talley 1, Colton A. Robison 1, Blake K. Wilson 1  
1Oklahoma State University

9:30 a.m.  RUMINANT ANIMAL PRODUCTION IV BREAK

9:45 a.m.  102  Impact of weaning strategy on beef cow-calf behavior and activity  
Molly K. Alexander 1, Carrie L. Pickworth 1, Mikayla Moore 2, Matt H. Poore 2  
1North Carolina State University, 2NC State University

10:00 a.m.  114  Monitoring the impact of shade and housing on physiological response in finishing beef cattle during the summer months in the Southeastern United States.  
Shane R. Hernandez 1, William M. Sims 2, Alexander M. Stelzleni 1, Dylan Blake B. Davis 2, Luís Fernando Glasenapp De Menezes 3, Robert W. McKee 2, Robert Lawton Stewart 2  
1University of Georgia, Animal and Dairy Science, 2University of Georgia, 3Federal University of Technology

10:15 a.m.  94  Impact of a Hydrolyzed Yeast Product on Performance, Hair Coat Shedding, and Behavior of Cows Grazing Pastures Containing Endophyte-Infected Tall Fescue  
Patricia L. Harrelson 1, Rick Martin 2, Brent Rogers 1, Flint W. Harrelson 1  
1Morehead State University, 2Gro-Tec Inc.

10:30 a.m.  148  The effect of bunk preference on performance, intake, and efficiency of feedlot steers using an automated individual feeding system  
Kaitlyn N. Pierce 1, Ryan R. Reuter 1, Colton A. Robison 1, Blake K. Wilson 1  
1Oklahoma State University

10:45 a.m.  38  Effect of Breed on Dairy Calf Vigor from Birth to Preweaning  
Michelle P. Meza 1, Caitlin M. Turner 1, Chad M. Powers 1, Andrea K. Sexten 1  
1Eastern Kentucky University
11:00 a.m. 150 The effect of competition for an automated supplement feeder on supplement intake behavior of stocker steers
Taylor C. Husz 1, Carla Goad 1, Ryan R. Reuter 1
1Oklahoma State University

EXTENSION
Chair: Jason Smith, Texas A&M AgriLife Extension; Madison Lee
8:15 AM - 11:30 AM
Robertson

8:15 a.m. 3 Addressing Food Animal Veterinary Services Shortages Through Veterinary Continuing Education Courses: A New Role for Extension as a Bridge Between Veterinary and Agriculture Communities
Heidi M. Ward 1
1University of Arkansas Cooperative Extension Service

8:30 a.m. 7 Assessment of beef cattle record keeping utilization and application: a collaboration of the Alabama Beef Cattle Improvement Association and the Alabama Cooperative Extension System
Michelle F. Elmore 1, Kim K. Mullenix 1, Joshua B. Elmore 2
1Auburn University, 2Alabama Cooperative Extension System

8:45 a.m. 15 Climate Change and the Evolving Fulani Pastoralists Cattle Production System in Nigeria: A Need to Retool Extension and Innovation Services
AKINWUMI OMOTAYO 1, Olga Bolden -Tiller 1, Chukewueme Okere 1
1Tuskegee University

9:00 a.m. 29 Demonstrating the Effects of Deworming and Implanting Weaned Calves for Retained Ownership on Pasture in Eastern Oklahoma
PAUL A. BECK 1, Earl Ward 2, Scott Clawson 2, Brian Pugh 2, Rodney Farris 2
1Oklahoma State University, Department of Animal & Food Sciences, 2Oklahoma State University

9:15 a.m. 73 Engaging youth through bovine reproductive practices
Nicholas W. Dias 1, Alvaro Sales 2, Claire L. Timlin 3, Curtis Friedel 4, Vitor RG Mercadante 2
1Virginia Tech, 2Animal and Poultry Sciences, Virginia Tech, Blacksburg, VA, USA, 3Animal and Poultry Sciences, Virginia Tech, 4Virginia Tech - Agricultural, Leadership, and Community Education

9:30 a.m. 116 Oklahoma State University Continuing Education Online Courses for Extension Educators in 2020
Alexi Moehlenpah 1, David Lalman 1
1Oklahoma State University

9:45 a.m. EXTENSION BREAK

10:00 a.m. 125 Possibility of Shifting Domestic Supply Curve for Lamb and Goat Meat: The Case of Market Price Information in the Southeast USA
Lila B. Karki 1, Uma Karki 1, Srinivasa R. Mentreddy 2
1Tuskegee University, 2Alabama A&M University
10:15 a.m. 131  **Producer adoption of preconditioning strategies in the Oklahoma Quality Beef Network**  
Jeff Robe 1, Paul A. Beck 2, Dana L. Zook 1, Marty New 1, Earl Ward 1, Brian M. Freking 1  
1Oklahoma State University, 2Oklahoma State University, Department of Animal & Food Sciences

10:30 a.m. 135 **Public perceptions of equine processing and welfare**  
Kelly Melvin 1, Liesel G. Schneider 2, Jennie L. Ivey 3, Peter D. Krawczel 3  
1University of Tennessee, 2Animal Science Department, University of Tennessee Institute of Agriculture, 3University of Tennessee Institute of Agriculture

10:45 a.m. 172 **The Mississippi Beef Quality Assurance Program: Certification Demographics from 2015 to 2019**  
Alexandra M. Pittman 1, Brandi B. Karisch 1, Carla Huston 2  
1Mississippi State University, 2Mississippi State University College of Veterinary Medicine

11:00 a.m. 174 **The Southeast hay contest: 10 year summary**  
Leanne L. Dillard 1, Lisa Baxter 2, Marcelo Wallau 3, Deidre D. Harmon 4, Dennis W. Hancock 2  
1Auburn University, 2University of Georgia, 3University of Florida, 4North Carolina State University

11:15 a.m. 176 **Utilizing Working Groups to Provide Hands-On Learning Opportunities for Experienced Beef Cattle Producers.**  
Timothy P. Vining 1, Luke L. Jacobs 2, Marty L. Marks 1, Gerald L. Thompson 1, Kim K. Mullenix 3  
1Alabama Cooperative Extension System, 2Clemson University, 3Auburn University

**NUTRITION**  
Chair: Robert Lawton Stewart, University of Georgia; Kaylyn Groce, University of Georgia  
10:45 AM - 11:30 AM  
Ballroom 1

10:45 a.m. 11 **Carcass Attributes and Performance of Poultry (**Gallus gallus domesticus**) fed Olive Pomace**  
Benny J. Conn 1, Payton Snokhous 1, Ethan Carter 1, Phil Urso 2, Jerrad F. Legako 3, Stanley F. Kelley 1, Marcy M. Beverly 1, Mark Anderson 1  
1Sam Houston State University, 2Texas Tech University, 3Texas Tech University, Department of Animal and Food Sciences

11:00 a.m. 118 **Palatability of Olive Pomace in Mozambique Tilapia (**Oreochromis mossambicus**)**  
Ethan Krasue 1, Benny J. Conn 1, Stanley F. Kelley 1, Marcy M. Beverly 1, Mark Anderson 1  
1Sam Houston State University

11:15 a.m. 176 **The Suitability of Autoclave and Pressure Cooker Washing Methods in Comparison to ANKOM200 to Determine Neutral Detergent Fiber Using Different Feedstuffs and Washing Solutions**  
Jordan Adams 1, Aaron B. Norris 2, Madeline E. Rivera 1, Luiz Fernando Dias Batista 1, Luis O. Tedeschi 1  
1Texas A&M University, 2Texas Tech University