



Thursday, July 15, 2021

SSASAS Graduate Student Competition MS
Chair: John Richeson, West Texas A&M University
8:00 AM - 8:40 AM
M109 & 110

8:00 a.m. **SSASAS Graduate Student Competition MS Introduction**

8:05 a.m. 532 **Plant Growth-promoting Rhizobacteria: Effects on Yield and Nutritive Value of 'Russell' Bermudagrass and 'KY 31' Tall Fescue**

Madison Cole ¹, Leanne L. Dillard ¹
¹Auburn University

8:10 a.m. 392 **Carcass Traits of Growing Meat Goats Fed Different Levels of Hempseed Meal**

Reshma Gurung ¹, Frank W. Abrahamsen ², Katie Moyer ³, Jason T. Sawyer ⁴, Nar K. Gurung ⁵
¹Integrative Biosciences Ph.D. Program, Tuskegee University, Tuskegee, AL 36088, USA,
²Tuskegee University, ³Kentucky Hemp Works, ⁴Auburn University, ⁵Department of Agricultural and Environmental Sciences, College of Agriculture, Environment, and Nutrition Sciences, Tuskegee University, Tuskegee, AL 36088, USA

8:15 a.m. 388 **Effect of Diet and Location Within the Longissimus Dorsi Muscle on the Quality and Fat Composition of Pork Loins Collected from Market Hog**

Amberly A. Dennis ¹, Dana S. Reid ², Dianna Wilson ³, Thu Dinh ¹, Derris D. Burnett ⁴
¹Mississippi State University, ²Department of Animal and Dairy Sciences, Mississippi State University, ³Department of Food Science, Nutrition, and Health Promotion, Mississippi State University, ⁴PhD

8:20 a.m. 389 **Effects of Dried Distillers' Grains Cube Supplementation for Steers Grazing Introduced Pastures on Animal Performance and Forage Production**

Jordan Adams ¹, Rodney Farris ¹, Scott Clawson ¹, Earl Ward ¹, Paul A. Beck ¹
¹Oklahoma State University

8:25 a.m. 391 **Evaluation of Kemtrace® Chromium on Animal Performance and Immune System of Weaned Beef Calves**

Reshma Gurung ¹, Frank W. Abrahamsen ², Kim K. Mullenix ³, Woubit Abdela ², Wendell McElhenney ², Nar K. Gurung ⁴
¹Integrative Biosciences Ph.D. Program, Tuskegee University, Tuskegee, AL 36088, USA,
²Tuskegee University, ³Auburn University, ⁴Department of Agricultural and Environmental Sciences, College of Agriculture, Environment, and Nutrition Sciences, Tuskegee University, Tuskegee, AL 36088, USA

8:30 a.m. 371 **Investigating Plasma Metabolomic Profiles at the Time of Weaning, Based on Pregnancy Outcome, in *bos Taurus* heifers**
Lauren V. Rutledge ¹, Landon Marks ², Soren P. Rodning ¹, Josh Elmore ¹, Kent Stanford ², Paul W W. Dyce ¹
¹Auburn University, ²Alabama Cooperative Extension

8:35 a.m. 411 **Evaluation of Whole Cottonseed Intake and *in Situ* digestibility in Beef Cattle**
Luke L. Jacobs ¹, Kim K. Mullenix ², Russell B. Muntifering ², Leanne L. Dillard ², Russell C. Carrell ³
¹Clemson University, ²Auburn University, ³Cargill Animal Nutrition

SSASAS Graduate Student Competition PHD
Chair: John Richeson, West Texas A&M University
9:00 AM - 9:30 AM
M109 & 110

9:00 a.m. **SSASAS Graduate Student Competition PHD Introduction**

9:05 a.m. 397 **The Effect of Melatonin Supplementation on Dam Milking Traits and Calf Performance in Beef Cattle**
Dana S. Reid ¹, Tom W. Geary ², Abby L. Zezeski ², M. Susan Reil ³, Richard C. Waterman ³, Derris D. Burnett ⁴, Caleb O. Lemley ⁵
¹Department of Animal and Dairy Sciences, Mississippi State University, ²USDA-ARS, ³USDA-ARS, Fort Keogh Livestock and Range Research Laboratory, ⁴PhD, ⁵Mississippi State University

9:10 a.m. 413 **The Effect of Storage Length on the Nutritive Value of Baleage in the Southeastern United States**
Justin C. Burt ¹, Taylor Hendricks ², Jennifer J. J. Tucker ¹, Lisa Baxter ¹, Robert Lawton Stewart ¹
¹University of Georgia, ²Abraham Baldwin Agricultural College

9:15 a.m. 398 **Effects of Melatonin Supplementation During Mid- to Late-gestation Nutrient Restriction on Maternal and Fetal Amino Acid Concentrations**
Rebecca M. Swanson ¹, Zully E. Contreras-Correa ¹, Thu Dinh ¹, Heath H. King ², Darcie R. Sidelinger ¹, Derris D. Burnett ³, Caleb O. Lemley ¹
¹Mississippi State University, ²Mississippi State University College of Veterinary Medicine, ³PhD

9:20 a.m. 395 **Changes in Metabolite and Protein Expression Profiles of Atypical Dark-cutting and Normal-ph Beef**
Frank Kiyimba ¹, Steven Hartson ², Janet Rogers ³, Gretchen G. Mafi ², Ranjith Ramanathan ²
¹Department of Animal and Food Sciences, Oklahoma State University, Stillwater, OK, ²Oklahoma State University, ³Oklahoma State university

9:25 a.m. 399 **Effects of Exogenous Glucocorticoid Administration on Appetitive Center Brain Development in Dairy Bull Calves**
Keelee J. McCarty ¹, Nathan Long ¹
¹Clemson University

SSASAS Undergraduate Student Competition
Chair: Jessica Leatherwood, Texas A&M University
9:15 AM - 9:35 AM
M101 & 102

9:15 a.m. **SSASAS Undergraduate Student Competition Introduction**

9:20 a.m. 471 **Effect of Increased Ruminal Propionate on the Expression of Gluconeogenic Genes in the Liver of Cattle on a Finishing Diet**

Carlee M. Salisbury ¹, Abbey R. Rathert ¹, Andrew P. Foote ¹
¹Oklahoma State University

9:25 a.m. 419 **Equine in Vitro Digestibility Using Different Cecal Fluid Dilutions**

Cody Davis ¹, Russell C. Carrell ², Serena Thompson ¹, Madison Cole ¹, Leanne L. Dillard ¹
¹Auburn University, ²Cargill Animal Nutrition

9:30 a.m. 404 **Impact of Retail Case Type and Lighting Intensity on Instrumental Color Traits of Ground Beef Patties**

Mesa B. Kutz ¹, Kelly R. Vierck ², Janeal W. Yancey ²
¹University of Arkansas, ²Department of Animal Science, Division of Agriculture, University of Arkansas System, Fayetteville

SSASAS: Teaching and Undergraduate Education

Chair: Jessica Leatherwood, Texas A&M University
9:45 AM - 10:15 AM
M101 & 102

9:45 a.m. 469 **Designing a High Enrollment Asynchronous Core Curriculum Science Course, General Animal Science for Declared Non-animal Science Majors**

Leslie Frenzel ¹, Sushil Paudyal ², Kathrin Dunlap ²
¹Texas A&M University-Department of Animal Science, ²Texas A&M University

10:00 a.m. 467 **Influencing Perceptions in Non-animal Science Majors: Impact of a High Enrollment, Asynchronous Core Curriculum Science General Animal Science Course**

Sushil Paudyal ¹, Leslie Frenzel ², Kathrin Dunlap ¹
¹Texas A&M University, ²Texas A&M University-Department of Animal Science

SSASAS: SERA 41 / SCC 81 Joint Symposium

Chair: Kim Mullenix, Auburn University
10:00 AM - 12:05 PM
M104/M107

10:00 a.m. **SSASAS: SERA 41/SCC 81 Joint Symposium Introduction**

10:05 a.m. 451 **Incorporating Alfalfa into Warm-season Grass Systems in the Southeast**

Jennifer J. J. Tucker ¹
¹University of Georgia

10:45 a.m. 452 **Use of Sericea Lespedeza (*Lespedeza Cuneata*) as a Nutraceutical Forage for Livestock**

Thomas H. Terrill ¹, Niki C. Whitley ¹, Joan M. Burke ², Jim E. Miller ³

¹Fort Valley State University, ²USDA ARS Dale Bumpers Small Farms Research Center,

³Louisiana State University

11:25 a.m. 450 **Economics and Feasibility of Legume Inclusion in Southeastern Perennial Grass-based Systems**

Chris Prevatt ¹, Jennifer J. J. Tucker ²

¹University of Florida, ²University of Georgia

SSASAS: Nutrition

Chair: Flint Harrelson, Morehead State University

11:00 AM - 12:00 PM

L005/009

11:00 a.m. 410 **Effect of Increased Ruminal Propionate on the Expression of Gluconeogenic Genes in the Liver of Cattle on a Finishing Diet**

Carlee M. Salisbury ¹, Abbey R. Rathert ¹, Andrew P. Foote ¹

¹Oklahoma State University

11:15 a.m. 408 **Determination of Blood Micromineral and Fat-soluble Vitamin Values for White-tailed Deer**

Megan P. Greenwood ¹, Stanley F. Kelley ¹, Marcy M. Beverly ¹, Phil M. Urso ¹, Mark Anderson ¹

¹Sam Houston State University

11:30 a.m. 409 **Evaluation of Kemtrace[®] Chromium on Animal Performance and Immune System of Weaned Beef Calves**

Reshma Gurung ¹, Frank W. Abrahamsen ², Kim K. Mullenix ³, Woubit Abdela ², Wendell McElhenney ², Nar K. Gurung ⁴

¹Integrative Biosciences Ph.D. Program, Tuskegee University, Tuskegee, AL 36088, USA,

²Tuskegee University, ³Auburn University, ⁴Department of Agricultural and Environmental Sciences, College of Agriculture, Environment, and Nutrition Sciences, Tuskegee University, Tuskegee, AL 36088, USA

11:45 a.m. 387 **Evaluation of Whole Cottonseed Intake and *in Situ* digestibility in Beef Cattle**

Luke L. Jacobs ¹, Kim K. Mullenix ², Russell B. Muntifering ², Leanne L. Dillard ², Russell C. Carrell ³

¹Clemson University, ²Auburn University, ³Cargill Animal Nutrition

SSASAS: SCC 81 Symposium

Chair: Stephan Wildeus, Virginia State University

1:00 PM - 3:05 PM

M104/M107

1:00 p.m. **SSASAS: SCC 81 Symposium Introduction**

1:05 p.m. 447 **Best Management Practices for Parasite Control in Beef Herds in the Southeastern United States**

Christine B. Navarre ¹

¹LSU AgCenter

1:45 p.m. 448 **Multi-species Grazing for Control of Gastrointestinal Nematodes – a Review**

Joan M. Burke ¹, Jim E. Miller ²

¹USDA ARS Dale Bumpers Small Farms Research Center, ²Louisiana State University

2:25 p.m. 449 **BioWorma as an Aid for Controlling Ruminant Nematode Parasites**

Jim E. Miller ¹, Joan M. Burke ², Thomas H. Terrill ³

¹Louisiana State University, ²USDA ARS Dale Bumpers Small Farms Research Center, ³Fort Valley State University

SSASAS Pastures and Forages

Chair: Jennifer J. Tucker, University of Georgia

3:00 PM - 5:00 PM

M109 & 110

3:00 p.m. 418 **Concentrate Supplementation Frequency Effects on Early-weaned Beef Calves Grazing Annual Ryegrass**

Hugo Oliveira ¹, Joao Vendramini ¹, Philippe Moriel ¹, Vinicius Gomes ¹, Hiran Silva ¹, Elizabeth A. Palmer ²

¹University of Florida, ²University of Florida - Range Cattle Research & Education Center

3:15 p.m. 415 **Determining the Rate of Ergot-alkaloid Degradation in Toxic Endophyte-infected Tall Fescue Hay and Haylage During Long Term Storage**

Charles A. Zumbaugh ¹, Susannah A. Gonia ¹, Kathryn M. Payne ², Thomas B. Wilson ¹

¹Department of Animal and Poultry Sciences, Virginia Tech, ²Southern Piedmont Agricultural Research and Extension Center, Virginia Tech

3:30 p.m. 417 **Effects of Dried Distillers' Grains Cube Supplementation for Steers Grazing Introduced Pastures on Animal Performance and Forage Production**

Jordan Adams ¹, Rodney Farris ¹, Scott Clawson ¹, Earl Ward ¹, Paul A. Beck ¹

¹Oklahoma State University

3:45 p.m. 416 **Profitability of Supplementing Dried Distillers' Grains Cubes to Improve Animal Performance and Replace N Fertilizer for Steers Grazing Introduced Pastures**

Jordan Adams ¹, Rodney Farris ¹, Scott Clawson ¹, Earl Ward ¹, Paul A. Beck ¹

¹Oklahoma State University

4:00 p.m. 473 **Equine in Vitro Digestibility Using Different Cecal Fluid Dilutions**
Cody Davis ¹, Russell C. Carrell ², Serena Thompson ¹, Madison Cole ¹, Leanne L. Dillard ¹
¹Auburn University, ²Cargill Animal Nutrition

4:15 p.m. 414 **Plant Growth-promoting Rhizobacteria: Effects on Yield and Nutritive Value of 'Russell' Bermudagrass and 'KY 31' Tall Fescue**
Madison Cole ¹, Leanne L. Dillard ¹
¹Auburn University

4:30 p.m. 396 **The Effect of Storage Length on the Nutritive Value of Baleage in the Southeastern United States**
Justin C. Burt ¹, Taylor Hendricks ², Jennifer J. J. Tucker ¹, Lisa Baxter ¹, Robert Lawton Stewart ¹
¹University of Georgia, ²Abraham Baldwin Agricultural College

4:45 p.m. 412 **Evaluating Soybean Cultivars for Forage Yield and Nutritive Values**
Serena Thompson ¹, Jenny Koebernick ¹, Russell C. Carrell ², Madison Cole ¹, Leanne L. Dillard ¹
¹Auburn University, ²Cargill Animal Nutrition

Friday, July 16, 2021

SSASAS: Physiology I

Chair: Reinaldo Cooke, Texas A&M University
9:00 AM - 11:00 AM
Ballroom D/E

9:00 a.m. 433 **Randel Lectureship: Neuroendocrine Mechanisms Regulating Reproductive Transition in the Ruminant Female: Is KNDy Required?**
Gary L. Williams ¹
¹Texas A & M AgriLife Research

9:45 a.m. 432 **Determination of Sex in Ungulate Herbivores via near Infrared Spectroscopy of Hair: Growing Cattle as a Surrogate Model**
Doug R. Tolleson ¹
¹Texas A&M University

10:00 a.m. 425 **Effects of Maternal Nutrient Restriction During Gestation on LH Production in the Female Bovine Fetus**
Sterling H. Fahey ¹, Sarah West ¹, John M. Long ¹, Carey Satterfield ¹, Rodolfo C. Cardoso ¹
¹Texas A&M University

10:15 a.m. 426 **Effects of Environmental Conditions on Pregnancy Rate in Replacement Beef Heifers**
Nicky Oosthuizen ¹, Rebecca K. Poole ², Patsy L. Houghton ³, Janet M. Rippe ³, G. Cliff C. Lamb ²
¹ABS Global, ²Texas A&M University, ³Heartland Cattle Company

10:30 a.m. 420 **Adrenomedullin and Its Receptor Components in the Porcine Uterus and Peri-implantation Conceptuses**

Bangmin Liu¹, Sudikshya Paudel¹, Magdalena J. Cummings¹, Xiaoqiu Wang¹
¹North Carolina State University

10:45 a.m. 430 **Effects of Exogenous Glucocorticoid Administration on Feed Intake in Beef Cattle**

Keelee J. McCarty¹, Nathan Long¹
¹Clemson University

SSASAS: Ruminant Animal Production I

Chair: Darren Henry, Texas Tech University

10:30 AM - 12:00 PM

M101 & 102

10:30 a.m. 437 **Determination of Nutrient Digestibility in Calves Supplemented with Various Levels of Corn Gluten Feed When Consuming Forage-based Rations**

Charles A. Zumbaugh¹, Emily N. Nolen¹, Thomas B. Wilson¹
¹Department of Animal and Poultry Sciences, Virginia Tech

10:45 a.m. 435 **Effect of Time of Supplementation and Supplement Delivery Method on Performance and Grazing Behavior of Backgrounded Beef Steers**

Adam R. Murray¹, Olivia M. Claire¹, Kathryn M. Payne², Donald L. Wright³, Thomas B. Wilson¹

¹Department of Animal and Poultry Sciences, Virginia Tech, ²Southern Piedmont Agricultural Research and Extension Center, Virginia Tech, ³Virginia Tech, Southwest Virginia Agricultural Research and Extension Center

11:00 a.m. 440 **Effects of Calcium-ammonium Nitrate on in Vitro Ruminant Fermentation Using a Mature Mixed Winter Forage-based Substrate**

Andrea M. Osorio-Doblado¹, Kenneth S. Madrid², Sergio Buitrago², Nicolas DiLorenzo³, Francine M. Ciriaco², Jhones O. Sarturi², Darren D. Henry²

¹University of Georgia, ²Texas Tech University, ³Department of Animal Sciences, North Florida Research and Education Center (NFREC), University of Florida, Marianna, FL

11:15 a.m. 438 **Effect of Stocking Rate During Gestation on Subsequent Performance of Growing Beef Cattle**

Doug R. Tolleson¹, Monte M. Rouquette², Kelli Norman², Charles R. Long³

¹Texas A&M University, ²Texas A&M AgriLife Research, ³School of Veterinary Medicine and Biomedical Sciences, Texas A&M University

11:30 a.m. 445 **Differential Expression of Cow Innate and Adaptive Responses Genes in Response to Eugenol**

Bahrath Kumar¹, Mulumebet Worku², Hamid Ismail²

¹University of Vermont, ²NC A&T State University

11:45 a.m. 439 **Effect of Anti-acaricide Treatment on Tick Species Present and Performance of Growing Beef Heifers**

Samantha R. Hays¹, Pete D. Teel¹, Heath D. Starns², Nick E. Garza³, Jose M. Diaz-Gomez¹, Sarah L. Beall³, Doug R. Tolleson⁴

¹Texas A&M AgriLife Research, ²Texas A&M AgriLife, ³Texas A&M AgriLife, Sonora, ⁴Texas A&M University

SSASAS: Kunkle Symposium

Chair: Daniel Rivera, Animal and Dairy Sciences Department Mississippi State University

1:45 PM - 4:30 PM

M104/M107

1:45 p.m. **SSASAS Kunkle Symposium Introduction**

1:50 p.m. 400 **Use of Byproduct Feeds in Southeastern Beef Production Systems**

Matthew H. Poore¹

¹North Carolina State University

2:35 p.m. 401 **Cotton Byproduct Use in Southeastern Beef Cattle Diets: Quality, Intake, and Changes in Feed Characteristics**

Kim K. Mullenix¹, Robert Lawton Stewart²

¹Auburn University, ²University of Georgia

3:20 p.m. **SSASAS Kunkle Symposium Break**

3:30 p.m. 402 **Rise of Craft Breweries and Distilleries Increase Beef Cattle Supplement Availability**

Deidre D. Harmon¹, Jeffrey W. Lehmkuhler²

¹NC State University, ²University of Kentucky

4:15 p.m. **SSASAS Kunkle Symposium Q&A**

SSASAS: Physiology II

Chair: Vitor R Mercadante, Virginia Tech - School of Animal Sciences, Large Animal Clinical Sciences

2:00 PM - 4:00 PM

Ballroom D/E

2:00 p.m. 422 **Evaluation of Prenatal Transportation Stress on the Number of Pituitary Corticotrophs in Mature Brahman Cows**

Victoria Kamilar¹, Sarah West², Brittini P. Littlejohn³, Charles R. Long⁴, David G. Riley², Penny K. Riggs², Ronald D. Randel⁵, Thomas H. Welsh⁶, Rodolfo C. Cardoso²

¹Texas A&M University, ²Texas A&M University, ³University of Arkansas System, Division of Agriculture, Department of Animal Science, ⁴School of Veterinary Medicine and Biomedical Sciences, Texas A&M University, ⁵Texas A&M AgriLife Research, Overton, TX, ⁶Texas A&M University, Department of Animal Science, College Station, TX

2:15 p.m. 429 **The Effect of Melatonin Supplementation on Dam Milking Traits and Calf Performance in Beef Cattle**

Dana S. Reid¹, Tom W. Geary², Abby L. Zezeski², M. Susan Reil³, Richard C. Waterman³, Derris D. Burnett⁴, Caleb O. Lemley⁵

¹Department of Animal and Dairy Sciences, Mississippi State University, ²USDA-ARS, ³USDA-ARS, Fort Keogh Livestock and Range Research Laboratory, ⁴PhD, ⁵Mississippi State University

2:30 p.m. 427 **Melatonin-induced Changes in the Bovine Vaginal Microbiota During Maternal Nutrient Restriction in Brangus Heifers**

Riley D. Messman¹, Caleb O. Lemley¹, Zully E. Contreras-Correa¹, Henry A. Paz¹

¹Mississippi State University

2:45 p.m. 423 **Setting the Cycle for Reproductive Success with a Presynchronization Program in Postpartum Beef Cows**

Macy M. Massengill¹, Thiago V. Silva¹, Daniel H. Poole¹

¹North Carolina State University

3:00 p.m. 428 **Effects of Melatonin Supplementation During Mid- to Late-gestation Nutrient Restriction on Maternal and Fetal Amino Acid Concentrations**

Rebecca M. Swanson¹, Zully E. Contreras-Correa¹, Thu Dinh¹, Heath H. King², Darcie R. Sidelinger¹, Derris D. Burnett³, Caleb O. Lemley¹

¹Mississippi State University, ²Mississippi State University College of Veterinary Medicine, ³PhD

3:15 p.m. 421 **Genomic Effects of Arginine on Cell Behavior of Conceptus Trophectoderm in Ungulates**

Sudikshya Paudel¹, Hongyao Yu², Tianyuan Wang³, Fuller W. Bazer⁴, Guoyao Wu⁵, Robert Burghardt⁶, Guang Hu², Xiaoqi Wang¹

¹North Carolina State University, ²Epigenetics and Stem Cell Biology Laboratory, National Institute of Environmental Health Sciences, ³Integrative Bioinformatics Support Group, National Institute of Environmental Health Sciences, ⁴Texas A&M University, ⁵Department of Animal Science, Texas A&M University, ⁶Department of Veterinary Integrative Biosciences, Texas A&M University

3:30 p.m. 424 **Changes in Metabolite and Protein Expression Profiles of Atypical Dark-cutting and Normal-ph Beef**

Frank Kiyimba¹, Steven Hartson², Janet Rogers³, Gretchen G. Mafi², Ranjith Ramanathan²

¹Department of Animal and Food Sciences, Oklahoma State University, Stillwater, OK,

²Oklahoma State University, ³Oklahoma State university

3:45 p.m. 431 **Effects of Exogenous Glucocorticoid Administration on Appetitive Center Brain Development in Dairy Bull Calves**

Keelee J. McCarty¹, Nathan Long¹

¹Clemson University

SSASAS: Small Ruminant Production I
Chair: Sara Linneen, Elanco Animal Health
3:30 PM - 5:15 PM
L006

3:30 p.m. 466 **Effects of Dietary Inclusion of Sericea Lespedeza Hay on Behavior, Heat Energy, and Ruminant Methane Emission by Growing Alpine Doelings and Katahdin Ewe Lambs**

Wei Wang¹, Ryszard Puchala², Luana Ribeiro³, Italo Portugal⁴, Terry A. Gipson⁵, Arthur L. Goetsch²

¹American Institute for Goat Research, Langston University; College of Veterinary Medicine, Shenyang Agricultural University, Shenyang, Liaoning, China, ²Langston University, ³American Institute for Goat Research, Langston University, ⁴American Institute for Goat Research Langston University, ⁵Langston

3:45 p.m. 453 **Effect of 'AU-Grazer' Sericea Lespedeza (*Lespedeza Cuneata*) from Two Different Sources on Indicators of Gastrointestinal Parasitism in Goats**

Thomas H. Terrill¹, Niki C. Whitley¹, Chelsea Pulsifer¹, Gregory Dykes², Phaneendra Batchu¹, Tony Hazard¹, Donielle Pannell¹

¹Fort Valley State University, ²Animal Science Program, College of Agriculture, Family Sciences, and Technology, Fort Valley State University,

4:00 p.m. 456 **Effect of 'Serala' Sericea Lespedeza (*Lespedeza Cuneata*) Hay on Gastrointestinal Parasite Fecal Egg and Oocysts Counts and Packed Cell Volume in Goats**

Niki C. Whitley¹, Tony Hazard¹, Chelsea Pulsifer¹, Phaneendra Batchu¹, Brou Kouakou¹, Thomas H. Terrill¹

¹Fort Valley State University

4:15 p.m. 545 **Effect of Copper Oxide Wire Particles with and Without Anthelmintic Treatment or Anthelmintic Treatment Alone on Gastrointestinal Nematode (GIN) Fecal Egg Counts in Goats**

Niki C. Whitley¹, Gregory Dykes², Jennifer Vazquez¹, Joan M. Burke³, Thomas H. Terrill¹

¹Fort Valley State University, ²Animal Science Program, College of Agriculture, Family Sciences, and Technology, Fort Valley State University,, ³USDA ARS Dale Bumpers Small Farms Research Center

4:30 p.m. 464 **Effect of Gum Arabica (GA) Drench on Indicators of Anemia in Goats**

Yaser M. Ahmed¹, Hamid Ismail¹, Djaafar M. Rehrh², Mulumebet Worku¹

¹NC A&T State University, ²NC A&T State University.

4:45 p.m. 470 **Changes in Cytochrome P450 in Katahdin Ewes Fed Endophyte-infected Tall Fescue Seed Diets in Spring and Fall**

Mohan Acharya¹, Joan M. Burke², Erin Wood³, Yan Huang⁴, Palika Dias-Morse⁵, Ken P. Coffey⁴, Edwards J L. Lannett⁶, Charles F Rosenkrans⁷

¹Department of Animal Science, University of Arkansas, ²USDA ARS Dale Bumpers Small Farms Research Center, ³USDA-ARS, ⁴University of Arkansas, ⁵University of Arkansas Fayetteville, ⁶Department of Animal Science, University of Tennessee, ⁷Animal and Veterinary Sciences Department, Clemson University

5:00 p.m. 459 **Effects of Sericea Lespedeza on Feed Intake, Digestion, and Ruminant Methane Emission in Hair Sheep**

Luana Ribeiro ¹, Ryszard Puchala ², Arthur L. Goetsch ²

¹American Institute for Goat Research, Langston University, ²Langston University

SSASAS: Breeding and Genetics

Chair: Darren Hagen, Oklahoma State University

3:45 PM - 5:15 PM

M105 & 106

3:45 p.m. 368 **Effect of Hair Coat Shedding Ability on Uterine Artery Hemodynamics in Angus Cattle**

Randy H. Burnett ¹, Zully E. Contreras-Correa ², Riley D. Messman ², Kirsten A. Midkiff ¹, Caleb O. Lemley ², Trent Smith ²

¹Mississippi State University Animal and Dairy Sciences, ²Mississippi State University

4:00 p.m. 373 **Estimates of Genetic Variation for Angus Gestation Length**

Carson Gilleland ¹, Kelli J. Retallick ², Daniel H. Poole ¹, Zack Peppmeier ¹, Mark Knauer ¹

¹North Carolina State University, ²American Angus Association

4:15 p.m. 369 **Evaluation of Peripheral Blood Leukocytes as a Surrogate for Rna-seq Detection of Gene Expression in Stress Axis Tissues of Mature Brahman Cows**

Audrey L. Earnhardt-San ¹, Emilie C. Baker ², Kubra Z. Cilkiz ³, David G. Riley ³, Noushin Ghaffari ⁴, Brittini P. Littlejohn ⁵, Haley C. Collins ³, Penny K. Riggs ³, Charles R. Long ⁶, Rodolfo C. Cardoso ³, Ronald D. Randel ⁷, Thomas H. Welsh ⁸

¹Texas A&M University and AgriLife Research, Department of Animal Science, ²West Texas A&M University, ³Texas A&M University, ⁴Prairie View A&M University, ⁵University of Arkansas System, Division of Agriculture, Department of Animal Science, ⁶School of Veterinary Medicine and Biomedical Sciences, Texas A&M University, ⁷Texas A&M AgriLife Research, Overton, TX, ⁸Texas A&M University, Department of Animal Science, College Station, TX

4:30 p.m. 372 **Impact of Sow Transition Diet and Genetic Line on Sow Reproduction Under Heat Stress Conditions**

Carson Gilleland ¹, Zack Peppmeier ¹, Mark Knauer ¹

¹North Carolina State University

4:45 p.m. 394 **Investigating Plasma Metabolomic Profiles at the Time of Weaning, Based on Pregnancy Outcome, in *bos Taurus* heifers**

Lauren V. Rutledge ¹, Landon Marks ², Soren P. Rodning ¹, Josh Elmore ¹, Kent Stanford ², Paul W W. Dyce ¹

¹Auburn University, ²Alabama Cooperative Extension

5:00 p.m. 370 **The Potential Use of DNA Methylation Patterns from Peripheral Blood Leukocytes as a Surrogate for Stress Axis Tissues in Mature Brahman Cows**

Emilie C. Baker¹, Audrey L. Earnhardt-San², Kubra Z. Cilkiz³, Brittini P. Littlejohn⁴, Haley C. Collins³, Noushin Ghaffari⁵, Penny K. Riggs³, Charles R. Long⁶, Thomas H. Welsh⁷, Ronald D. Randel⁸, David G. Riley³

¹West Texas A&M University, ²Texas A&M University and AgriLife Research, Department of Animal Science, ³Texas A&M University, ⁴University of Arkansas System, Division of Agriculture, Department of Animal Science, ⁵Prairie View A&M University, ⁶School of Veterinary Medicine and Biomedical Sciences, Texas A&M University, ⁷Texas A&M University, Department of Animal Science, College Station, TX, ⁸Texas A&M AgriLife Research, Overton, TX

Saturday, July 17, 2021

SSASAS: Meats

Chair: Christy Bratcher, Texas Tech University, Department of Animal and Food Science

10:00 AM - 11:30 AM

M105 & 106

10:00 a.m. 407 **Carcass Traits of Growing Meat Goats Fed Different Levels of Hempseed Meal**

Reshma Gurung¹, Frank W. Abrahamsen², Katie Moyer³, Jason T. Sawyer⁴, Nar K. Gurung⁵

¹Integrative Biosciences Ph.D. Program, Tuskegee University, Tuskegee, AL 36088, USA,

²Tuskegee University, ³Kentucky Hemp Works, ⁴Auburn University, ⁵Department of Agricultural and Environmental Sciences, College of Agriculture, Environment, and Nutrition Sciences, Tuskegee University, Tuskegee, AL 36088, USA

10:15 a.m. 406 **Prediction of Myostatin on Carcass Composition in Crossbred Lambs**

S. Maggie Justice¹, Alexandra Thomas², Maslyn A. Greene², Susan K. Duckett², Elliot Jesch²

¹Auburn University, ²Clemson University

10:30 a.m. 403 **Effect of Diet and Location Within the Longissimus Dorsi Muscle on the Quality and Fat Composition of Pork Loins Collected from Market Hog**

Amberly A. Dennis¹, Dana S. Reid², Dianna Wilson³, Thu Dinh¹, Derris D. Burnett⁴

¹Mississippi State University, ²Department of Animal and Dairy Sciences, Mississippi State University, ³Department of Food Science, Nutrition, and Health Promotion, Mississippi State University, ⁴PhD

10:45 a.m. 530 **Late-Breaking: Hempseed Meal as a Protein Replacement in the Diet of Meat Rabbits**

K. June Jacobson¹, Emily G. Verret¹, Lea Ann A. Kinman¹, Walter F. Owsley¹, James P. Muir², William B. Smith¹

¹Tarleton State University, ²TAMU

11:00 a.m. 405 **Dark Storage of Enhanced Dark-cutting Beef in Nitrite-embedded Packaging Increased Metmyoglobin Formation upon Repackaging**

Morgan Denzer¹, Gretchen G. Mafi¹, Deb VanOverbeke¹, Ranjith Ramanathan¹

¹Oklahoma State University

11:15 a.m. 472 **Impact of Retail Case Type and Lighting Intensity on Instrumental Color Traits of Ground Beef Patties**

Mesa B. Kutz ¹, Kelly R. Vierck ², Janeal W. Yancey ²

¹University of Arkansas, ²Department of Animal Science, Division of Agriculture, University of Arkansas System, Fayetteville

SSASAS: Extension I

Chair: Philippe Moriel, University of Florida

10:30 AM - 12:00 PM

M109 & 110

10:30 a.m. 380 **2016-2020 Alabama Pasture to Rail Program and Data: An Educational Retained Ownership Program for Alabama Cattle Producers**

Daniel A. Tigue ¹, Soren P. Rodning ¹, Paul Vining ², Danny McWilliams ³, Kim K. Mullenix ¹

¹Auburn University, ²Alabama Cooperative Extension, ³Alabama Cooperative Extension System

10:45 a.m. 376 **Availability and Management of Cotton Byproducts in North Carolina: A State Survey**

Elizabeth P. Mullins ¹, Matt H. Poore ², April D. Shaeffer ², Deidre D. Harmon ², Carrie L. Pickworth ¹

¹North Carolina State University, ²NC State University

11:00 a.m. 381 **Extension Contribution to Anaplasmosis Surveillance in Arkansas: A Story of Collaboration**

Heidi M. Ward ¹, Gabriel L. Apple ², Lauren R. Rogers ³, Kathryn E. Reif ⁴

¹University of Arkansas Cooperative Extension Service, ²University of Arkansas, ³University of Arkansas, Department of Animal Science, ⁴Kansas State University, College of Veterinary Medicine, Department of Diagnostic Medicine/Pathobiology

11:15 a.m. 379 **Case Study: On-farm Demonstration for the Impact of Applied Reproductive Technologies**

Courtne L. Carter ¹, Justin D. Rhinehart ²

¹University of Tennessee- Knoxville, ²University of Tennessee

11:30 a.m. 377 **Development of Online Alfalfa Management Extension Education Resources Amid the COVID-19 Pandemic**

Liliane Silva ¹, Kim K. Mullenix ², Leanne L. Dillard ², Jennifer J. J. Tucker ³, Gerry Thompson ⁴

¹Clemson University, ²Auburn University, ³University of Georgia, ⁴Alabama Cooperative Extension

11:45 a.m. 384 **Body Condition Score for Monitoring the Performance and Health of Small Ruminants in Field Conditions**

Uma Karki ¹, Anand Tiwari ¹, Kendra Norwood ¹, Ja'Nia Johnson ¹, Lila B. Karki ²

¹Tuskegee University, ²University of Maryland Eastern Shore

SSASAS: Ruminant Animal Production II

Chair: Ryon Walker, Texas A&M University

10:45 AM - 12:30 PM

L005/009

10:45 a.m. 531 **Awardee Talk: Maternal Gestational Nutrition Alters the Postnatal Growth, Immunity, and Carcass Quality of Bos Indicus-Influenced Beef Calves in Tropical/Subtropical Environments**

Elizabeth A. Palmer¹, Marcelo Vedovatto², Rhaiza A. Oliveira³, Juliana Ranches⁴, Matt H. Poore⁵, Francisco Peñagaricano⁶, Jimena Laporta⁶, Joao Vendramini⁷, Philippe Moriel⁷

¹University of Florida - Range Cattle Research & Education Center, ²Faculdade de Medicina Veterinária e Zootecnia, Universidade Federal de Mato Grosso do Sul, ³University of Florida, IFAS – Range Cattle Research and Education Center, ⁴Oregon State University; EOARC, ⁵NC State University, ⁶University of Wisconsin-Madison, ⁷University of Florida

11:15 a.m. 446 **Ruminal Degradation Kinetics of Beef Steers Fed Annual or Perennial Grass-hay with or Without Supplementation**

Kaue Tonelli Nardi¹, Jhones O. Sarturi¹, Joel D. Sugg², Darren D. Henry¹, Francine M. Ciriaco¹, Charles P. West¹

¹Texas Tech University, ²Midwest PMS, LLC

11:30 a.m. 436 **The Effects of Varying Levels of Trace Mineral Supplementation on Feedlot Cattle Performance and Carcass Characteristics**

Brittany A. Lippy¹, Blake K. Wilson¹, Colton A. Robison¹

¹Oklahoma State University

11:45 a.m. 441 **The Influence of Diet Type on Ranking for Feed Intake in Angus Cows**

Amanda Holder¹, James Rogers², Ryon Walker³, David Lalman⁴

¹College of the Ozarks, ²Noble Research Institute, ³Texas A&M University, ⁴Oklahoma State University

12:00 p.m. 442 **Relationship Between Gas Emissions and Dry Matter Intake in Mature Angus Cows**

Amanda Holder¹, Megan A. Gross², Alexi Moehlenpah², David Lalman²

¹College of the Ozarks, ²Oklahoma State University

12:15 p.m. 434 **Tamegrass Forage Options for Growing Heifers During the Summer**

Jaymelynn K. Farney¹, Macie E. Reeb¹, Zachary T. Buessing¹, Katie Malone¹

¹Kansas State University

SSASAS: Small Ruminant Production II

Chair: Thomas Terrill, Fort Valley State University

1:15 PM - 3:00 PM

L006

1:15 p.m. 458 **Growth Performance of Short Scrotum and Castrated Hair Sheep Lambs on Pasture During Different Seasons**

Stephan Wildeus¹, Dahlia O'Brien¹, Gabriel J. Pent², Kathryn M. Payne³

¹Virginia State University, ²Virginia Tech - SVAREC, ³Southern Piedmont Agricultural Research and Extension Center, Virginia Tech

1:30 p.m. 463 **Immunomodulatory Effects of Gum Arabica in Goat Blood**

Yaser M. Ahmed ¹, Hamid Ismail ¹, Djaafar M. Rehrach ², Mulumebet Worku ¹

¹NC A&T State University, ²NC A&T State University.

1:45 p.m. 455 **Survey to Determine Knowledge of Bioactive Forages Among Small Ruminant Producers**

Niki C. Whitley ¹, Chelsea Pulsifer ¹, Thomas H. Terrill ¹

¹Fort Valley State University

2:00 p.m. 460 **Selection Methods for Models to Predict Feedstuff Associative Effects in Goats**

Yoko Tsukahara ¹, Terry A. Gipson ², Ryszard Puchala ³, Arthur L. Goetsch ³

¹American Institute for Goat Research Langston University, ²Langston, ³Langston University

2:30 p.m. 462 **Influence of Season of Lambing on Gastrointestinal Nematode (GIN) Infection of Lambs**

Joan M. Burke ¹, Jim E. Miller ², Erin Wood ³

¹USDA ARS Dale Bumpers Small Farms Research Center, ²Louisiana State University, ³USDA-ARS

2:45 p.m. 457 **Influence of Season of Birth, Breed and Reproductive Status on Carcass Traits of Male Hair Sheep Lambs**

Dahlia O'Brien ¹, Stephan Wildeus ¹

¹Virginia State University

2:45 p.m. 465 **Legume-grass Pastures Enhanced the Performance of Kiko Does**

Anand Tiwari ¹, Uma Karki ¹, Kendra Norwood ¹, Ja'Nia Johnson ¹, Lila B. Karki ²

¹Tuskegee University, ²University of Maryland Eastern Shore

SSASAS: Extension II

Chair: Deidre Harmon, NC State University

3:15 PM - 5:00 PM

L006

3:15 p.m. 378 **Incorporation of a Statewide Webinar Series into an Existing County-based Beef Cattle Extension Program**

Courtnie L. Carter ¹, Justin D. Rhinehart ²

¹University of Tennessee- Knoxville, ²University of Tennessee

3:30 p.m. 375 **Integration of Virtual Programming into Beef Cattle Producer and Extension Agent Education**

Ashley K. Edwards ¹, A. Lee Faulk ¹, Vincent Deshotel ¹, Jason Holmes ¹

¹Louisiana State University Agricultural Center

3:45 p.m. 382 **Knowledge Transfer in Online Meat and Dairy Goat Certification Programs in English and Spanish**

Terry A. Gipson ¹, Roger C. Merkel ², Abner A. Rodriguez ³, John Fernandez ⁴

¹Langston, ²American Institute for Goat Research Langston University, ³Universidad de Puerto Rico Mayagüez, ⁴University of Puerto Rico

4:00 p.m. 386 **Use of an Unmanned Aerial Vehicle (UAV) to Document Vegetation Coverage Rate in Managed Grasslands Following a Historic River Flood**

Shane Gadberry ¹, Kevin Lawson ², John A. Jennings ³, Kenny Simon ²

¹University of Arkansas, ²University of Arkansas, Division of Agriculture, ³University of Arkansas System Division of Agriculture, Department of Animal Science, Little Rock, AR

4:15 p.m. 383 **Targeted Extension Programming for New and Beginning Beef Cattle Producers Through a Multi-night Lecture Series**

Kim K. Mullenix ¹, Luke L. Jacobs ², Landon Marks ³, Gerry Thompson ³, Paul Vining ³, Josh Elmore ¹, Alex Tighe ⁴, Rickey Hudson ⁴, Kent Stanford ³, Danny Miller ⁴, Danny McWilliams ⁵, Ken Kelley ¹

¹Auburn University, ²Clemson University, ³Alabama Cooperative Extension, ⁴Auburn University/Alabama Cooperative Extension System, ⁵Alabama Cooperative Extension System

4:30 p.m. 385 **Needs and Challenges Cattle Producers Face in Adapting Preconditioning Programs**

Paul A. Beck ¹, Jeff Robe ¹, David Lalman ¹, Dana L. Zook ¹, Marty G. New ¹, Earl Ward ¹, Brian M. Freking ¹

¹Oklahoma State University

4:45 p.m. 374 **Woodland Grazing: Untapped Resource to Increase Economic Benefits from Forestland**

Lila B. Karki ¹, Uma Karki ², Anand Tiwari ²

¹University of Maryland Eastern Shore, ²Tuskegee University