Sunday, January 28, 2024

Undergraduate Student Competition
Chair: Sushil Paudyal, Texas A&M
2:00 PM - 3:15 PM
Olmsted 6

2:00 p.m.  Undergraduate Student Competition Introduction and Logistics

2:10 p.m.  106 Advancing precision livestock management in the dairy industry: An early exploration of individual cow tracking using YOLOv5-Based computer vision
Marcus McGee 1, Cierra Clayton 1, Abigail Victory 1, Colby Hardin 1, Christopher Hudson 1
1Mississippi State University

2:15 p.m.  107 Bacterial direct-fed microbial mixtures effects on beef cattle ruminal degradability kinetics
DeAnja A. McLain 1, Jhones O. Sarturi 1, Kaliu G. Silva 1, Bradley J. Johnson 1, Barbara Rodrigues 1, Marie Goulais 1, Juliana Pessoni 1, Beatriz Reis 1
1Texas Tech University

2:20 p.m.  108 Discriminating highly resilient spermatozoa during long-term chilled storage
Kristen M. Johnson 1, Serge L. Kameni 1, Notsile H. Dlamini 1, Shengfa F. Liao 1, Jean M. Feugang 1
1Mississippi State University

2:25 p.m.  109 Effectiveness of Fenbendazole in growing Quarter Horses using the Quantitative Modified Wisconsin Technique
Jamie Lavergne 1, Jessica L. Leatherwood 1, Cecilia Gaulandri 1, Lauren Pavel 1, Brittany L. Paris 2, Margaret M. Carter 2, Paige Linne 2, Grace E. Moore 2, Carolyn E. Arnold 3, Kati G. Glass 2, Amanda Bradberry 4, Trinette Jones 1
1Tarleton State University, 2Texas A&M University, 3Texas Tech University, 4Montana State University

2:30 p.m.  110 Effects of sire selection on puberty and reproduction of offspring selected as replacement heifers
Terry H. McDonald 1, Chris Johnson 2, Timothy P. Vining 2, Mike Major 3, Gabriela Lamberti 2, Maria Lopes 2, Nicole Bonmann 2, Joao Moraes 1, Paul A. Beck 2
1Oklahoma State University - Animal Science, 2Oklahoma State University, 3Oklahoma State University - Range Cow Research Center
2:35 p.m.  111  First Kiko Buck Performance Test in Mississippi
Nicolas Marchant 1, Kelsey Mazeres 1, Jill DeGayner 1, Alex Shook 2, Rhonda C. Vann 1, Trent Smith 1, Rocky Lemus 1, Leyla Rios 3
1Mississippi State University, 2Mississippi State Univiersity-Extension, 3Mississippi State University

2:40 p.m.  112  In situ evaluation of multiple edible insects as feed for cattle
Delila Dominguez 1, Emma Fukuda 1, Jay Rea 1, Merritt L. Drewery 1
1Texas State University

2:45 p.m.  113  Investigation of differences in pregnancy associated glycoproteins due to different fetal parameters (sex and number) using commercial tests in multiparous ewes
Faith Rogers 1, Jim R. Rhoades 2, Lacey K. Quail 3, Jerica J J Rich 1
1Arkansas State University - College of Agriculture, 2IDEXX Laboratories, 3Texas A&M University, College Station, TX

2:50 p.m.  114  The efficacy of a natural fungus (Duddingtonia flagrans) in reducing gastrointestinal nematode indicators in lambs
Jessica Queen 1, Dahlia J. O'Brien 1, Stephan A. Wildeus 1, Javin Davis 1, MacKenzie Robertson 1, Kwame Matthews 2
1Virginia State University, 2Delaware State University

2:55 p.m.  115  Solubility and degradation of human fertility-promoting molecules in a rumen environment
Catherine R. Kalmbach 1, Brian J. Rude 1, Morgan E. Brown 2, Thiago Martins 2
1Mississippi State University Department of Animal and Dairy Sciences, 2Mississippi State University Brown Loam Branch Experiment Station

3:00 p.m.  116  In-situ degradability of hemp (Cannabis sativa L.) plant components in cattle
Alyssa Lopez 1, Emma Fukuda 1, Greyson Fruge 1, Merritt L. Drewery 1
1Texas State University

3:05 p.m.  117  Supplementation with soy hull during late gestation and lactation on parasite indicators in hair sheep ewes
MacKenzie Robertson 1, Dahlia J. O'Brien 1, Stephan A. Wildeus 1, Javin Davis 1, Kwame Matthews 2
1Virginia State University, 2Delaware State University

Graduate Student Competition - MS
Chair: Nicole Burdick Sanchez, USDA-ARS
3:00 PM – 5:30 PM
Olmsted 2

3:00 p.m.  Graduate Student Competition – MS Introduction and Logistics
3:10 p.m. 75 **AI-Enhanced Hematocrit Analysis: Revolutionizing rapid anemia detection in small ruminants**
Seymone Dargan 1, Aftab Siddique 2, Andres Pech-Cervantes 3, Jan van Wyk 4, Sudhanshu Panda 6, Ajit Mahapatra 2, Eric Morgan 6, Ebonie Appleberry 2, India Carter 2, Savana Lewis 2, Thomas H. Terrill 2
1Fort Valley State University, 2Fort Valley State University, 3University of Maryland, 4University of Pretoria, 5University of North Georgia, 6Queen’s University Belfast

3:15 p.m. 76 **An in-vitro analysis of hemp as feed for beef cattle**
Greyson Fruge 1, Hannah Boyer 1, Nicole Wagner 1, Merritt L. Drewery 1
1Texas State University

3:20 p.m. 77 **Assessing abundance of pregnancy markers among fertility-classified beef cows**
Alexandra Bennett 1, Cecilia C. Constantino Rocha 1, Abdul Waheed 1, Morgan Brown 1, Gabriela Dalmaso De Melo 2, Rubessa Marcello 3, Ricardo Chebel 1, Philippe Moriel 4, Rebecca Krisher 3, Ky G. Pohler 2, Peter J. Hansen 1, Mario Binelli 1
1University of Florida, 2Texas A&M University, 3Genus PLC, 4University of Florida, IFAS – Range Cattle Research and Education Center

3:25 p.m. 78 **Assessing nutrient digestibility in boer×spanish castrated male goats feeding varied levels of hempseed meal.**
Santosh Chaudhary 1, khim B. Ale 1, Frank W. Abrahamsen 1, Nar K. Gurung 1
1Tuskegee University

3:30 p.m. 79 **Dietary buffer comparison and tannins supplementation modulating subacute ruminal acidosis and fermentation in beef cattle.**
Andres Fernandez Lehmann 1, Liza Garcia 1, Araceli B. Maderal 1, Ignacio Fernandez-Marenchino 1, Federico Tarnonsky 1, Federico Podversich 1, Juan Vargas 1, Wilmer Cuervo 2, Camila Gomez 2, Cristian Erazo-Mendes 1, Georgia Dubeux 1, Tessa M. Schulmeister 1, Nicolas DiLorenzo 1
1University of Florida, 2University of Florida – NFREC – Marianna

3:35 p.m. 80 **Effect of copper bolus administration on circulating copper concentration, blood metabolites and parasite load**
Tyler K. Harmonson 1, Andrew M. Cassens 1, Walter F. Owsley 1, Cheyenne L. Runyan 1, Edward Webb 1, Kimberly B. Wellmann 1
1Tarleton State University

3:40 p.m. 81 **Effect of thymol on intake and digestion in beef cattle**
Emma Fukuda 1, Merritt L. Drewery 1, Russell Jessup 2
1Texas State University, 2Texas A&M University

3:45 p.m. 82 **Effects of a red-clover containing mineral on heifer behavior and fertility**
Tyler A. Purvis 1, Leslie H. Anderson 1, Jennifer R. Weinert-Nelson 2, Eric Vanzant 1, Tracy A. Hamilton 2, Dan Miller 3, John Johns 4, Brittany E. Davis 2
1University of Kentucky, 2USDA-ARS, Forage-Animal Production Research Unit, 3Kentucky Cattleman’s Association, 4Burkmann Feeds
3:50 p.m. 83 Effects of cottonseed meal supplementation on growth performance of heifers grazing mature summer forage
Connor R. Kern 1, Whitney L. Crossland 1, Aaron B. Norris 1, Ryan R. Rathmann 1, Jhone O. Sarturi 1
1Texas Tech University

3:55 p.m. 84 Efficacy of Livamol with BioWorma for controlling gastrointestinal nematode in nursing Kiko does raised in pastures
Durga P. Dhakal 1, Uma Karki 1, Santoshi Chaudhary 2, Sadikshya Lamsal 1
1Tuskegee University, 2Pennsylvania State University

4:00 p.m. 85 Evaluation of a Saccharomyces cerevisiae fermentation product on performance, plasma metabolites, rumen parameters, and fecal pathogen shedding in feedlot steers
Wendy Gong 1, Guolong Zhang 1, Andrew P. Foote 1, Blake K. Wilson 1
1Oklahoma State University

4:05 p.m. 86 Evaluation of dietary Saccharomyces cerevisiae fermentation product on markers of joint inflammation in young, exercising horses following an intra-articular lipopolysaccharide challenge
Grace E. Moore 1, Jessica L. Leatherwood 2, Kati G. Glass 1, Carolyn E. Arnold 3, Britanny L. Paris 1, Margaret M. Carter 1, James M. George 1, Alyson B. Fontenot 1, Taylor A. Gilcrest 1, Madison K. Blythe 4, Rafael E. Martinez 4, Amanda N. Bradbery 5, Tryon A. Wickersham 1
1Texas A&M University, 2Tarleton State University, 3Texas Tech University, 4Sam Houston State University, 5Montana State University

4:10 p.m. Graduate Student Competition – MS Break

4:25 p.m. 87 Functional rumen microbiological survey of triplet-bearing Polypay ewes from parturition to weaning
Katherine G. Purvis 1, Jennifer R. Weinert-Nelson 2, Donald G. Ely 3, John May 1, Michael D. Flythe 2, Tracy A. Hamilton 2, Jessica L. Ferrell 4, Brittany E. Davis 2
1University of Kentucky, 2USDA-ARS, Forage-Animal Production Research Unit, 3Animal and Food Sciences, University of Kentucky, 4USDA-ARS

4:30 p.m. 88 Impacts of trace mineral source and ancillary drench on steer performance during a 60-day backgrounding phase
Madeline McKnight 1, Kelsey M. Harvey 1, Brandi B. Karisch 2, Juan C. Cordero 1, Mason Drewery 2, Libby S. Durst 2, Eduardo Colombo 3, Reinaldo F. Cooke 3, Jason R. Russell 2
1Mississippi State University Prairie Research Unit, 2Mississippi State University, 3Texas A&M University

4:35 p.m. 89 Improving cattle grazing efficiency with multi-functional cover crops
Sofia A. Suazo 1, Jose D. Pereira Neto 1, Kimberly Mullenix 1, W. Brandon Smith 1, S. Leanne Dillard 1
1Auburn University
4:40 p.m.  Interconnecting feed efficiency with molecular mechanisms of muscle growth in beef steers
Sophia Ascolese 1, Troy N. Rowan 2, Jonathan E. Beever 2, Madison T. Henniger 1, Sonia J. Moisa 2, Taylor B. Ault-Seay 2, Brynn H. Voy 1, Phillip R. Myer 1
1Department of Animal Science, University of Tennessee, 2Department of Animal Science, Department of Large Animal Clinical Sciences, University of Tennessee

4:45 p.m.  Mealworm and black soldier fly larvae as protein supplements for beef steers consuming forage
Mikael Carrasco 1, Merritt L. Drewery 1
1Texas State University

4:50 p.m.  Rearing system influenced the performance, GI-parasite burden, and immune profile of pregnant does during winter
Sadikshya Lamsal 1, Uma Karki 1, Santoshi Chaudhary 2, Durga P. Dhakal 1, Bidur Paneru 3
1Tuskegee University, 2Pennsylvania State University, 3University of Georgia

4:55 p.m.  Red clover as a functional feed: Effects on rumen microbiota of finishing ram lambs
Macy E. Ragsdale 1, Donald G. Ely 2, Jennifer R. Weinert-Nelson 3, Brittany E. Davis 3, Michael D. Flythe 3, Tracy A. Hamilton 3, Matthew C. Hamilton 1, W. Leann Jacks 1, Sydney Davis 1
1University of Kentucky, 2Animal and Food Sciences, University of Kentucky, 3USDA-ARS, Forage-Animal Production Research Unit

5:00 p.m.  Smartphone integration in anemia detection for small ruminants with Convolutional Neural Networks
Reginald J. Randall 1, Andres Pech-Cervantes 2, Jan van Wyk 3, Sudhanshu Panda 4, Ajit Mahapatra 1, Eric Morgan 5, Kensley Stegall 1, Davia Brown 1, Ethan Manns 1, Shaylon Saunders 6, Andrea Rubio villa 1, Aniyah Plummer 1, Thomas H. Terrill 1
1Fort Valley State University, 2University of Maryland, 3University of Pretoria, 4University of North Georgia, 5Queen’s University Belfast, 6Fort Valley state University

5:05 p.m.  The effect of embryo stage and biopsy on embryo viability
Kenleigh N. Wells 1, Tommy L. Perkins 1
1West Texas A&M University

5:10 p.m.  Use of genomic testing for predicting performance of finishing steers
Jacee K. De Vries 1, Emma A. Briggs 1, Paul A. Beck 1, David L. Lalman 1, Chris Johnson 1
1Oklahoma State University

5:15 p.m.  Using youth hippology contest results as a needs assessment as a framework for a train the trainer program
Sawyer Main 1, Jennie L. Ivey 1, Lew G. Strickland 1, Justin D. Rhinehart 2
1University of Tennessee, 2University of Tennessee Extension
Graduate Student Competition – PHD
Chair:
3:30 PM – 4:15 PM
Olmsted 6

3:30 p.m.  Graduate Student Competition – PHD Introduction and Logistics

3:40 p.m.  99 Diversity of vaginal bacteria in lactating dairy cattle on pregnancy establishment
Dallas R. Soffa 1, Ashton Dodd 2, Jennifer A. Spencer 3, Rebecca K. Poole 1
1Texas A&M University, 2Texas A&M, 3Texas A&M AgriLife Research and Extension Center

3:45 p.m.  100 Can in vitro or in situ disappearance predict to in vivo digestibility of forages?
Abbigail R. Hines 1, Diva N. Rigney 1, Anna G. Underwood 1, Werner G. Bergen 1, M. Kim Mullenix 1, S. Leanne L. Dillard 1, Todd R. Callaway 2, William B. Smith 1
1Auburn University, 2University of Georgia

3:50 p.m.  101 Effects of moderate exercise regimen on reproductive development of replacement beef heifers reared in drylots at a high stocking density
Autumn Pickett 1, Reinaldo F. Cooke 1, Logan W. Rahmel 2, Shea Mackey 3, Mason Drewery 2, Juan C. Cordero 4, Teegan Mackey 1, Courtney L. Daigle 1, Thiago Martins 5, Kelsey M. Harvey 4
1Texas A&M University, 2Mississippi State University, 3Texas A&M University, Department of Animal Science, 4Mississippi State University Prairie Research Unit, 5Mississippi State University Brown Loam Branch Experiment Station

3:55 p.m.  102 Estradiol and follicular growth are associated with estrous behavior monitored by an accelerometer in grazing beef cows
Cecilia C. Constantino Rocha 1, Ana B. Montevecchio 1, Mackenzie Mazziotta 1, Alexandra Bennett 1, Abdul Waheed 1, Meghan Campbell 1, Marcello Rubessa 2, Rebecca Krisher 2, Philippe Moriel 3, Peter J. Hansen 1, Ricardo Chebel 1, Mario Binelli 1
1University of Florida, 2Genus PLC, 3University of Florida, IFAS – Range Cattle Research and Education Center

4:00 p.m.  103 Goats complement cattle in a woody-plant encroached, diverse Cross Timbers rangeland.
Brittany A. Lippy 1, Cooper Sherrill 2, Laura Goodman 1, Ryan R. Reuter 1
1Oklahoma State University, 2Oklahoma State Universit

4:05 p.m.  104 Maternal pre- and post-partum supplementation of Bacillus-based DFM enhanced cow and calf performance
Vinicius S. Izquierdo 1, Bruno I. Cappellozza 2, João V. L. Silva 1, Giovanna C. M. Santos 1, Andre Miranda 1, João H. J. Bittar 3, Autumn Pickett 4, Shea Mackey 5, Reinaldo F. Cooke 4, João M. B. Vendramini 1, Philippe Moriel 1
1University of Florida, IFAS – Range Cattle Research and Education Center, 2Chr. Hansen A/S, 3University of Florida, College of Veterinary Medicine, 4Texas A&M University, 5Texas A&M University, Department of Animal Science
SERA 41 Symposium
Chair: Nicolas DiLorenzo, University of Florida
2:30 PM - 5:30 PM
Olmsted 1

2:35 p.m.  1  Use of the GreenFeed bait system to assist in measuring fecal output and digesta kinetics
Stacey A. Gunter ¹, Emalee J. Friend ¹, Matthew R. Beck ¹, Corey A. Moffet ²
¹USDA-ARS, ²USDA-ARS, Oklahoma and Central Plains Agricultural Research Center

3:15 p.m.  2  Number of spot samples required when using the GreenFeed System in grazing beef cows
Elizabeth Dressler ¹, Jennifer M. Bormann ¹, Robert Weaber ¹, Megan M. Rolf ¹
¹Kansas State University

3:55 p.m.  SERA 41 Symposium Break

4:10 p.m.  3  Measuring feed intake in cows
David L. Lalman ¹, Emma A. Briggs ¹, Samuel R. Talley ¹, Jay Edens ², Paul A. Beck ¹, Andrew P. Foote ¹, Ryan R. Reuter ¹
¹Oklahoma State University, ²Oklahoma State University

4:50 p.m.  4  Utilizing SmartFeed Pro and SuperSmart Feeders for applied beef cattle research
Timothy DelCurto ¹, Sam Wyffels ¹
¹Montana State University

Monday, January 29, 2024

Kunkle Symposium: Sustainability of livestock systems in the southeastern U.S.: Opportunities and research gaps - Sponsored by Elanco
Chair: S. Leanne Dillard, Auburn University; Emma Briggs, Oklahoma State University
8:00 AM - 11:30 AM
Olmsted 2

8:00 a.m.  Kunkle Symposium Introduction

8:05 a.m.  5  Farm-level management practices in forage-based beef cattle systems and their influence on sustainability
M. Kim Mullenix ¹, William B. Smith ¹, S. Leanne L. Dillard ¹, Jose D. Pereira Neto ¹
¹Auburn University

8:50 a.m.  7  Environmental sustainability of livestock systems in the southeastern U.S.: Opportunities and research gaps
Matthew R. Beck ¹, Stacey A. Gunter ¹, Emalee J. Friend ¹, Corey A. Moffet ²
¹USDA-ARS, ²USDA-ARS, Oklahoma and Central Plains Agricultural Research Center

9:35 a.m.  Kunkle Symposium Break
9:50 a.m. 8 **Opportunities in enteric methane emissions mitigation in beef cattle**  
Sara E. Place ¹  
¹AgNext, Colorado State University

10:35 a.m. 6 **Identifying research gaps and opportunities to enhance sustainable beef production**  
Jessica Gilreath ¹  
¹Elanco Animal Health

11:20 a.m.  **Kunkle Symposium Closing Remarks**

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**Small Ruminant Production I: Nutrition**  
Chair: Joan Burke, USDA, ARS, Dale Bumpers Small Farms Research Center; **Katherine Purvis, University of Kentucky**  
8:00 AM - 11:30 AM  
Olmsted 5

8:00 a.m. 44 **CANCELLED**

8:15 a.m. 45 **CANCELLED**

8:30 a.m. 46 **Use of soy hull as a supplement during late gestation and lactation for landrace hair sheep ewes in a forage-based system**  
Stephan A. Wildeus ¹, Dahlia J. O'Brien ¹, MacKenzie Robertson ¹, Javin Davis ¹  
¹Virginia State University

8:45 a.m. 47 **Inclusion of black soldier fly (Hermetia illucens) larvae frass as an alternative protein source in the diet of Florida native yearling ewes.**  
Britany M. Fernandez-Mora ¹, Carlos NinoDeGuzman-Cerna ¹, Gerald K. Salas-Solis ¹, Kathy Arriola ¹, Jose A. Arce-Cordero ², Diwakar Vyas ¹  
¹University of Florida, ²University of Costa Rica

9:00 a.m. 48 **The ruminal microbiome of conventionally and artificially raised lambs fed high-concentrate and high-forage post-weaning diets**  
Jennifer R. Weinert-Nelson ¹, Donald G. Ely ², Michael D. Flythe ¹, Tracy A. Hamilton ¹, Katherine G. Purvis ³, Matthew C. Hamilton ³, W. Leann Jacks ³, Brittany E. Davis ¹  
¹USDA-ARS, Forage-Animal Production Research Unit, ²Animal and Food Sciences, University of Kentucky, ³University of Kentucky

9:15 a.m. 49 **Red clover as a functional feed: Effects on rumen microbiota of finishing ram lambs**  
Macy E. Ragsdale ¹, Donald G. Ely ², Jennifer R. Weinert-Nelson ³, Brittany E. Davis ³, Michael D. Flythe ³, Tracy A. Hamilton ³, Matthew C. Hamilton ¹, W. Leann Jacks ¹, Sydney Davis ¹  
¹University of Kentucky, ²Animal and Food Sciences, University of Kentucky, ³USDA-ARS, Forage-Animal Production Research Unit

9:30 a.m. 50 **Effects of cottonseed supplementation on the rumen microbiota of parasite-challenged meat goats**  
Peixin Fan ¹, Lindsey N. Dearborn ¹, Chuan-yu Hsu ¹, Bernard Brandon ¹, Leyla Rios de Alvarez ¹  
¹Mississippi State University
9:45 a.m.  Small Ruminant Production I Break

10:00 a.m.  51  A preliminary study of the effect of dietary cottonseed on the follicular reserve of does artificially infected with *Haemonchus contortus*
Nicolas Marchant ¹, Notsile H. Dlamini ¹, Serge L. Kameni ¹, Jean M. Feugang ¹, Leyla Rios ²
¹Mississippi State University, ²Mississippi State University

10:15 a.m.  52  Evaluation of linseed meal on ovarian follicular development after synchronization in preovulatory small ruminants during seasonal anestrus.
Cameron A. Poole ¹, Audrey G. Meyer ¹, Chase Runyan ¹
¹Angelo State University

10:30 a.m.  53  CANCELLED

10:45 a.m.  54  CANCELLED

11:00 a.m.  55  Evaluation of feed efficiency and feeding behavior in Katahdin lambs housed in a Vyettle Sense system
Nicole K. Valliere ¹, Lee L. Wright ², Andrew R. Weaver ³, Scott A. Bowdrige ⁴, Scott P. Greiner ¹
¹Virginia Tech, ²Southwest Virginia Agricultural Research and Extension Center, ³NC State University, ⁴West Virginia University

11:15 a.m.  56  Assessing nutrient digestibility in boer×spanish castrated male goats feeding varied levels of hempseed meal.
Santosh Chaudhary ¹, khim B. Ale ¹, Frank W. Abrahamsen ¹, Nar K. Gurung ¹
¹Tuskegee University

Breeding and Genetics
Chair: Michael Looper, University of Arkansas System Division of Agriculture, Department of Animal Science Fayetteville, AR
8:30 AM - 10:15 AM
Olmsted 3

8:30 a.m.  118  Investigation of differences in pregnancy associated glycoproteins due to different fetal parameters (sex and number) using commercial tests in multiparous ewes
Faith Rogers ¹, Jim R. Rhoades ², Lacey K. Quail ³, Jerica J J Rich ¹
¹Arkansas State University - College of Agriculture, ²IDEXX Laboratories, ³Texas A&M University, College Station, TX

8:45 a.m.  119  Plasma metabolomics and feed behavior patterns in feed efficient or inefficient beef bulls.
MAURO VENTURINI ¹, Daniella C. Heredia ², MARIA LOPEZ ¹, KAMRYN JOICE ¹, MARTIN RUIZ ¹, JOSE C B DUBEUX ², Nicolas DiLorenzo ², Angela M. Gonella-Diaza ²
¹UNIVERSITY OF FLORIDA, ²University of Florida
9:00 a.m. 120 Effects of sire selection on puberty and reproduction of offspring selected as replacement heifers
Terry H. McDonald 1, Chris Johnson 2, Timothy P. Vining 2, Mike Major 3, Gabriela Lamberti 2, Maria Lopes 2, Nicole Bonmann 2, Joao Moraes 1, Paul A. Beck 2
1Oklahoma State University - Animal Science, 2Oklahoma State University, 3Oklahoma State University - Range Cow Research Center

9:15 a.m. 121 Unraveling the biology of bovine conceptus elongation
Gabriela Lamberti 1, Anna K. Goldkamp 1, Maria Lopes 1, Nicole Bonmann 1, Samuel Van Rhijn 1, Darren E. Hagen 1, Joao Moraes 2
1Oklahoma State University, 2Oklahoma State University - Animal Science

9:30 a.m. 122 A retrospective analysis of gestational length and its influencers for Bos taurus beef cows
Camille Mitchell 1, Trinity Vidlund 1, Hannah Craun 1, Vitor R G Mercadante 2, Tracey Redifer 3, John Currin 3
1Virginia Tech, 2Virginia Tech - Animal and Poultry Sciences, 3Virginia-Maryland College of Veterinary Medicine

9:45 a.m. 123 Discriminating highly resilient spermatozoa during long-term chilled storage
Kristen M. Johnson 1, Serge L. Kameni 1, Notsile H. Dlamini 1, Shengfa F. Liao 1, Jean M. Feugang 1
1Mississippi State University

10:00 a.m. 124 The effect of embryo stage and biopsy on embryo viability
Kenleigh N. Wells 1, Tommy L. Perkins 1
1West Texas A&M University

Extension
Chair: Vitor Mercadante, Virginia Tech - Animal and Poultry Sciences;
Sawyer Main, University of Tennessee
8:30 AM - 12:00 PM
Olmsted 1

8:30 a.m. 30 Ethnobotany applied to ruminant feeding inserted in countryside property redesign
Annelise Aila Gomes Lobo 1, Mariana Campana 2, Jozivaldo Prudêncio Gomes De Morais 3
1UFSCAR, 2UFSCAR - Federal University of Sao Carlos, 3UFSCAR-Federal University of Sao Carlos

8:45 a.m. 31 Pastureland Ecology 1 provides hands-on training in grazing management for USDA-NRCS professionals
Matt H. Poore 1, April D. Shaeffer 2, Johnny R. Rogers 1, Andrew R. Weaver 2, Paul Siciliano 2, Deidre D. Harmon 3
1North Carolina State University, 2NC State University, 3Cargill Corporation
9:00 a.m. 32 Amazing Grazing webinar and workshop series improves producers understanding of pasture ecology
Johnny R. Rogers 1, Matt H. Poore 1, April D. Sheaffer 2, Andrew R. Weaver 2, Paul Siciliano 2, Deidre D. Harmon 3
1North Carolina State University, 2NC State University, 3Cargill Corporation

9:15 a.m. 33 An evaluation of Oklahoma beef producer decision factors regarding the implementation of calf best management practices
Timothy P. Vining 1, Kellie C. Raper 1, Derrell S. Peel 1, Paul A. Beck 1
1Oklahoma State University

9:30 a.m. 34 A survey of the Oklahoma State University Cowculator user preferences
Samuel R. Talley 1, Paul A. Beck 1, Megan A. Gross 1, Scarlett Kingsley 1, David L. Lalman 1
1Oklahoma State University

9:45 a.m. 35 Louisiana cattle pregnancy determination clinic aims to improve reproductive efficiency
Ashley K. Edwards 1, A. Lee Faulk 1, Jason E. Holmes 1, Randall Mallette 1, Joshua Salley 1
1Louisiana State University Agricultural Center

10:00 a.m. 36 Improving cattle grazing efficiency with multi-functional cover crops
Sofia A. Suazo 1, Jose D. Pereira Neto 1, Kimberly Mullenix 1, Brandon Smith 1, S. Leanne Dillard 1
1Auburn University

10:15 a.m. Extension Break

10:30 a.m. 43 Using youth hippology contest results as a needs assessment as a framework for a train the trainer program
Sawyer Main 1, Jennie L. Ivey 1, Lew G. Strickland 1, Justin D. Rhinehart 2
1University of Tennessee, 2University of Tennessee Extension

10:45 a.m. 38 Assessment of retained ownership extension programming in southeastern beef cattle herds
S. Maggie Justice 1, M. Kim Mullenix 2, Shane Gadberry 3
1University of Arkansas System Division of Ag, 2Auburn University, 3University of Arkansas

11:00 a.m. 39 Effectiveness of an educational program covering on-farm finishing of beef cattle for direct-to-consumer in Kentucky
Katie VanValin 1, Morgan Hayes 1, Leslie H. Anderson 1, Darrh Bullock 1, Kevin Laurent 1
1University of Kentucky

11:15 a.m. 40 Two-week agriculture institute prepares Mississippi teachers to improve agricultural literacy in classrooms
Stephanie Lemley 1, Riley Messman 1, Rebecca M. Swanson 1, Caleb O. Lemley 1
1Mississippi State University
11:30 a.m. 41 Social and institutional trust: A comparison between non-associated and associated producers in Southeast Brazil
Beatriz Reis 1, Adrieli Casado 2, Elaine Bernardes 2, Celso Miasaku 2, DeAnja A. McLain 1, Otavio France 1, Jhones O. Sarturi 1
1Texas Tech University, 2Sao Paulo State University

11:45 a.m. 42 Challenges for agricultural social media influencers engagement with young, non-ag adults
Samantha Bennett 1, David Martin 2, Jason T. Sawyer 3, Soren P. Rodning 2, Don R. Mulvaney 2
1RFD-TV, 2Auburn University, 3Auburn University

Ruminant Animal Production I: Management and Physiology I
Chair: Brandi Karisch, Mississippi State University
9:00 AM - 10:15 AM
Olmsted 7

9:00 a.m. 129 Selenium-form affects de novo cholesterol synthesis and catabolism of cholesterol and progesterone in the liver of beef heifers
Elizabeth Stamper 1, Jordan Jackson 1, Benjamin Crites 1, Kwangwon Son 1, Sarah Carr 1, Phillip Bridges 1
1University of Kentucky

9:15 a.m. 130 Effect of an appeasing substance application on growth, stress, handling quality and reproduction of Bos indicus beef heifers synchronized to fixed-time AI
Eduardo de Assis Lima 1, Marcelo Vedovatto 2, Fabio Farias 1, Juliana Ranches 3, Matheus Ferreira 4, Bruno I. Cappellozza 6, Osvaldo Souza 6, Gumercindo L. Loriano Franco 1
1Faculdade de Medicina Veterinária e Zootecnia, Universidade Federal de Mato Grosso do Sul, 2Louisiana State University, 3Oregon State University, 4Eastern Oregon Agricultural Research Center, Oregon State University, 5Chr. Hansen A/S, 6Nutricorp

9:30 a.m. 131 Selenium-form effects on hepatic function and selenoprotein mRNAs in the early pregnant heifer
Jordan Jackson 1, Elizabeth Stamper 1, Benjamin Crites 1, Kwangwon Son 1, Sarah Carr 1, Phillip Bridges 1
1University of Kentucky

9:45 a.m. 132 Effects of supplementing corn silage to fall-calving cows grazing tall fescue on cow and calf performance and physiology
James Banks 1, Jason Warner 1, Karol E. Fike 1, Jaymelynn K. Farney 1
1Kansas State University

10:00 a.m. 133 Effects of supplementing corn silage to fall-calving heifers and cows grazing bermudagrass on cow and calf performance and physiology
James Banks 1, Jason Warner 1, Karol E. Fike 1, Jaymelynn K. Farney 1
1Kansas State University
10:05 a.m. 9 **Randel Lecture: In Vivo investigation of pregnancy Physiology**
Russell V. Anthony 1, Amelia R. Tanner 1, Victoria C. Kennedy 1, Quinton A. Winger 1, Paul J. Rozance 2
1Colorado State University, 2University of Colorado School of Medicine

11:00 a.m. 10 **Interconnecting feed efficiency with molecular mechanisms of muscle growth in beef steers**
Sophia Ascolese 1, Troy N. Rowan 2, Jonathan E. Beever 2, Madison T. Henniger 1, Sonia J. Moisa 2, Taylor B. Ault-Seay 2, Brynn H. Voy 1, Phillip R. Myer 1
1Department of Animal Science, University of Tennessee, 2Department of Animal Science, Department of Large Animal Clinical Sciences, University of Tennessee

11:15 a.m. 11 **Transcriptomic changes in response to form of selenium on the interferon-tau signaling mechanism in the caruncular tissue of beef heifers at maternal recognition of pregnancy**
Sarah Carr 1, Benjamin Crites 1, Phillip Bridges 1
1University of Kentucky

11:30 a.m. 12 **Impact of progesterone signaling on tumor necrosis factor-alpha synthesis by luteal macrophages**
Mariam Giurgis 1, Madison McCann-Deshazer 1, John E. Gadsby 1, Daniel H. Poole 1
1NC State University

11:45 a.m. 13 **Effects of an acclimation protocol during the handling events of the 7 d CO-synch + CIDR protocol on temperament and reproductive performance of Bos taurus commercial beef heifers**
Nicholas Wege Dias 1, Sydney Tastad 2, Joao Victor Chaves Silva 3, Santiago Paez Hurtado 1, Andreia Ferreira Machado 3, Victor Enrique Gomez-Leon 1, John R. Jaeger 4, Nicola Oosthuizen 5, Sandy Johnson 1
1Kansas State University, 2Kansas state University, 3Universidade Federal de Vicsosa, 4South Dakota State University, 5ABS Global Inc.

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**Meats**
Chair: Alex Tigue, Cargill; Gabriella Johnson, Auburn University
10:30 AM - 11:30 AM
Olmsted 3

10:30 a.m. 125 **Relationship of electrical conductivity to color variables (chroma, hue, L*, a*, b*) of fresh beef loins**
Carolina S. Mesquita 1, Reed Richardson 2, Christopher Kerth 3, Pratheesh Sudhakaran 1
1Texas State University - San Marcos, 2Texas State University, 3Texas A&M University
10:45 a.m. 126 Effects of Tall Fescue Seeds and Quercetin on the Meat Quality of Finishing Lambs
Yongjie Wang 1, Jing Ge 2, Sarah Shelby 3, Yan Huang 3, Palika Morse 3
1North Carolina Agricultural and Technical State University, 2Yangzhou University, 3University of Arkansas

11:00 a.m. 127 Color and oxidative stability of Longissimus lumborum muscles from artificially raised ram lambs finished on a high-concentrate diet
Koushik Mondal 1, Katherine G. Purvis 2, Gregg K. Rentfrow 1, Donald G. Ely 1, Brittany E. Davis 3, Jennifer R. Weinert-Nelson 3, Michael D. Flythe 3, Yifei Wang 4, Surendranath P. Suman 1
1Animal and Food Sciences, University of Kentucky, 2University of Kentucky, 3USDA-ARS, Forage-Animal Production Research Unit, 4Animal Sciences, The Ohio State University

11:15 a.m. 128 Impact of different levels of dark-cutting severity on the retail color and color stability of beef longissimus lumborum steaks
Keayla M. Harr 1, Madelyn Scott 1, Sunil More 1, Gretchen G. Mafi 1, Morgan Pfeiffer 1, Ranjith Ramanathan 1
1Oklahoma State University

Ruminant Animal Production II: Management and Physiology II
Chair: Brandi Karisch, Mississippi State University; Vinicius de Souza Izquierdo, University of Florida
10:30 AM - 11:45 AM
Olmsted 7

10:30 a.m. 134 A 12-year summary of effects of body weight at breeding and synchronization protocols on reproductive success of Bos indicus-influenced beef heifers grazing warm-season grasses.
Cassio Brauner 1, Vinicius S. Izquierdo 2, João M. B. Vendramini 2, Philipe Moriel 2
1Federal University of Pelotas, 2University of Florida, IFAS - Range Cattle Research and Education Center

10:45 a.m. 135 Effects of intratesticular injectable zinc as an alternative castration method compared to banding one week post weaning in beef bulls: effects on health, inflammation, behavior, and growth during the backgrounding period.
Lauren K. Solice 1, Reagan N. Sims 1, Beth B. Kegley 2, Shane Gadberry 2, Jeremy G. Powell 2, Sami Dridi 2, Elizabeth S. Greene 2
1Texas State University, 2University of Arkansas

11:00 a.m. 136 Evaluation of internal parasite burden in grazing beef cattle in North Carolina over a production lifecycle
Katherine G. Williams 1, Carrie L. Pickworth 2, Andrew R. Weaver 2, Daniel H. Poole 2
1North Carolina, 2NC State University

11:15 a.m. 137 Impacts of heat stress on the accuracy of an ear-tag sensor for detection of eating and ruminating behavior in cattle
Jennifer R. Weinert-Nelson 1, Jessica Werner 2, Alayna A. Jacobs 1, Leslie H. Anderson 3, Tracy A. Hamilton 1, Carey A. Williams 4, Brittany E. Davis 1
1USDA-ARS, Forage-Animal Production Research Unit, 2University of Hohenheim, 3University of Kentucky, 4Rutgers, The State University of New Jersey
An examination of cow behavior with an automated brush system in an intensively managed dairy system
Allison Griffin 1, Colby Hardin 1, Kandy Tilley 1, Maghan Burlison 1, Marcus McGee 1
1Mississippi State University

Nutrition
Chair: Brian Rude, Mississippi State University Department of Animal and Dairy Sciences;
Jaedyn Rawson, Mississippi State University
2:00 PM - 4:30 PM
Olmsted 2

Dietary buffer comparison and tannins supplementation modulating subacute ruminal acidosis and fermentation in beef cattle.
Andres Fernandez Lehmann 1, Liza Garcia 1, Araceli B. Maderal 1, Ignacio Fernandez-Marenchino 1, Federico Tamonsky 1, Federico Podversich 1, Juan Vargas 1, Wilmer Cuervo 2, Camila Gomez 2, Cristian Erazo-Mendes 1, Georgia Dubeux 1, Tessa M. Schulmeister 1, Nicolas DiLorenzo 1
1University of Florida, 2University of Florida - NFREC - Marianna

Effect of thymol on intake and digestion in beef cattle
Emma Fukuda 1, Merritt L. Drewery 1, Russell Jessup 2
1Texas State University, 2Texas A&M University

Bacterial direct-fed microbial mixtures effects on beef cattle ruminal degradability kinetics
DeAnja A. McLain 1, Jhones O. Sarturi 1, Kaliu G. Silva 1, Bradley J. Johnson 1, Barbara Rodrigues 1, Marie Goulais 1, Juliana Pessoni 1, Beatriz Reis 1
1Texas Tech University

Solubility and degradation of human fertility-promoting molecules in a rumen environment
Catherine R. Kalmbach 1, Brian J. Rude 1, Morgan E. Brown 2, Thiago Martins 2
1Mississippi State University Department of Animal and Dairy Sciences, 2Mississippi State University Brown Loam Branch Experiment Station

An in-vitro analysis of hemp as feed for beef cattle
Greyson Fruge 1, Hannah Boyer 1, Nicole Wagner 1, Merritt L. Drewery 1
1Texas State University

Nutrition Break

In-situ degradability of hemp (Cannabis sativa L.) plant components in cattle
Alyssa Lopez 1, Emma Fukuda 1, Greyson Fruge 1, Merritt L. Drewery 1
1Texas State University
3:45 p.m. 157  **Can in vitro or in situ disappearance predict to in vivo digestibility of forages?**
Abbigail R. Hines 1, Diva N. Rigney 1, Anna G. Underwood 1, Werner G. Bergen 1, M. Kim Mullenix 1, S. Leanne L. Dillard 1, Todd R. Callaway 2, William B. Smith 1
1Auburn University, 2University of Georgia

4:00 p.m. 158  **In situ evaluation of multiple edible insects as feed for cattle**
Delila Dominguez 1, Emma Fukuda 1, Jay Rea 1, Merritt L. Drewery 1
1Texas State University

4:15 p.m. 159  **Mealworm and black soldier fly larvae as protein supplements for beef steers consuming forage**
Mikael Carrasco 1, Merritt L. Drewery 1
1Texas State University

**Small Ruminant Production II: Health**
Chair: Andrew Weaver, NC State University; Macy Ragsdale, University of Kentucky
2:00 PM - 4:45 PM
Olmsted 5

2:00 p.m. 57  **Impact of Cache Valley Virus in an Arkansas sheep flock**
1USDA, ARS, Dale Bumpers Small Farms Research Center, 2USDA, ARS, 3CDC

2:15 p.m. 58  **United States Department of Agriculture National Animal Health Monitoring System Goat 2019 study: Distribution of gastrointestinal nematodes**
James E. Miller 1, Ryan Avery 2, Joan M. Burke 3
1Louisiana State University, 2USAID, 3USDA, ARS, Dale Bumpers Small Farms Research Center

2:30 p.m. 59  **Efficacy of Livamol with BioWorma for Controlling Gastrointestinal Nematode in Nursing Kiko Does raised in Pastures**
Durga P. Dhakal 1, Uma Karki 1, Santoshi Chaudhary 2, Sadikshya Lamsal 1
1Tuskegee University, 2Pennsylvania State University

2:45 p.m. 60  **The efficacy of a natural fungus (*Duddingtonia flagrans*) in reducing gastrointestinal nematode indicators in lambs**
Jessica Queen 1, Dahlia J. O'Brien 1, Stephan A. Wildeus 1, Javin Davis 1, MacKenzie Robertson 1, Kwame Matthews 2
1Virginia State University, 2Delaware State University

3:00 p.m. 61  **Determining in vivo and in vitro predatory activity of *Duddingtonia flagrans* and interaction with dietary coccidiostat**
Joan M. Burke 1, Suman Rohila 2, Katherine Petersson 3, Elizabeth Kass 3, Adriano Vatta 4, James E. Miller 4
1USDA, ARS, Dale Bumpers Small Farms Research Center, 2USDA, ARS, 3University of Rhode Island, 4Louisiana State University
3:15 p.m.  Small Ruminant Production II Break

3:30 p.m.  62  Supplementation with soy hull during late gestation and lactation on parasite indicators in hair sheep ewes
MacKenzie Robertson 1, Dahlia J. O’Brien 1, Stephan A. Wildeus 1, Javin Davis 1, Kwame Matthews 2
1Virginia State University, 2Delaware State University

3:45 p.m.  63  CANCELLED

4:00 p.m.  64  The effect of postweaning fecal egg count EBV on colostrum IgG concentration and color in Katahdin dams
Kelsey Bentley 1, Andrew R. Weaver 2, Lee L. Wright 3, Scott P. Greiner 4, Scott A. Bowdridge 1
1West Virginia University, 2NC State University, 3Southwest Virginia Agricultural Research and Extension Center, 4Virginia Tech

4:15 p.m.  65  Effect of post-weaning fecal egg count EBV on grazing ewe behavior after weaning.
Garrett T. Vaughan 1, Lee L. Wright 2, Scott P. Greiner 3, Scott A. Bowdridge 1
1West Virginia University, 2Southwest Virginia Agricultural Research and Extension Center, 3Virginia Tech

4:30 p.m.  66  Effect of copper oxide wire particles on parasitism and growth in Katahdin lambs divergently selected for fecal egg count estimated breeding value
Victoria Geniac 1, Lee L. Wright 2, Scott P. Greiner 3, Scott A. Bowdridge 4, Andrew R. Weaver 1
1NC State University, 2Southwest Virginia Agricultural Research and Extension Center, 3Virginia Tech, 4West Virginia University

Pastures and Forages
Chair: Stacey Gunter, USDA-ARS; Mason Henson, Auburn University
2:00 PM - 5:00 PM
Olmsted 1

2:00 p.m.  160  Comparison of native to introduced mixed warm-season grass pastures on heifer weight gain and fecal egg count.
Nate T. Moss 1, Eva M. Wray 2, Chris Tucker 2, Shane Gadberry 2
1UA Livestock and Forestry Station, 2University of Arkansas

2:15 p.m.  161  Effects of Sericea Lespedeza Supplementation on Steers Grazing Wild-Type Endophyte-Infected Tall Fescue
Sanjok Poudel 1, Gabriel J. Pent 2, John H. Fike 1, Brittany Harlow 3, Wayne Zeller 3
1Virginia Tech, 2Virginia Tech’s Shenandoah Valley Agricultural Research and Extension Center, 3USDA Agricultural Research Service

2:30 p.m.  162  Nutritive value and dry matter yield of stockpiled tall fescue across plant hardiness zones 7 and 8
Malerie E. Fancher 1, Katie Mason 1, S. Leanne L. Dillard 2
1University of Tennessee Institute of Agriculture, 2Auburn University
2:45 p.m. 163 Growth trends in *Bos grunniens* raised in pasture-based systems in Eastern Kentucky
Amanda L. Lee ¹, Jeffrey Lehmkuhler ¹, Mary McCarty ², Gregory Dike ³
¹University of Kentucky, ²University of Kentucky Cooperative Extension, ³Zhi-ba Shing-ga Yaks

3:00 p.m. 164 Effect of distillers grains supplementation and fertilization rate on performance of stocker cattle grazing wheat pasture and stand performance
Cody Gruber ¹, Michelle Johnson ¹, Tom Hess ², Daniel Rivera ³, James Mitchell ¹, Shane Gadberry ¹
¹University of Arkansas, ²UA Livestock and Forestry Station, ³University of Arkansas Southwest Research and Extension Center

3:15 p.m. 165 Does supplementation of beef cattle impact the agronomy performance of tall fescue and bermudagrass pastures?
Jaymelynn K. Farney ¹, Jason Warner ¹, James Banks ¹, Junior Yasuoka ¹, Bruno Pedriera ²
¹Kansas State University, ²University of Tennessee

3:30 p.m. Pastures and Forages Break

3:45 p.m. 166 Effect of silo type on fermentation characteristics of laboratory-scale silage
Macy Rockwell ¹, Lauren M. St. Andrew ¹, Abigail R. Hines ¹, William P. Tarter ¹, Berman E. Espino ¹, Cecelia N. Sagastume Fernandez ¹, Jose D. Pereira Neto ¹, Aghata E. Moreira da Silva ¹, S. Leanne L. Dillard ¹, Aeriel D. Belk ¹, M. Kim Mullenix ¹, William B. Smith ¹
¹Auburn University

4:00 p.m. 167 Use of plant growth-promoting rhizobacteria in bermudagrass systems of the Southeast US
Isaac Mirahki ¹, Jennifer Crabtree ¹, Jose D. Pereira Neto ¹, Brandon Smith ¹, Tony Adesemoye ², M. Kim Mullenix ¹, S. Leanne L. Dillard ¹
¹Auburn University, ²USDA ARS National Soil Dynamics Lab

4:15 p.m. 168 Evaluate the digestibility effects of alfalfa-bermudagrass mixtures on beef cattle in the Deep South
Mason Henson ¹, Peyton Zessin ¹, S. Leanne L. Dillard ¹, M. Kim Mullenix ¹, William B. Smith ¹
¹Auburn University

4:30 p.m. 169 Hemp as a forage crop: Harvest date effects on yield and nutritive value
Swarup Podder ¹, John H. Fike ¹, Bain Wilson ²
¹Virginia Tech, ²Ohio State University

4:45 p.m. 170 Goats complement cattle in a woody-plant encroached, diverse Cross Timbers rangeland.
Brittany A. Lippy ¹, Cooper Sherrill ², Laura Goodman ¹, Ryan R. Reuter ¹
¹Oklahoma State University, ²Oklahoma State Universitly
Impact of supplementing rumen-protected methionine during the periconceptional period in the post-weaning period in female calves
Daniella C. Heredia, Federico Tarnonsky, Maria C. Lopez-Duarte, MAURO VENTURINI, Oscar A. Ojeda, Daniel D. Luchini, Peter J. Hansen, Dean Pringle, Nicolas DiLorenzo, Angela M. Gonella-Diaza
University of Florida, UNIVERSIT Y OF FLORIDA, Adisseo USA Inc

High-resolution characterization of the gut microbiota of neonatal dairy calves using full-length 16S rRNA gene amplicon sequencing
Jalyn G. Hawkins, Shelby Carpenter, Mackenzie Woody, Colby Hardin, Jim Brett, Marcus McGee, Trent Smith, Peixin Fan
Mississippi State University

Advancing precision livestock management in the dairy industry: An early exploration of individual cow tracking using YOLOv5-Based computer vision
Marcus McGee, Cierra Clayton, Abigail Victory, Colby Hardin, Christopher Hudson
Mississippi State University

Use of genomic testing for predicting performance of finishing steers
Jacee K. De Vries, Emma A. Briggs, Paul A. Beck, David L. Lalman, Chris Johnson
Oklahoma State University

Maternal pre- and post-partum supplementation of Bacillus-based DFM enhanced cow and calf performance
Vinicius S. Izquierdo, Bruno I. Cappellozza, João V. L. Silva, Giovanna C. M. Santos, Andre Miranda, João H. J. Bittar, Autumn Pickett, Shea Mackey, Reinaldo F. Cooke, João M. B. Vendramini, Philipe Moriel
University of Florida, IFAS - Range Cattle Research and Education Center, Chr. Hansen A/S, University of Florida, College of Veterinary Medicine, Texas A&M University, Texas A&M University, Department of Animal Science

Influence of early progesterone removal on follicular development, estrus expression, and pregnancy rates in presynchronized beef cows
University of Georgia, ABS Global Inc., University of Tennessee, Texas Tech University, Oregon State University
3:30 p.m. 16 Estradiol and follicular growth are associated with estrous behavior monitored by an accelerometer in grazing beef cows
Cecilia c. Constantino Rocha 1, Ana B. Montevecchio 1, Mackenzie Mazziotta 1, Alexandra Bennett 1, Abdul Waheed 1, Meghan Campbell 1, Marcello Rubessa 2, Rebecca Krisher 2, Philipe Moriel 3, Peter J. Hansen 1, Ricardo Chebel 1, Mario Binelli 1
1University of Florida, 2Genus PLC, 3University of Florida, IFAS - Range Cattle Research and Education Center

3:45 p.m. 17 Assessing abundance of pregnancy markers among fertility-classified beef cows
Alexandra Bennett 1, Cecilia c. Constantino Rocha 1, Abdul Waheed 1, Morgan Brown 1, Gabriela Dalmaso De Melo 2, Rubessa Marcello 3, Ricardo Chebel 1, Philipe Moriel 4, Rebecca Krisher 3, Ky G. Pohler 2, Peter J. Hansen 1, Mario Binelli 1
1University of Florida, 2Texas A&M University, 3Genus PLC, 4University of Florida, IFAS - Range Cattle Research and Education Center

4:00 p.m. 18 Progesterone and insulin concentrations during pregnancy in slick and wild type-haired Holstein cows
Anayra I. Tirado-Colón 1, William D. Feliciano-Figueroa 1, Héctor L. Sánchez-Rodríguez 1, Veronica M. Negrón-Pérez 1, Esbal Jiménez-Cabán 1
1University of Puerto Rico- Mayaguez

4:15 p.m. 19 Evaluation of dietary Saccharomyces cerevisiae fermentation product on markers of joint inflammation in young, exercising horses following an intra-articular lipopolysaccharide challenge
Grace E. Moore 1, Jessica L. Leatherwood 2, Kati G. Glass 1, Carolyn E. Arnold 3, Brittany L. Paris 1, Margaret M. Carter 1, James M. George 1, Alyson B. Fontenot 1, Taylor A. Gilcrest 1, Madison K. Blythe 4, Rafael E. Martinez 4, Amanda N. Bradbery 5, Tryon A. Wickersham 1
1Texas A&M University, 2Tarleton State University, 3Texas Tech University, 4Sam Houston State University, 5Montana State University

4:30 p.m. 20 Evaluation of a Saccharomyces cerevisiae fermentation product on performance, plasma metabolites, rumen parameters, and fecal pathogen shedding in feedlot steers
Wendy Gong 1, Guolong Zhang 1, Andrew P. Foote 1, Blake K. Wilson 1
1Oklahoma State University

4:45 p.m. 21 Ancylostoma caninum-derived neutrophil inhibitory factor impairs ovine neutrophil chemotaxis to Haemonchus contortus larval antigen in Suffolk but not St. Croix sheep
Hannah G. Teddleton 1, Scott P. Greiner 2, Scott A. Bowdridge 1
1West Virginia University, 2Virginia Tech
Tuesday, January 30, 2024

Small Ruminant Production III
Chair: Scott Bowdridge, West Virginia University
8:00 AM - 10:00 AM
Olmsted 5

8:00 a.m.  67 Functional rumen microbiological survey of triplet-bearing Polypay ewes from parturition to weaning
Katherine G. Purvis, Jennifer R. Weinert-Nelson, Donald G. Ely, John May, Michael D. Flythe, Tracy A. Hamilton, Jessica L. Ferrell, Brittany E. Davis
1University of Kentucky, 2USDA-ARS, Forage-Animal Production Research Unit, 3Animal and Food Sciences, University of Kentucky, 4USDA-ARS

8:15 a.m.  68 First Kiko Buck Performance Test in Mississippi
Nicolas Marchant, Kelsey Mazeres, Jill DeGayner, Alex Shook, Rhonda C. Vann, Trent Smith, Rocky Lemus, Leyla Rios
1Mississippi State University, 2Mississippi State University-Extension, 3Mississippi State University

8:30 a.m.  69 Smartphone integration in anemia detection for small ruminants with Convolutional Neural Networks
1Fort Valley State University, 2University of Maryland, 3University of Pretoria, 4University of North Georgia, 5Queen's University Belfast, 6Fort Valley State University

8:45 a.m.  70 Rearing system influenced the performance, GI-parasite burden, and immune profile of pregnant does during winter
Sadikshya Lamsal, Uma Karki, Santoshi Chaudhary, Durga P. Dhakal, Bidur Paneru
1Tuskegee University, 2Pennsylvania State University, 3University of Georgia

9:00 a.m.  71 AI-Enhanced Hematocrit Analysis: Revolutionizing rapid anemia detection in small ruminants
Seymone Dargan, Aftab Siddique, Andres Pech-Cervantes, Jan van Wyk, Sudhanshu Panda, Ajit Mahapatra, Eric Morgan, Ebonie Appleberry, India Carter, Savana Lewis, Thomas H. Terrill
1Fort Valley State University, 2Fort Valley State University, 3University of Maryland, 4University of Pretoria, 5University of North Georgia, 6Queen's University Belfast

9:15 a.m.  72 Comparison of Myotonic, Kiko, and Spanish Sires for Meat Goat Doe-Kid Traits
Emily G. Hayes, Heather Meador, Richard Browning
1Tennessee State University

9:30 a.m.  73 Deworming to improve growth in early-weaned spring born hair sheep lambs
Dahlia J. O'Brien, Stephan A. Wildeus, Javin Davis, MacKenzie Robertson, Kwame Matthews
1Virginia State University, 2Delaware State University
9:45 a.m.  74  Effect of grazing native warm season grasses on parasitism and growth in weaned Katahdin lambs
Andrew R. Weaver 1, Lee Holcomb 2, Jason Smith 3, Allison Brown 4, Der Holcomb 4, Johnny R. Rogers 4
1NC State University, 2NRCS, 3NC Wildlife Resources Commission, 4North Carolina State University

Ruminant Animal Production IV: Nutrition
Chair: Jeffrey Lehmkuhler, University of Kentucky; Amanda Lee, University of Kentucky
8:15 AM - 10:00 AM
Olmsted 7

8:15 a.m.  144  Utilizing Invasive Pigweed (Amaranthus Spinosus) as a Novel Methane Mitigation Strategy in Beef Cattle Feed: A Sustainable Approach
Wilmer Cuervo 1, Camila Gomez 1, Ignacio Fernandez-Marenchino 2, Araceli B. Maderal 2, Federico Tamonsky 2, Cristian Erazo-Mendes 2, Tessa M. Schulmeister 2, Nicolas DiLorenzo 2
1University of Florida - NFREC - Marianna, 2University of Florida

8:30 a.m.  145  The effect of a plant secondary metabolite blend on energy metabolism and nutrient balance of beef cattle consuming low-quality warm season grass hay
Emily A. Petzel 1, Eric Bailey 1, Derek W. Brake 1
1University of Missouri

8:45 a.m.  146  Effects of cottonseed meal supplementation on growth performance of heifers grazing mature summer forage
Connor R. Kern 1, Whitney L. Crossland 1, Aaron B. Norris 1, Ryan R. Rathmann 1, Jhones O. Sarturi 1
1Texas Tech University

9:00 a.m.  147  Effects of grazing dairy-beef and native beef crossbred steers on native range with supplementation on growth
Ally J. Grote 1, Zane N. Grigsby 1, Tom Fanning 2, Dusty Turner 3, Paul A. Beck 1
1Oklahoma State University, 2Buffalo Feeders, 3MasterHand Milling

9:15 a.m.  148  Supplementing Bovacillus to newly weaned beef steers during a 90-d grazing period
Reinaldo F. Cooke 1, Shea Mackey 2, Autumn Pickett 1, Eduardo Colombo 1, Bruno I. Cappellozza 3, Brandi B. Karisch 4, Kelsey M. Harvey 5
1Texas A&M University, 2Texas A&M University, Department of Animal Science, 3Chr. Hansen A/S, 4Mississippi State University, 5Mississippi State University Prairie Research Unit

9:30 a.m.  149  Using respiratory gas flux and backward dietary energy partitioning to estimate energy intake by beef cattle fed a high concentrate diet
Emalee J. Friend 1, Addie Womack 2, Stacey A. Gunter 1, Paul A. Beck 2
1USDA-ARS, 2Oklahoma State University
9:45 a.m. 150  **Effects of diet type on performance and methane yield in replacement beef heifers**  
Emma A. Briggs 1, Kade Horton 1, Mikyla F. Moore 1, Justin Crosswhite 1, Andrew P. Foote 1, Carla Goad 1, Megan M. Rolf 2, David L. Lalman 1  
1Oklahoma State University, 2Kansas State University

**Physiology III**  
Chair: Nathan Long, Clemson University; Cecilia Constantino Rocha, University of Florida  
8:30 AM - 10:30 AM  
Olmsted 6

8:30 a.m. 22  **Diversity of vaginal bacteria in lactating dairy cattle on pregnancy establishment**  
Dallas R. Soffa 1, Ashton Dodd 2, Jennifer A. Spencer 3, Rebecca K. Poole 1  
1Texas A&M University, 2Texas A&M, 3Texas A&M AgriLife Research and Extension Center

8:45 a.m. 23  **Effectiveness of Fenbendazole in growing Quarter Horses using the Quantitative Modified Wisconsin Technique**  
Jamie Lavergne 1, Jessica L. Leatherwood 1, Cecilia Gaulandri 1, Lauren Pavel 1, Brittany L. Paris 2, Margaret M. Carter 2, Paige Linne 2, Grace E. Moore 2, Carolyn E. Arnold 3, Kati G. Glass 2, Amanda Bradberry 4, Trinette Jones 1  
1Tarleton State University, 2Texas A&M University, 3Texas Tech University, 4Montana State University

9:00 a.m. 29  **Effect of copper bolus administration on circulating copper concentration, blood metabolites and parasite load**  
Tyler K. Harmonson 1, Andrew M. Cassens 1, Walter F. Owsley 1, Cheyenne L. Runyan 1, Edward Webb 1, Kimberly B. Wellmann 1  
1Tarleton State University

9:15 a.m. 25  **Impacts of trace mineral source and ancillary drench on steer performance during a 60-day backgrounding phase**  
Madeline McKnight 1, Kelsey M. Harvey 1, Brandi B. Karisch 2, Juan C. Cordero 1, Mason Drewery 2, Libby S. Durst 2, Eduardo Colombo 3, Reinaldo F. Cooke 3, Jason R. Russell 2  
1Mississippi State University Prairie Research Unit, 2Mississippi State University, 3Texas A&M University

9:30 a.m. 26  **Effects of a red-clover containing mineral on heifer behavior and fertility**  
Tyler A. Purvis 1, Leslie H. Anderson 1, Jennifer R. Weinert-Nelson 2, Eric Vanzant 1, Tracy A. Hamilton 2, Dan Miller 3, John Johns 4, Brittany E. Davis 2  
1University of Kentucky, 2USDA-ARS, Forage-Animal Production Research Unit, 3Kentucky Cattleman's Association, 4Burkmann Feeds

9:45 a.m. 27  **Awardee Talk: Effects of moderate exercise regimen on reproductive development of replacement beef heifers reared in drylots at a high stocking density**  
Autumn Pickett 1, Reinaldo F. Cooke 1, Logan W. Rahmel 2, Shea Mackey 3, Mason Drewery 2, Juan C. Cordero 4, Teegan Mackey 1, Courtney L. Daigle 1, Thiago Martins 5, Kelsey M. Harvey 4  
1Texas A&M University, 2Mississippi State University, 3Texas A&M University, Department of Animal Science, 4Mississippi State University Prairie Research Unit, 5Mississippi State University Brown Loam Branch Experiment Station
Investigating the effects of Chromium Propionate supplementation on reproductive performance of beef cows
Trinity Vidlund¹, Hannah Craun¹, Camille Mitchell¹, John Currin², Jamie L. Stewart², Sherrie Clark², Tracey Redifer², Vitor R G Mercadante³
¹Virginia Tech, ²Virginia-Maryland College of Veterinary Medicine, ³Virginia Tech - Animal and Poultry Sciences