



Sunday, January 25, 2026

SERA 41 Symposium: Integrating Research and Extension Programming

Chair: Brandon Smith, Auburn University

1:00 PM - 4:15 PM

Pinnacle I-II

1:00 p.m. 187 **Using Research to Train Extension Personnel: An Administrative Perspective**
Cliff Lamb ¹

¹Texas A&M University

1:45 p.m. 188 **Using your Extension Program to Inform Research**

Jason K. Smith ¹

¹Texas A&M AgriLife Extension

2:30 p.m. **SERA 41 Symposium Break**

2:45 p.m. 189 **Using your Research Program to Inform Extension**

Daniel Rivera ¹

¹University of Arkansas Division of Agriculture

3:30 p.m. 190 **How Does Industry Approach the Integration of Research and Outreach?**

John Hutcheson ¹

¹Merck Animal Health

Undergraduate Student Competition

Chair: Kelsey M. Harvey, Prairie Research Unit, Mississippi State University

2:00 PM - 2:30 PM

Pinnacle Ballroom IV

2:00 p.m. **Student Competitions Introduction and Logistics**

Kelsey M. M. Harvey ¹

¹Prairie Research Unit, Mississippi State University

2:05 p.m. 49 **N-carbamylglutamate and Melatonin Supplementation Alters Peripheral Blood Flow in Lambs Without an Apparent Benefit to Heat Stress.**

Emilia H. Saint Loup ¹, Antonio Luna ¹, Ella Dobler ², Jesús A. Cortés-Mercado ¹, Kaitlin C. Dinkle ¹, Zully E. Contreras-Correa ¹

¹Tarleton State University, ²Tarleton State university

2:10 p.m. 52 **The Effect of Including a Yeast Culture and Essential Oils in Receiving Cattle Diets on Growth Performance and Health.**

Taylor D. Foster¹, Robin A. Cheek², Elizabeth B. Kegley², Jana L. Reynolds², Alexis J. Harness², Craig M. Looney², Jeremy G. Powell²

¹University of Arkansas Division of Agriculture, ²University of Arkansas

2:15 p.m. 50 **Ruminal Degradability Kinetics of Old World Bluestem “WW-B Dahl” Substrate on Beef Steers Offered Grower or Finisher Diets with *Saccharomyces Cerevisiae*.**

Crystal N. Martinez¹, Jhones O. Sarturi¹, Ahmari Henry¹, Kaliu Silva², Otavio France¹, Beatriz Reis¹, Kip Karges², Fernando T. Sandrini¹, Osman R.A. Melgar¹, Barbara M. Rodrigues³

¹Texas Tech University, ²Lallemand Animal Nutrition, ³Texas A&M University

2:20 p.m. 51 **Surveillance of Bovine Leukemia Virus ELISA Positivity Rate in Arkansas Beef Cattle Herds.**

Austin Sharp¹, Skylar Daniels², Adnan Alrubaye³, Ken B. Coffey¹, Aranyak Goswami¹, Lauren R. Rogers¹

¹University of Arkansas, Department of Animal Science, ²Arkansas Department of Agriculture, Arkansas Veterinary Diagnostic Lab, ³University of Arkansas, Department of Poultry Science

2:25 p.m. 53 **Using a High-quality Fibrous Co-product to Apprise the Effects of *Saccharomyces Cerevisiae* and beef Cattle Diet Type on Ruminal Degradability Kinetics.**

Fernanda Berumen¹, Jhones O. Sarturi¹, Kaliu Silva², Ahmari Henry¹, Otavio France¹, Beatriz Reis¹, Kip Karges², Barbara M. Rodrigues³, Osman R.A. Melgar¹

¹Texas Tech University, ²Lallemand Animal Nutrition, ³Texas A&M University

Graduate Student Competition MS

Chair: Kelsey Harvey, Mississippi State University

2:30 PM - 3:15 PM

Pinnacle Ballroom IV

2:30 p.m. 14 **Effects of Creep Feeding Supplementation and Growth-Promoting Implants on Preweaning Performance of *Bos Indicus*-Influenced Calves.**

Kelsey R. Mazeris¹, Gianluca Chagas¹, Marcos R. Oliveira Jr¹, Pedro H.V. H.V. Carvalho², Barbara Roqueto dos Reis¹

¹White Sand Research Unit, Mississippi State University, ²Colorado State University

2:35 p.m. 17 **Effects of Inclusion of Soybean Oil in Beef Heifer Diets on Reproductive Function and Calf Growth Performance.**

Isabella R. Becerra¹, Kirsten A. Midkiff¹, Elizabeth B. Kegley¹, Robin A. Cheek¹, Jacy L. Riddle¹, Doug L. Galloway², Jana L. Reynolds¹, Alexis J. Harness¹, Charles R. Looney¹, Brittini P. Littlejohn², Jeremy G. Powell¹

¹University of Arkansas, ²University of Arkansas Division of Agriculture

2:40 p.m. 18 **Effects of Melatonin Supplementation and Maternal Nutrient Restriction on Fatty Acid Transport During Late Gestation in Beef Cattle.**

Katherine Kennedy¹, Zully E. Contreras-Correa², Rebecca Swanson³, Riley D. Messman⁴, Darcie Sidelinger⁵, Heath H. King¹, Shangshang wWng⁶, Thu Dihn⁶, Caleb O. Lemley¹
¹Mississippi State University, ²Tarleton State University, ³South Dakota State University, ⁴Oklahoma State University, ⁵Mississippi State, ⁶Tyson Foods

2:45 p.m. 22 **Impact of Postweaning Stair-step Nutritional Regimen in Beef Heifers on Reproductive Development and Productivity as Primiparous Cows.**

Brooklyn Laubinger¹, Kelsey M. Harvey¹, Mason Drewery¹, Anna McGehee¹, Jules Rimmer¹, T Cole Miles¹, Madeline G. McKnight¹, Toriann Winton¹, Reinaldo F. Cooke², Caleb O. Lemley¹, Jessica Halfen¹, Brandi B. Karisch¹
¹Mississippi State University, ²Texas A&M University

2:50 p.m. 24 **Investigating the Influence of Dietary N-carbamylglutamate and Melatonin on Liver Hemodynamics, Amino Acid Concentration, and Transcriptomics in Heat-stressed Finishing Lambs.**

Jesús A. Cortés-Mercado¹, Isabella R. Becerra², Hannah Blasingame¹, Mackenzie Hodge¹, Anna West¹, Mark Arick II³, Zully E. Contreras-Correa¹
¹Tarleton State University, ²University of Arkansas, ³Mississippi State University

2:55 p.m. 25 **N-carbamylglutamate and Melatonin Supplementation Modulate Testicular Physiology in Peripubertal Rams Subjected to Unmitigated Heat Load.**

Kaitlin C. Dinkle¹, Ella Dobler², Emilia H. Saint Loup¹, Jesús A. Cortés-Mercado¹, Darcie Sidelinger³, Zully E. Contreras-Correa¹
¹Tarleton State University, ²Tarleton State University, ³Mississippi State

3:00 p.m. 26 **Potential of Southern Pine Silvopasture to Mitigate Enteric Methane Emission from and Enhance Performance of Hair Sheep.**

Sagar Acharya¹, Uma Karki¹, Arjun Acharya¹, Madhav Dumre¹
¹Tuskegee University

3:05 p.m. 27 **Retrospective Evaluation of Ozone Uterine Lavage on Subsequent Pregnancy Success in Mares Affected by Post-Breeding Induced Endometritis.**

Patrisha D. Anaya Estrada¹, Rafael Montiel², Nestor Sanchez², Kimberly A. Guay¹, Trinetta N. Jones¹, Rafael E. Martinez¹
¹Tarleton State University, ²MillionHeir Ranch

3:10 p.m. 30 **Using the Ruminal Degradability Kinetics of a Corn Silage Substrate to Apprise the Effects of Saccharomyces Cerevisiae in Beef Cattle Grower and Finisher Diets.**

Ahmari Henry¹, Jhones O. Sarturi¹, Kalilu Silva², Otavio France¹, Kip Karges², Beatriz Reis¹, Fernando T. Sandrini¹, Barbara M. Rodrigues³, Osman R.A. Melgar¹
¹Texas Tech University, ²Lallemand Animal Nutrition, ³Texas A&M University

Graduate Student Competition PHD

Chair:

3:15 PM - 4:10 PM

Pinnacle Ballroom IV

3:15 p.m. 36 **The Effects of a Single-dose Injectable Trace Mineral Solution on Performance in Beef Cattle During Preconditioning and Feedlot Receiving: A Systematic Review and Meta-analysis.**

Madeline G. McKnight¹, Kelsey M. Harvey¹, W Isaac Jumper¹, Juliana Ranches², Brandi B. Karisch¹

¹Mississippi State University, ²Oregon State University

3:20 p.m. 41 **Evaluating the Efficacy of Extension-Based Artificial Insemination Trainings on Knowledge Gain, Satisfaction Level, and Behavioral Intent.**

Talha Ashraf¹, Brittney Santamaria-Cortez², Carlos E. Lima², Mady Justiniano², Allyson S. McCarty¹, Megan Bahr², James Clothier³, William Farmer⁴, Paul Gonzalez⁵, Ashley Robbins⁶, Felipe A.C.C. Silva²

¹North Carolina State University, ²Department of animal science, North Carolina State University, ³College of Agriculture and Life Sciences (CALS), North Carolina State University, ⁴University of Mount Olive, ⁵NC Cooperative Extension, Sampson County Center, ⁶NC Cooperative Extension

3:25 p.m. 46 **Pre-analytical Blood Sample Handling for Downstream Cell-free DNA Analysis in Beef Cattle.**

Maria Camila Lopez Duarte¹, Daniella C. Heredia², Mauro Venturini², Jose L. Infante², Victoria Toffolo Luiz Rozin², Araseli B. Maderal², Angela M. Gonella-Diaza²

¹University of Florida, ²University of Florida

3:30 p.m. 47 **Seasonality of Bovine Respiratory Disease Incidence and Nasal Temperatures in Receiving Beef Cattle: A Potential Early Disease Detection Method.**

Robin A. Cheek¹, Elizabeth B. Kegley¹, Jeremy G. Powell¹, Jana L. Reynolds¹, Alexis J. Harness¹, Craig M. Looney¹, Jacy L. Riddle¹

¹University of Arkansas

3:35 p.m. 42 **Impact of Ultra-high Stocking Density Grazing System on Cattle Behavior and Productivity.**

Bronwyn Pepper¹, Kelsey M. Harvey¹, Aaron B. Norris², Ameer Bumguardner¹, Anna McGehee¹, Brooklyn Laubinger¹, Madeline G. McKnight¹, Jules Rimmer¹, Cole Miles¹, Brandi B. Karisch¹

¹Mississippi State University, ²Texas Tech University

3:40 p.m. 33 **A Meta-analysis Assessing the Effects of Total Dietary Sulfur or Adjusted Ruminant Protein Sulfur on Beef Cattle Growth Performance, Carcass Characteristics, Digestibility, and Ruminant Fermentation.**

Osman R.A. Melgar¹, Jhones O. Sarturi¹, Michael L. Galvayan¹, Roberio R. Silva²
¹Texas Tech University, ²Universidade Estadual do Sudoeste da Bahia (UESB)

3:45 p.m. 34 **Automated Luteal Blood Perfusion Assessment Across the Bovine Estrous Cycle Using Image Processing and Deep Learning Algorithms.**

Lucas Melo-Goncalves¹, Jaden Hallman¹, Gustavo Marcelo Chiconato¹, Samir Burato¹, Anderson Alves¹, Pedro Fontes¹
¹University of Georgia

3:50 p.m. 38 **Effects of Feeding a Bacillus-based Probiotic on Nutrient Utilization and Microbiota Profile in the Rumen and Reproductive Tract of Beef Heifers Receiving a Forage-based Diet.**

Izadora de Souza¹, Reinaldo F. Cooke¹, Kelsey M. M. Harvey², Shea Mackey¹, Thainá Minela¹, Zachary K. Seekford¹, Ky G. G. Pohler¹, Joao M. B. Vendramini³
¹Texas A&M University, ²Prairie Research Unit, Mississippi State University, ³Texas A&M AgriLife Research & Extension Center

3:55 p.m. 43 **Integrated Transcriptomic and Metabolomic Analysis of Immune and Metabolic Pathways in Broiler Chickens Supplemented with Lactobacillus Reuteri and Streptomyces Coelicolor.**

Oluwaseun D. Adeyemi¹, Sarayu Bhogoju², Goodness Olakanmi¹, Thyneice Taylor-Bowden¹, Agnes Kilonzo-Nthenge¹, Xiaofei Wang¹, Samuel Nahashon¹
¹Tennessee State University, Nashville, TN, ²University of Kentucky

4:00 p.m. 44 **Livestock Response to Alternative Annual Forages Under Semi-arid Conditions.**

Diego F. Aviles¹, Alondra Cruz¹, Krishna Jagadish¹, Caitlyn Cooper¹, Aaron B. Norris¹
¹Texas Tech University

4:05 p.m. 45 **MicroRNA Treatment Delivery Methods and Short-Term Effects on Growth in Juvenile Rainbow Trout (*Oncorhynchus mykiss*): A Pilot Study.**

Aliute S. Udoka¹, Troy Farmer¹, Susan K. Duckett¹
¹Clemson University

Monday, January 26, 2026

Small Ruminant Production I: Nutrition

Chair: Taryn Chima, West Virginia University

8:00 AM - 11:00 AM

Pinnacle Ballroom IV

8:00 a.m. 89 **Assessing the Impact of Bee Pollen Supplementation on Energy Metabolism in Crossbred Boer Goats.**

Bianca V. Trochez Vargas ¹

¹Texas State University

8:15 a.m. 90 **Bee Pollen as a Natural Modulator of Glucose and Protein Metabolism in Crossbred Goats.**

Bianca V. Trochez Vargas ¹

¹Texas State University

8:30 a.m. 91 **Repeatability of Feed Efficiency and Feeding Behavior Across Diets in Katahdin Ewes Divergently Selected for Residual Feed Intake.**

Nicole K. Valliere-Kopetzky ¹, Donald L. Wright ², Andrew R. Weaver ³, Scott A. Bowdridge ⁴, Scott P. Greiner ¹

¹Virginia Tech, ²Southwest Agricultural Research and Extension Center, Virginia Tech, ³North Carolina State University, ⁴West Virginia University

8:45 a.m. 92 **Use of Soy Hull and Corn Gluten Feed in Post-weaning Diets of Landrace Hair Sheep Lambs: Growth and Intake.**

Stephan A. Wildeus ¹, Dahlia J. O'Brien ¹

¹Virginia State University

9:00 a.m. 93 **Effects of Supplement Type and Breeding Season on Parasite Load in Hair Sheep Ewes.**

Dahlia J. O'Brien ¹, Stephan A. Wildeus ¹, Kwame Matthews ²

¹Virginia State University, ²Delaware State University

9:15 a.m. **Small Ruminant Production I: Nutrition Break**

9:30 a.m. 94 **Effect of Supplement Type, Season and Breed on Pre-weaning Lamb Performance in Landrace Hair Sheep in a Pasture-based Accelerated Mating System.**

Stephan A. Wildeus ¹, Dahlia J. O'Brien ¹, Kwame Matthews ²

¹Virginia State University, ²Delaware State University

9:45 a.m. 95 **Grazing Performance of Meat Goats Under Mississippi Summer Conditions. A Comparison: Kiko vs. Spanish.**

Maggie Dillahunty¹, Larry Leon-Medina¹, Cadence Jackson¹, Baylee McAnally¹, Gabrielle Champ¹, Madeline Merry¹, Imani Cannon¹, Jackson Grace¹, Santiago Cornejo¹, Rhonda C. Vann¹, Leyla Rios¹

¹Mississippi State University

10:00 a.m. 96 **Agro-byproduct Supplementation During Late Gestation and Lactation in Landrace Hair Sheep During Different Seasons Managed Under Accelerated Mating on Pasture.**

Stephan A. Wildeus¹, Dahlia J. O'Brien¹

¹Virginia State University

10:15 a.m. 97 **A Performance Comparison of Kiko Bucks Grazing Under Mississippi Summer Conditions with and Without Supplementation.**

Larry Leon-Medina¹, Kelsey R. Mazeres², Alex Shook¹, Rhonda C. Vann¹, Leyla Rios¹

¹Mississippi State University, ²White Sand Research Unit, Mississippi State University

Kunkle Symposium: Rebuilding the Cow Herd

Chair: Pedro Fontes, University of Georgia

8:00 AM - 11:30 AM

Pinnacle I-II

8:00 a.m. **Kunkle Symposium Introduction**

8:15 a.m. 54 **Rebuilding the U.S. Beef Cow herd—Market Signals, Economic Considerations, and Industry Implications**

James Mitchell¹

¹Department of Agricultural Economics and Agribusiness, University of Arkansas Division of Agriculture

9:00 a.m. 55 **Rebuilding the U.S. beef herd through more intentional reproductive management of replacement heifers: Lessons from the Missouri Show-Me-Select Replacement Heifer Program**

Jordan M. Thomas¹

¹University of Missouri

9:45 a.m. **Kunkle Symposium Break**

10:00 a.m. 56 **Nutritional considerations for heifer development programs in the Southeastern US**

Lawton Stewart¹

¹University of Georgia

10:45 a.m. 57 **Expansion or Replenishing—Implications for the U.S. Cow Herd**

Logan R. Thompson¹, Matthew R. Beck²

¹Kansas State University, ²Texas A&M University

Ruminant Animal Production I: Nutrition

Chair: Macie Weigand, Kansas State University

8:00 AM - 11:30 AM

Commerce A

8:30 a.m. 65 **Does the Source of Trace Mineral Supplementation Influence Fiber Degradability in Beef Cattle?**

Rodrigo Marques¹, Fernando Cidrini¹, Arnaldo Limede¹, Erollykens Santos¹, Franklin Even¹

¹Virginia Tech

8:45 a.m. 66 **Impacts of Chromium Propionate Supplementation During Preconditioning on Growth, Temperament, Physiology, Immunity, and Rumen Fermentation of Brangus Steers.**

Hiam Marcon¹, Matheus Ferreira¹, Ashley K. Edwards¹, Mariana Santos², Joao Chinaglia², Gilmar Leite², Kelsey M. M. Harvey³, Brooklyn Laubinger⁴, Barbara Roqueto dos Reis⁵, Gustavo R. Siqueira⁶, Marcelo Vedovatto¹

¹Louisiana State University, ²Dean Lee Research and Extension Center, Louisiana State University, ³Prairie Research Unit, Mississippi State University, ⁴Mississippi State University, ⁵White Sand Research Unit, Mississippi State University, ⁶Agência Paulista de Tecnologia dos Agronegócios

9:45 a.m. **Ruminant Animal Production I: Nutrition Break**

10:00 a.m. 70 **Inclusion of Whole Cottonseed in Successive Backgrounding and Finishing Phases in Beef Cattle: A Backgrounding Summary.**

Isabella Corners¹, Chandler Kyle¹, Duncan McSorley¹, Kimberly Mullenix¹, S. Maggie Justice¹, Brandon B. Smith¹

¹Auburn University

10:15 a.m. 71 **Effect of Increasing Amounts of Pine Derived Biochar on Forage Utilization in Beef Steers.**

Sabrina Fortunatti¹, Emily Fowler¹, Merritt L. Drewery¹

¹Texas State University

10:45 a.m. 73 **Feeding a Bacillus-based Probiotic to Beef Heifers During Stress Challenges: Effects on Feed Intake, Immune, and Metabolic Responses.**

Izadora de Souza ¹, Reinaldo F. Cooke ¹, Shea Mackey ¹, Guilherme Monteiro ¹, William de Souza ¹, Bruno Cappellozza ²

¹Texas A&M University, ²Novonosis

11:00 a.m. 74 **Evaluating the Impact of Chicken Breeding Waste as a Feed Supplement on Beef Cattle Performance and Feed Intake.**

Julia N. Bonner ¹, Brandi B. Karisch ¹, Kelsey M. Harvey ¹, Madeline G. McKnight ¹, Brooklyn Laubinger ¹, Jules Rimmer ¹, T Cole Miles ¹

¹Mississippi State University

11:15 a.m. 75 **Effects of Different Feed Additives on Intake, Growth Performance, and Carcass Characteristics of Finishing Beef Cattle.**

João Guilherme Petter Mittelsted ¹, Enzo A. Fioruci ¹, Reinaldo F. Cooke ¹, Matthew R. Beck ¹, Vinícius N. Gouvêa ¹

¹Texas A&M University

Ruminant Animal Production IV: Health/Technology

Chair: Samantha McGovern, Tarleton State University

8:45 AM - 11:30 AM

Commerce B

8:45 a.m. 78 **Assessing the Relationship Between Beef Calf Grimace Scores and Circulating Haptoglobin During Castration.**

Yazmin Montes ¹, Brian L. Bruner ¹, Jessica Carnal ², Abbie Viscardi ², Merritt L. Drewery ¹

¹Texas State University, ²Kansas State University

9:30 a.m. 82 **A Fecal Egg Count Reduction Test Comparing the Efficacy of Generic Injectable Moxidectin to the Pioneer Brand in Weaned Beef Calves.**

Jacy L. Riddle ¹, Christopher A. Tucker ², Jana L. Reynolds ¹, Alexis J. Harness ¹, Robin A. Cheek ¹, Craig M. Looney ¹, Jeremy G. Powell ¹

¹University of Arkansas, ²University of Arkansas Division of Agriculture

9:45 a.m. **Ruminant Animal Production IV: Health/Technology Break**

10:00 a.m. 83 **Deworming Strategies for Parasite Control in Weaning Beef Cattle.**

Skylar Dudley ¹, Joaquin Armendano ¹, Tori Geniac ¹, Carrie L. Pickworth ¹

¹NC State University

10:15 a.m. 84 **An Initial Assessment of the SizeR Technology and the Relationships Between Morphometric Measurements and Enteric Methane Emissions from Grazing Heifers.**
Kyle Vahlenkamp¹, John Pennington¹, Jerry Hudec¹, Gordon E. E. Carstens¹, Matthew R. Beck¹

¹Texas A&M University

10:30 a.m. 85 **Evaluation of Automated Feed Behavior Sensors for Intake Prediction in Growth-phenotype Divergent Crossbred Angus Beef Steers.**

Mariana E. Garcia-Ascolan¹, Chloe B. Krause¹, Ranjith Ramanathan¹, Nicolas DiLorenzo², David L. Lalman¹

¹Oklahoma State University, ²University of Florida

10:45 a.m. 86 **Assessing Self- and Social-grooming Dynamics as Potential Behavioral Biomarkers of Estrus in Precision-managed Dairy Herds.**

Malena Heck¹, Cierra Clayton¹, Emma Hartley¹, Christopher Hudson¹, Marcus McGee¹

¹Mississippi State University

11:00 a.m. 87 **Comparisons of Ultralytics YOLO Models for Individual Cow Identification and Estrus Detection in Dairy Cattle.**

Morgan Craven¹, Cierra Clayton¹, Emma Hartley¹, Christopher Hudson¹, Marcus McGee¹

¹Mississippi State University

11:15 a.m. 88 **Automated Detection and Tracking of Estrus Behaviors in Dairy Cows Using YOLOv10s and DeepSORT.**

Cierra Clayton¹, Emma Hartley¹, Christopher Hudson¹, Marcus McGee¹

¹Mississippi State University

Physiology I

Chairs: Kelsey Harvey, Mississippi State University;

Brooklyn Laubinger, Mississippi State University

9:15 AM - 11:15 AM

Pinnacle VI-VII

9:15 a.m. 58 **Randel Lectureship: Know the Literature and Follow the Science; Understanding the Roles of Preovulatory Estradiol and Vaccination in Bovine Reproductive Efficiency.**

George A. Perry¹

¹Texas A&M AgriLife Research & Extension Center

10:15 a.m. 61 **The Effects of Including an Alleyway Brush as Positive Reinforcement During the Events of the 7-day-CO-Synch+CIDR Protocol on Temperament and Conception Rates to Timed-artificial Insemination in Commercial Beef Cows and Heifers.**

Danielle M. Stock¹, Allen G. Schwartz¹, Cassia A. Gruis¹, Sydney Noel², Nicholas Steinkampf², Victoria Axman², Ava Carlson², Samuel Costa¹, Emma Briggs¹, Sandy Johnson², David M. Grieger¹, Nicholas Dias¹

¹Kansas State University, ²Kansas State University - Department of Animal Sciences & Industry

10:30 a.m. 62 **Metabolomic Analyses of Uterine Luminal Fluid Reveals Regulatory Landscapes During the Peri-implantation Period of Pregnancy in Pigs.**

Bangmin Liu¹, Likun Duan¹, Xiaojing Liu¹, Fuller Bazer², Xiaoqiu Wang¹

¹North Carolina State University, ²Texas A&M University

10:45 a.m. 186 **Award Talk: An interplay of internal and external factors on reproductive microbiota and immune signaling in cattle.**

Dallas R. Soffa¹, Jennifer A. Spencer², George A. Perry³, Gregory A. Johnson⁴, Rebecca Poole¹

¹Texas A&M University, ²Texas A&M AgriLife Research and Extension Center, ³Texas A&M AgriLife Research & Extension Center, ⁴Department of Veterinary Integrative Biosciences, Texas A&M University, College Station, TX 77843, USA

11:00 a.m. 59 **Potential Modification of the PG 6-day CIDR Protocol for Herds with >50% Bos Indicus-influence.**

Abigail Roberts¹, Haley N. Weidman², Thomas H. Welsh³, Charles R. Long¹, George A. Perry⁴

¹Texas A&M AgriLife, Overton, ²Texas A&M AgriLife, ³Texas A&M University, ⁴Texas A&M AgriLife Research & Extension Center

Meats

Chair: Tessa Barrett, Auburn University

11:30 AM - 12:00 PM

Pinnacle VI-VII

11:30 a.m. 99 **Effect of Necrotic Enteritis on Breast Meat Quality in Broiler Chickens.**

Lin Yang¹, Safiu Suberu¹, Junzhou Ding¹, Kaliyah Hayes¹, Shaymaa Abousaad¹, Reza Tahergorabi¹, Hao Feng¹, Yewande Fasina¹, Yongjie Wang¹

¹North Carolina Agricultural and Technical State University

11:45 a.m. 100 **Effects of High-pressure Processing, Packaging Types, and Storage Time on Tenderloin Color.**

Ranjith Ramanathan¹, Anna Scott¹, Noah Jewell¹, Mary-Grace Danao², Gary A. Sullivan², Morgan Pfeiffer¹, Gretchen G. Mafi¹

¹Oklahoma State University, ²University of Nebraska-Lincoln

Breeding and Genetics

Chair: Jose Infante, University of Florida

2:00 PM - 3:45 PM

Commerce C

2:15 p.m. 102 Software Development to Measure Ultrasonic Images in Beef Cattle.

Mia B. McCracken¹, Thomas Lee Perkins¹, Emilie C. Baker¹, Li Chou¹, Mohammad Siddiqui¹

¹West Texas A&M University

3:00 p.m. 105 Association Between Corpus Luteum Vascularization and Circulating Progesterone in Mares.

Ashley Reeves-Olmos¹, Nicole Schultz¹, Kynzlee Nuttall¹, Jessica L. Leatherwood¹, Kimberly B. Wellmann¹, Leticia Mota¹, Rafael E. Martinez¹

¹Tarleton State University

3:15 p.m. 106 Sexual Dimorphism of Supplementation with Rumen-protected Methionine in Early Gestation in Beef Cattle Systems.

Jose L. Infante¹, Daniella C. Heredia¹, Maria Camila C. Lopez², Federico Tarnonsky², Mauro Venturini², Daniel D. Luchini³, Peter J. Hansen², Nicolas DiLorenzo¹, Angela M. Gonella-Diaza¹

¹University of Florida, ²UNIVERSITY OF FLORIDA, ³Adisseo USA

3:30 p.m. 107 Gene Editing the Slick Mutation to Mitigate Fescue Toxicosis Losses.

Lucas C S Branco¹, Juliet E. Henning¹, Raquel Oliveira¹, Gabriela Dasqueve¹, Caleb O'Neal¹, Tad Sonstegard², Cecilia Constantino Rocha³

¹University of Missouri, ²Acceligen, ³Division of Animal Sciences, Southwest Research Extension and Education Center, University of Missouri, Mt. Vernon, Missouri, USA.

Physiology II

Chair: Riley Messmann, Oklahoma State University; Nicholas Kertz, University of Florida

2:00 PM - 3:45 PM

Pinnacle VI-VII

2:00 p.m. 116 Influence of Prenatal Melatonin on Postnatal Growth and Behavioral Reactivity in Angus Calves.

Kasey A. Elder¹, Katherine Kennedy¹, Jacy Snider¹, Marcus McGee¹, Caleb O. Lemley¹

¹Mississippi State University

2:30 p.m. 118 Role of Oral Melatonin in Improving Semen Quality and Thermal Regulation of the Testes in Bulls.

Megan Mills¹, Notsile H. Dlamini¹, Serge L. Kameni¹, Justin Maynard¹, Thomas Brister¹, Hala El Daous¹, Shiveeli Rajput¹, Jean F. Feugang¹, Darcie Sidelinger², Heath H. King¹, Caleb O. Lemley¹

¹Mississippi State University, ²Mississippi State

2:45 p.m. 119 **Semen Quality, Sperm Morphology, and Reproductive Development in Young Nellore Bulls Managed on Different Nutritional Planes.**

German D. Ramirez-Zamudio ¹, Murilo S. de Magistri ², Nicole Gimenez ³, Lásaro Pereira ², Leticia B. Soares ², Fabiana A. Shiozaki ², Leticia K. Huang ², Laura Haupenthal ², Raissa B. Rangel ⁴, Larissa S. Camargo ², Maria de Almeida ², Ana Beatriz Moura ², Roberta B. A. Dahlen ⁵, Maíra B R Alves ⁴, Carl R. Dahlen ⁵, Arlindo S. Netto ²

¹Department of Animal Sciences / North Dakota State University, ²School of Animal Science and Food Engineering, University of São Paulo, ³Fundação de Ensino Superior de Bragança Paulista, ⁴Faculty of Agricultural and Veterinary Sciences, São Paulo State University, ⁵North Dakota State University

3:15 p.m. 121 **Dietary Fatty Acid Profile and Choline Altered the Transcriptome of Placental Tissue in Beef Cows.**

Allyson S. McCarty ¹, Megan Bahr ², Priyanka Banerjee ³, Wellison JS Diniz ⁴, Felipe A.C.C. Silva ²

¹North Carolina State University, ²Department of animal science, North Carolina State University, ³Auburn University, ⁴Auburn

3:30 p.m. 122 **Hormone-responsive Porcine Endometrial Epithelial Organoids: Establishment, Validation, and Transcriptomic Characterization.**

Bangmin Liu ¹, Lin Xi ¹, Jack Odle ¹, Guang Hu ², Xiaoqiu Wang ¹

¹North Carolina State University, ²National Institute of Environmental Health Sciences

Extension

Chair: Reagan Bustabad, University of Tennessee

2:00 PM - 4:00 PM

Pinnacle I-II

2:00 p.m. 108 **Assessing the Impact of Reproduction Management Schools on Participant Perceived Knowledge Gains: A Multi-county Evaluation.**

Carlos E. Lima ¹, Mady Justiniano ¹, Brittney Santamaria-Cortez ¹, Talha Ashraf ², Allyson S. McCarty ², Megan Bahr ¹, James Clothier ³, Felipe A.C.C. Silva ¹

¹Department of animal science, North Carolina State University, ²North Carolina State University, ³College of Agriculture and Life Sciences (CALs), North Carolina State University

2:15 p.m. 109 **Preservation and 3D Modeling of a Caprine Stomach for Extension Use in Ruminant Nutrition Programing.**

Tessa L. Barrett ¹, S. Leanne Dillard ¹

¹Auburn University

3:00 p.m. 112 **The Mid-South Beef Leadership Conference: A Collaborative Approach to Strengthening the Beef Industry.**

Reagan Bustabad¹, Katie Mason¹, Troy N. Rowan¹, Saulo Zoca¹, Kelly Vierck¹, Les H. Anderson², Darrh Bullock², Jeff W. Lehmkuhler², Katherine VanValin², Kevin Laurent², Maggie Ginn²
¹University of Tennessee, ²University of Kentucky

3:15 p.m. 113 **Evaluation of Best Management Practice Adoption in Kentucky and Tennessee Beef Cattle Herds as Part of a Leadership Conference to Develop Extension Education Programs.**

Katie VanValin¹, Les H. Anderson¹, Katie Mason², Darrh Bullock¹, Jeff W. Lehmkuhler¹, Troy N. Rowan², Kelly Vierck², Saulo Zoca², Kevin Laurent¹, Maggie Ginn¹
¹University of Kentucky, ²University of Tennessee

3:30 p.m. 114 **From Chaos to Calm: How FerAppease Shapes Calf Behavior and Eases Weaning Woes.**

Rinna Tarter¹, Violet Fox¹, Andrea K. Sexten¹
¹Eastern Kentucky University

Ruminant Animal Production II: Nutrition/Physiology

Chair: Amanda Lee, University of Kentucky

2:00 PM - 4:00 PM

Commerce A

2:00 p.m. 123 **Effect of Whole Cottonseed Delivery Frequency on Beef Cattle Performance in Warm-season Forage Systems.**

Chandler Kyle¹, Duncan McSorley¹, Paul W. Dyce¹, Kimberly Mullenix¹, S. Leanne Dillard¹, Brandon B. Smith¹
¹Auburn University

2:15 p.m. 124 **Effect of Protein Supplementation Frequency on Forage Utilization by Cattle Consuming Cool-season or Warm-season Low-quality Forage.**

Allison Serda¹, Brian L. Bruner¹, Tryon A. Wickersham², Merritt L. Drewery¹
¹Texas State University, ²Texas A&M University

2:30 p.m. 125 **Carryover Effects of Grazing Performance on Variability of Finishing Performance and System Profitability.**

Paul A. Beck¹
¹Oklahoma State University

2:45 p.m. 126 **Electrolyte Supplementation for Gestating Beef Cows Under Heat Stress Conditions: Cow Performance and Physiological Responses.**

Isabelle Pinheiro Siqueira ¹, Marcelo Vedovatto ¹, Giancarlo Pereira Silva ¹, Juliana Ranches ², Barbara Roqueto dos Reis ³, Hiam Marcon ¹, Ashley K. Edwards ¹, Nate Haas ⁴, Matheus Ferreira ¹

¹Louisiana State University, ²Oregon State University, ³White Sand Research Unit, Mississippi State University, ⁴Bio-Vet

3:00 p.m. 127 **Two-Year Assessment of Supplementation Feeding Strategies on Stocker Calf Performance Grazing Mixed Grass Prairie in Western Oklahoma.**

Timothy P. Vining ¹, Charles Worthington ¹, Eric A. DeVuyst ¹, Donovan Smith ², Matt Harrison ², Tom Fanning ³, Andy Lizardo ³, Paul A. Beck ¹

¹Oklahoma State University, ²Pellet Technology USA LLC, ³Buffalo Feeders LLC

3:15 p.m. 128 **In Vitro Incubation Times to Estimate the in Vivo Digestibility of Dry Matter and Organic Matter of Diets Based on Bolivian Giant Sorghum Silage Containing Different Levels of Concentrate.**

Erollykens Santos ¹, Rodrigo Marques ¹, Fernando Cidrini ¹, Julia Travassos ², Pauliane Pucetti ³, Arnaldo Limede ¹, Gilyard Souza ⁴, Gabriela Salles ⁴, Sebastiao Valadares Filho ⁴

¹Virginia Tech, ²Colorado State University, ³North Dakota State University, ⁴Federal University of Vicosa

3:30 p.m. 129 **Bacillus-based Direct-fed Microbials Supplementation Alters Blood Stress Markers in Feeder-calves During a 60-day Feedlot Receiving Program.**

Arnaldo Limede ¹, Rodrigo Marques ¹, Gilyard Souza ², Fernando Cidrini ¹, Erollykens Santos ¹, Mariane Beline ¹, Bruno Cappellozza ³

¹Virginia Tech, ²Federal University of Vicosa, ³Novonesis

3:45 p.m. 130 **Effects of Including High-moisture Rolled Sorghum Grain Partially Replacing Steam-flaked Corn on Dry Matter Intake and Total Tract Nutrient Digestibility in Finishing Beef Steers.**

Artur Grando Pilati ¹, João Guilherme Petter Mittelsted ¹, Avianna Liuzzo ¹, Vitoria Aparecida Morato Ribeiro ¹, Matthew R. Beck ¹, Juan Manuel M. Piñeiro ¹, Vinícius N. Gouvêa ¹

¹Texas A&M University

Small Ruminant Production II: Health

Chair: Macy Ragsdale, University of Kentucky

2:00 PM - 4:30 PM

Pinnacle Ballroom IV

2:00 p.m. 142 **Efficacy Evaluation of an Allopathic versus a Homeopathic Anthelmintic in Naturally Infected Small Ruminants.**

Kennon Harrington¹, Randy H. Burnett², Jerica J. J. Rich²

¹College of Agriculture - Arkansas State University, ²College of Agriculture - Arkansas State University

2:15 p.m. 143 **Shift in Bacterial Isolates from Arrival to Pneumonia Cases in Buck Performance Test in Mississippi.**

Maghan S. Taylor¹, Santiago Cornejo¹, Leyla Rios¹, Caroline Chapman¹, Himai Joshi¹

¹Mississippi State University

2:30 p.m. 144 **Application of Thoracic Ultrasound for Identifying Subclinical Respiratory Disease in Goats Enrolled in a Buck Performance Test.**

Caroline Chapman¹, Maghan S. Taylor¹, Santiago Cornejo¹, Leyla Rios¹

¹Mississippi State University

2:45 p.m. 145 **Antibody Response to Booster Clostridial Vaccination Is Negatively Correlated with PFEC EBV Values in Katahdin Lambs.**

Scott A. Bowdridge¹, Taryn Chima¹, Donald L. Wright², Andrew R. Weaver³, Scott P. Greiner⁴

¹West Virginia University, ²Southwest Agricultural Research and Extension Center, Virginia Tech, ³North Carolina State University, ⁴Virginia Tech

3:00 p.m. 146 **Relationship Between Antibody Response to Booster Clostridial Vaccine and Weaning Fecal Egg Counts in Polypay Ewe Lambs.**

Taryn Chima¹, Andrew R. Weaver², Scott A. Bowdridge¹

¹West Virginia University, ²North Carolina State University

3:15 p.m. **Small Ruminant Production II: Health Break**

3:30 p.m. 147 **Efficacy of the Valita Titer™ Assay to Rapidly Quantify Serum IgG in Sheep.**

Taryn Chima¹, Scott A. Bowdridge¹

¹West Virginia University

3:45 p.m. 148 **Non-Invasive Thermal Imaging of Unrestrained Goats in Paddocks: Identifying Optimal Regions for Accurate Body Temperature Measurement.**

Larry Leon-Medina¹, Cadence Jackson¹, Maggie Dillahunty¹, Megan Mills¹, Caleb O. Lemley¹, Leyla Rios¹

¹Mississippi State University

4:00 p.m. 149 **Relationship Between Immune Fitness and Maternal Productivity Traits in Katahdin Sheep.**

Michala Williams¹, Scott A. Bowdridge², Andrew R. Weaver¹

¹North Carolina State University, ²West Virginia University

4:15 p.m. 150 **Evaluation of IgG Concentration Differences in Colostrum from Suffolk and St. Croix Ewes.**

Erin L. Poteat¹, Scott A. Bowdridge², Scott P. Greiner¹

¹Virginia Tech, ²West Virginia University

Ruminant Animal Production V: Management

Chair: Jaedyn Rawson, Mississippi State University

2:00 PM - 5:00 PM

Commerce B

2:00 p.m. 131 **Effect of Sire Yearling Weight and Milk EPD on Yearling Weight and Hip Height in Commercial Angus Replacement Heifers Reared in a Minimal Input System.**

Jordyn L. Hensley¹, David L. Lalman¹, Paul A. Beck¹, Mellissa R. Crosswhite¹

¹Oklahoma State University

2:15 p.m. 132 **Evaluating Forage-Based Feed Efficiency Metrics in Angus Replacement Heifers.**

Bailey J. Tomson¹, Samuel R. Talley², Caitlyn T. Kleffner¹, Mariana E. Garcia-Ascolan¹, Mellissa R. Crosswhite¹, Ryan R. Reuter¹, David L. Lalman¹

¹Oklahoma State University, ²University of Missouri

2:30 p.m. 133 **Relationship Between Mature Cow Size and Weaning Weights in Bos Taurus Cows in the Southeastern United States.**

Jason Duggin¹, Pedro Fontes¹, Lucas Melo-Goncalves¹, Molly Sloan Smith¹, Anderson Alves¹, Bruno Medeiros¹, Jaden Hallman¹, Riley Metzger¹, Lawton Stewart¹

¹University of Georgia

2:45 p.m. 134 **Characterization of Daily Feeder Attendance and Blood Urea Nitrogen Dynamics in Mature Beef Cows Grazing Native Range.**

Caitlyn T. Kleffner¹, Bailey J. Tomson¹, Chloe B. Krause¹, Mariana E. Garcia-Ascolan¹, Candace C. Adams², Steven E. Myers³, Andrew P. Foote¹, Ryan R. Reuter¹, David L. Lalman¹

¹Oklahoma State University, ²HerdX Inc., ³Purina

3:00 p.m. 135 **Effect of RFI and RNE on Energy Partitioning in Beef Cows During Gestation and Lactation.**

Mariana E. Garcia-Ascolan¹, Mikayla Moore¹, Emma Briggs², Paul A. Beck¹, David L. Lalman¹

¹Oklahoma State University, ²Kansas State University

3:15 p.m. 136 **Evaluation of Performance and Nutritional Intake in Angus Cow-Calf Pairs During Pregnancy and Lactation.**

E. Benjamin Rajo-Gomez ¹, Joaquin Armendano ², Andrew R. Weaver ¹, Carrie L. Pickworth ², Daniel H. Poole ¹

¹North Carolina State University, ²NC State University

3:30 p.m. **Ruminant Animal Production V: Management Break**

3:45 p.m. 137 **Effects of Heat Stress Mitigation During Late Gestation on Plasma Metabolome Profile of Bos Indicus-influenced Cow-calf Pairs.**

Vinicius S. Izquierdo ¹, Joao M. B. Vendramini ², Nadia Ashrafi ³, Romana A. Mimi ⁴, Stewart F. Graham ⁴, Angela M. Gonella-Diaza ⁵, Philippe Moriel ¹

¹University of Florida, IFAS/Range Cattle Research and Education Center, ²Texas A&M AgriLife Research & Extension Center, ³Metabolomics Department, Beaumont Research Institute,

⁴Corewell Health, ⁵University of Florida

4:00 p.m. 138 **Effects of a Bovine Appeasing Substance Applied at Estrous Synchronization on Stress, Cyclicity, and Pregnancy.**

Alaina K. Dela Rosa ¹, Lauren K. Solice ¹, Natalie E. Reyes ¹, Olivia S. Brummett ¹, Michael B. Sims ¹, Eryn L. Pierdolla ¹, Cesar A. Rosales-Nieto ¹, Brian L. Bruner ¹, Jeremy G. Powell ², Reagan Sims ¹

¹Texas State University, ²University of Arkansas

4:45 p.m. 141 **Beef × Dairy vs. Native Beef: Production System and Preweaning Nutrition Effects on Carcass Traits.**

Timothy P. Vining ¹, Justin D. Crosswhite ¹, Olivia N. Genter-Schroeder ², Michael D. Major ¹, Paul A. Beck ¹

¹Oklahoma State University, ²Purina Animal Nutrition

Teaching and Undergraduate Education

Chair: Hunter Perez, University of Georgia

4:15 PM - 4:45 PM

Pinnacle I-II

4:15 p.m. 151 **Student Perceptions of Animal Experiences in Beef Production After an Experiential Learning Opportunity.**

Victoria Garcia ¹, Alice P. Brandao ², Tryon A. Wickersham ², Merritt L. Drewery ¹

¹Texas State University, ²Texas A&M University

4:30 p.m. 152 **Measuring Grit in Undergraduate Animal Science Education: Insights for Curriculum and Extension Programming.**

Brooke A. Zeleny ¹, Mellissa R. Crosswhite ¹

¹Oklahoma State University

Tuesday, January 27, 2026

Small Ruminant Production III: Production

Chair: Katherine Purvis, University of Kentucky

8:00 AM - 9:30 AM

Pinnacle Ballroom IV

8:00 a.m. 180 Grazing Behavior of Kiko and Spanish Goats in a Rotational System with Warm-season Forages in Mississippi.

Larry Leon-Medina¹, Cadence Jackson¹, Gabrielle Champ¹, Caroline Chapman¹, Baylee McAnally¹, Jalyn G. Hawkins¹, Jackson Grace¹, Leyla Rios¹

¹Mississippi State University

8:15 a.m. 181 Physiological Variables Associated with Heat Stress in Kiko and Spanish Goats Grazing in Summer Conditions in Mississippi.

Cadence Jackson¹, Larry Leon-Medina¹, Maggie Dillahunty¹, Baylee McAnally¹, Gabrielle Champ¹, Caroline Chapman¹, Jackson Grace¹, Imani Cannon¹, Madeline Merry¹, Leyla Rios¹

¹Mississippi State University

8:30 a.m. 182 Goat Production Systems in Texas.

Justin M. McGriff¹

¹Tarleton State University

8:45 a.m. 183 Farm Evaluation of a Biological Product to Control Gastrointestinal Nematodes in Pasture-Raised Goats.

Uma Karki¹, Sagar Acharya¹, Arjun Acharya¹, Madhav Dumre¹, Suresh Sharma¹

¹Tuskegee University

9:00 a.m. 184 Differences in Forage Quality and Hematological Parameters of Kiko Goats Grazing Southern Pine Silvopasture and Open Pasture During Summer.

Arjun Acharya¹, Uma Karki¹, Sagar Acharya¹, Madhav Dumre¹

¹Tuskegee University

Pastures and Forages

Chair:

8:00 AM - 10:15 AM

Pinnacle I-II

8:00 a.m. 153 Nutritive Effects of Wind on Drought Stressed Forage Sorghum.

Emily K. Brown¹, Whitney L. Crossland¹, Caitlyn Cooper¹, Aaron B. Norris¹

¹Texas Tech University

8:15 a.m. 154 **Response of Cotton to Simulated Grazing.**

Marquez L. Wortham¹, Chandler Kyle¹, S. Leanne Dillard¹, Jenny C. Koebernick¹, Brandon B. Smith¹

¹Auburn University

8:45 a.m. 156 **Performance of Steers Grazing Summer Cover Crops with and Without Nitrogen Fertilization.**

Cody E. Gruber¹, Tori Booker¹, Josh Lofton¹, Ryan R. Reuter¹, Andrew P. Foote¹, Paul A. Beck¹

¹Oklahoma State University

9:00 a.m. 157 **Effect of Season-Long Weed Interference on Beef Heifer Performance in Cool-Season Pastures in Alabama.**

Duncan McSorley¹, Brandon B. Smith¹, S. Leanne Dillard¹

¹Auburn University

9:15 a.m. **Pastures and Forages Break**

9:30 a.m. 158 **Evaluating the Effects of Plant Growth Promoting Rhizobacteria in Bermudagrass (Tifton-85) on Nitrogen Use Efficiency, Drought Response, and Inoculation Frequency.**

Jennifer Crabtree¹, Alvaro Sanz-Saez¹, S. Leanne Dillard¹, Brandon B. Smith¹, A.O. Adesemoye²

¹Auburn University, ²ARS/Auburn University

10:00 a.m. 160 **Comparison of Greenhouse Gas Emissions Under Adaptive Multi-paddock and Continuous Grazing Systems Across Two U.S. Regions.**

Carlee M. Salisbury¹, Jason E. Rowntree², Logan R. Thompson¹

¹Kansas State University, ²Michigan State University

Physiology III

Chairs: Daniel Poole, North Carolina State University; Joaquin Armendano, NC State University

8:00 AM - 10:30 AM

Pinnacle VI-VII

8:00 a.m. 161 **Association Between Cytokine Changes and Estrous Cyclicity in Bos Indicus and Bos Indicus-influenced Cattle After Vaccination with an Individual or Combination Modified-live Viral Vaccine Against Bovine herpesvirus-1.**

Haley N. Weidman¹, Alexandria P. Snider², Charles R. Long³, George A. Perry⁴

¹Texas A&M AgriLife, ²USDA, U.S. Meat Animal Research Center, ³Texas A&M AgriLife, Overton,

⁴Texas A&M AgriLife Research & Extension Center

8:30 a.m. 163 **In Vitro Analysis of Menthol-Mediated Responses in Bovine Ruminal Epithelial Cells with Heat Stress.**

Hala El Daous¹, Shiveeli Rajput¹, Peixin F. Fan², Mark Arick II¹, Adam Thrash³, Caleb O. Lemley¹

¹Mississippi State University, ²Mississippi State University, USA, ³Mississippi State

8:45 a.m. 164 **Melatonin Supplementation Relieves the LPS-Induced Inflammation in the Rumen Epithelial Cells of Angus Cattle.**

Shiveeli Rajput¹, Hala El Daous¹, Mark Arick II¹, Caleb O. Lemley¹

¹Mississippi State University

9:15 a.m. **Physiology III Break**

9:30 a.m. 166 **Bovine Defensin Expression in Nasal Mucosal Secretions of Calves Challenged with Bovine Respiratory Disease: A Preliminary Analysis.**

Olivia S. Brummett¹, Ariana Evans¹, Alaina K. Dela Rosa¹, Vivian Barrera¹, Brian L. Bruner¹, Elizabeth S. Greene², Sami Dridi², Reagan Sims¹

¹Texas State University, ²University of Arkansas

Ruminant Animal Production III: Nutrition/Fermentation

Chair: Hunter Perez, University of Georgia

8:00 AM - 11:00 AM

Commerce A

8:00 a.m. 170 **A Microbial Enzymatic Comparison Between Liquid and Solid Microenvironments in the Rumen of Beef Steers.**

Emily Fowler¹, Emma Fukuda², Merritt L. Drewery¹

¹Texas State University, ²Texas Tech University

8:30 a.m. 172 **Effect of Pine Derived Biochar on Ruminal Methanogen Communities in Beef Steers.**

Emily Fowler¹, Sabrina Fortunatti¹, Merritt L. Drewery¹

¹Texas State University

9:15 a.m. **Ruminant Animal Production III: Nutrition/Fermentation Break**

9:45 a.m. 176 **Effects of Different Feed Additives on Intake, Nutrient Digestibility, and Ruminal Fermentation Characteristics of Finishing Beef Cattle.**

Felipe Fonseca Nassar¹, Enzo A. Fioruci¹, Reinaldo F. Cooke¹, Matthew R. Beck¹, Vinícius N. Gouvêa¹

¹Texas A&M University

10:15 a.m. 178 **Comparing Microbiota Composition Within the Buccal, Rumen, and Fecal Microbiomes of Commercial Beef Heifers Developed on Varying Forage-based Diets.**

Alexa H. Cornett¹, Susan K. Duckett¹, Matt J. Hersom¹, Joe Bible¹

¹Clemson University

10:45 a.m. 79 **Interval from Feedlot Arrival to Initial Processing: An Overlooked Management Decision to Improve Health and Performance of High-risk Receiving Cattle.**

Guilherme Monteiro¹, Reinaldo F. Cooke¹, Izadora de Souza¹, Shea Mackey¹

¹Texas A&M University