



**Southern Section  
American Society of Animal Science**

**Scientific Sessions &  
Business Meeting**

**Hilton Fort Worth  
Fort Worth, TX  
February 3 - 6, 2018**

## **Camera, Video Camera and Cell Phone Policy**

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Use of cameras, video cameras and cell phones (for calls or as cameras) is prohibited during presentations to minimize disruption and unauthorized dissemination of data. Violators may be asked to leave the session/conference. Exceptions to this policy must be approved by the Southern Section Scientific Program Coordinator.

# **Officers 2017 – 2018**

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**Officers 2017 – 2018**  
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North Carolina State University, Raleigh, NC

Sierra Lockwood, Graduate Student Representative  
University of Tennessee, Knoxville, TN

Sam Ingram, Graduate Student Representative  
North Carolina State University, Clayton, NC

# General Information

## Meeting Location

Hilton Fort Worth

## Registration

Saturday, February 3 .....	11:30 AM – 4:00 PM
Sunday, February 4 .....	7:00 AM – 5:00 PM
Monday, February 5 .....	7:00 AM – 4:30 PM
Tuesday, February 6 .....	7:00 AM – 12:00 PM

## Hotel Information

**Hilton Fort Worth**  
815 Main St.  
Fort Worth, TX 76102  
817-870-2100  
[tinyurl.com/HiltonFTW](http://tinyurl.com/HiltonFTW)

## Awards Banquet Location

**Lil' Red's Longhorn Saloon**  
121 W. Exchange Ave.  
Fort Worth, TX 76164  
817-740-0078  
[tinyurl.com/LonghornFTW](http://tinyurl.com/LonghornFTW)

## Academic Quadrathlon Location

**Tarleton State University**  
1333 W. Washington St.  
Stephenville, TX 76401

# Academic Quadrathlon Schedule of Events

## Friday, February 2, 2018

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9:00 PM                      Advisors' Meeting  
*Hilton Fort Worth*

## Saturday, February 3, 2018

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All Day                      AQ Lab Practicum and  
Written Exam  
*Tarleton State University*

## Sunday, February 4, 2018

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6:30 AM – 12:00 PM      Oral Preparations  
*Rooms: Citizens A, Citizens C,  
Texas C, and Metropolitan*

8:00 AM – 12:00 PM      Oral Presentations  
*Room: Texas B*

8:00 AM – 12:00 PM      Quiz Bowl  
*Room: Texas A*

# Meeting Schedule of Events

Unless otherwise noted, all events will  
be held in the Hilton Fort Worth

## Saturday, February 3, 2018

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- 2:00 PM – 5:30 PM      Pre-Conference: Integrated Pest  
Management Symposium  
*Room: Crystal C*
- 6:00 PM – 7:00 PM      Integrated Pest Management  
Symposium Reception  
*Room: Crystal D*

## Sunday, February 4, 2018

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- 8:00 AM – 4:00 PM      SCC 81: Sustainable Ruminant  
Production in the Southeastern  
United States  
*Room: Continental*
- 1:00 PM – 3:35 PM      SERA 041 Symposium: Round Bale  
Haylage Production Impacts and  
Economics  
*Room: Crystal A*
- 3:35 PM – 6:00 PM      SERA 041 Meeting  
*Room: Crystal A*
- 4:00 PM – 5:30 PM      Graduate Student Competition, MS  
*Room: Texas AB*
- 5:45 PM – 7:00 PM      Graduate Student Competition, PhD  
*Room: Texas AB*
- 5:00 PM – 6:40 PM      Undergraduate Student Competition  
*Room: Texas CD*

## Monday, February 5, 2018

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8:00 AM – 11:30 AM	Bill E. Kunkle Interdisciplinary Beef Symposium: Recent Advances in Replacement Heifer Development <i>Room: Texas AB</i>
8:00 AM – 11:05 AM	Small Ruminant Production I <i>Room: Crystal A</i>
8:00 AM – 10:45 AM	Meats <i>Room: Crystal B</i>
8:00 AM – 9:30 AM	Breeding and Genetics <i>Room: Texas CD</i>
9:30 AM – 10:00 AM	Coffee Break <i>Room: West Promenade</i>
10:00 AM – 11:45 AM	Nonruminant <i>Room: Continental</i>
1:00 PM – 2:45 PM	Small Ruminant Production II: Parasitology & Health <i>Room: Crystal A</i>
1:00 PM – 3:00 PM	Pastures and Forages/Conserved Forages <i>Room: Citizens AB</i>
1:00 PM – 4:30 PM	Physiology I <i>Room: Texas CD</i>
1:00 PM – 4:00 PM	Ruminant Animal Production: Health <i>Room: Texas AB</i>
1:00 PM – 4:30 PM	Ruminant Animal Production: Cow/ Calf <i>Room: Continental</i>
2:55 PM – 4:30 PM	Extension I: Demonstrations <i>Room: Crystal A</i>
4:30 PM – 5:30 PM	Business Meeting <i>Room: Crystal A</i>
6:00 PM – 7:30 PM	Awards Banquet <i>Offsite: Lil' Red's Longhorn Saloon</i>
8:00 PM – 12:00 AM	Awards Entertainment & Graduate Mixer <i>Offsite: Lil' Red's Longhorn Saloon</i>
7:00 PM – 9:15 PM	Small Ruminant Subcommittee of NAGP <i>Room: Continental</i>



## **Tuesday, February 6, 2018**

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6:30 AM – 8:00 AM	Extension Breakfast <i>Room: Texas CD</i>
8:00 AM – 9:20 AM	Teaching and Undergraduate Education <i>Room: Texas B</i>
8:00 AM – 10:45 AM	Extension II: Programs <i>Room: Crystal A</i>
8:00 AM – 11:30 AM	Pastures and Forages <i>Room: Citizens AB</i>
8:00 AM – 12:20 PM	Physiology II <i>Room: Continental</i>
8:00 AM – 11:45 AM	Ruminant Animal Production: Nutrition <i>Room: Texas A</i>
9:30 AM – 12:05 PM	Ruminant Animal Production: Weaned Calf <i>Room: Texas B</i>
9:30 AM – 10:00 AM	Coffee Break <i>Room: West Promenade</i>
11:00 AM – 1:00 PM	Graduate Student Lunch and Learn <i>Room: Texas CD</i>
12:30 PM – 3:00 PM	Southern Section Board Meeting <i>Room: Metropolitan</i>

### **Uploading Presentation Files**

Only PowerPoint presentations will be accommodated (i.e., no slides, no overheads and no alternative programs allowed).

1. All session rooms will have Master PCs running PowerPoint 2013 or newer in Windows.
2. Individual laptops may not be connected to the projectors in the session rooms.
3. Presentations must be given to the session chair via flash drive at least 15 minutes before the start of the session.

# Special Events

## **Pre-Conference: Integrated Pest Management Symposium**

**Saturday, February 3, 2018 • 2:00 PM – 5:30 PM**

*Room: Crystal C*

It is well known that certain insects can be pests of livestock. This symposium will address some of these most economically important insect pest species as well as link some of these insects to disease pathogens of importance that lead to decreased productivity in livestock. It will also aid in providing guidance on developing an effective Integrated Pest Management (IPM) plan for operations and/or producers battling insect pests.

## **Integrated Pest Management Reception**

**Saturday, February 3, 2018 • 6:00 PM – 7:00 PM**

*Room: Crystal D*

## **Business Meeting**

**Monday, February 5, 2018 • 4:30 PM – 5:30 PM**

*Room: Crystal A*

The Southern Section business meeting will be held independent of the awards banquet.

## **Awards Banquet**

**Monday, February 5, 2018 • 6:00 PM – 7:30 PM**

*Offsite: Lil' Red's Longhorn Saloon*

Join us for an awards banquet at Lil' Red's Longhorn Saloon, for an evening of food, drinks and catching up with friends as we honor the accomplishments of our 2018 Southern Section award winners.

## **Awards Entertainment and Graduate Mixer**

**Monday, February 5, 2018 • 8:00 PM – 12:00 AM**

*Offsite: Lil' Red's Longhorn Saloon*

Join us at Lil' Red's Longhorn Saloon for an evening of food, drinks and catching up with friends.

## **Ronald D. Randel Lectureship**

The Executive Committee of Southern Section is pleased to announce the establishment of an annual invited lectureship to the Physiology Section. Dr. Randel's contributions to the field of animal physiology and endocrinology have globally benefited animal agriculture. Dedicating his research career to investigating the reproductive physiology of beef cattle, especially for tropically adapted breeds, Dr. Randel evaluated the role of nutrition on reproduction, elucidated the

fundamental reproductive biology of Brahman cattle, developed strategies to reduce livestock production risks and resolved practical problems in beef cattle reproduction. This year he will be honored by a two-part lectureship at the beginning of each physiology session.

**Monday, February 5, 2018 • 1:15 PM – 2:00 PM**

*Room: Texas CD*

**Dr. Carole Mendelson**

**UTSW Medical Center/UTHSC–Dallas**

Ronald D. Randel Lectureship Part I: Fetal-to-Maternal Signaling in the Timing of Birth

**Tuesday, February 6, 2018 • 8:05 AM – 8:50 AM**

*Room: Continental*

**Dr. Mike Smith**

**University of Missouri**

Ronald D. Randel Lectureship Part II: Reproduction in Domestic Ruminants during the Past 50 Years: Discovery to Application.

## **Extension Breakfast**

**Tuesday, February 6, 2018 • 6:30 AM – 8:00 AM**

*Room: Texas CD*

The objective of the extension breakfast is to coordinate collaborative forage and livestock educational efforts in the southeastern United States.

The main topics for the 2018 extension breakfast will be:

1. Discuss the committee structure and approval of the 2017 extension luncheon minutes
2. Summary of the abstracts and symposium
3. Planning for the II Forage and Livestock Southeastern Extension Meeting.

## **Graduate Student Lunch and Learn**

**Tuesday, February 6, 2018 • 12:00 PM – 2:00 PM**

*Room: Texas CD*

The Southern Section Graduate Student Lunch and Learn will provide a unique opportunity for students to obtain valuable information and advice from academic and industry professionals in an exclusive setting. This year's theme is "Committed to Science." During this interactive meeting/workshop with fellow graduate students from colleges and universities across the southern section of ASAS, speakers will provide effective tools and strategies for conducting sound research and for communicating the importance of your research to a broad audience.

This year's speakers:

Dr. Keith Haydon, CJ America

Dr. Jason Smith, University of Tennessee

# SCIENTIFIC SESSIONS

**Saturday, February 3, 2018**

## PRE-CONFERENCE: INTEGRATED PEST MANAGEMENT SYMPOSIUM

*Chairs: Mark Upton, Central Life Sciences;  
Nicky Oosthuizen, University of Florida, North Florida  
Research and Education Center*

**2:00 PM – 6:00 PM  
Crystal C**

- 2:00 PM                    **Welcoming Remarks.**
- 2:05 PM      71      **Overview of Arthropod Pests of Typical  
Livestock Production Systems.**  
*C. Holderman\**, *Central Life Sciences, Dallas,  
TX*
- 2:35 PM      72      **Benefits of Horn Fly Control in Dairy and  
Beef Heifers.**  
*S. C. Nickerson\**, *University of Georgia, Athens*
- 3:05 PM      73      **The Effect of ClariFly® Larvicide in  
Purchased Feed on Fly Populations on Dairy  
Farms in 2008 and 2013.**  
*C. S. Mooney\**, *Morrisville State College,  
Morrisville, NY*
- 3:35 PM                    **Break.**
- 3:50 PM      74      **Update on Fly Control Practices for Pastured  
Cattle.**  
*J. L. Talley\**, *Oklahoma State University,  
Stillwater*
- 4:20 PM      75      **An Integrated Approach to Managing Insects  
in Livestock Production Systems.**  
*C. White\**, *Central Life Sciences, Dallas, TX*
- 4:50 PM                    **Break.**
- 5:20 PM                    **Panel Discussion.**
- 6:00 PM                    **Reception.**

# Sunday, February 4, 2018

## SERA 041

**Chairs: Shane Gadberry, University of Arkansas;  
Caleb P. Weiss, University of Arkansas**

**1:00 PM – 6:00 PM  
Crystal A**

- 1:00 PM 119 **Anti-Quality Factors with Forage Baleage and Grain Crop Silage.**  
*A. T. Adesogan\**, Department of Animal Sciences, IFAS, University of Florida, Gainesville
- 1:45 PM 120 **Characteristics of and Animal Responses to Warm- and Cool-Season Forage Baleage.**  
*R. S. Walker\*<sup>1</sup> and J. Vendramini<sup>2</sup>*, <sup>1</sup>Noble Research Institute, Ardmore, OK, <sup>2</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL
- 2:30 PM 121 **Economics of Baleage with Consideration for Class of Cattle.**  
*J. R. Pruitt\**, University of Tennessee at Martin, Martin
- 3:15 PM **Panel Discussion.**
- 3:35 PM **SERA 041 Meeting.**

## GRADUATE STUDENT COMPETITION: MS DIVISION

**Chair: Nicole C. Burdick Sanchez, USDA-ARS,  
Livestock Issues Research Unit**

**4:00 PM – 5:30 PM  
Texas AB**

- 4:00 PM **Welcoming Remarks.**
- 4:05 PM 20 **An Orientation Course with Effort-Based Grading Predicts Undergraduate Student Success in Animal Science.**  
*M. J. Mann\* and C. J. Kojima*, University of Tennessee, Knoxville

- 4:10 PM 21 **Impact of Different Maturity Stages on Yield and Quality of Ensiled Johnson-grass [*Sorghum halepense* (L.) Pers].**  
*C. Silva*<sup>\*1</sup>, *M. L. Bass*<sup>1</sup>, *D. W. Hancock*<sup>2</sup>, and *R. L. Stewart, Jr.*<sup>1</sup>, <sup>1</sup>*University of Georgia, Athens*, <sup>2</sup>*Department of Crop and Soil Sciences, University of Georgia, Athens*
- 4:15 PM 22 **Evaluation of a Starter Ration on Growth and Performance of White-Tailed Deer Fawns.**  
*M. A. Sain*<sup>\*1</sup>, *K. J. Stutts*<sup>1</sup>, *J. K. Suagee-Bedore*<sup>1</sup>, *M. J. Anderson*<sup>1</sup>, and *J. L. Leatherwood*<sup>2</sup>, <sup>1</sup>*Sam Houston State University, Huntsville, TX*, <sup>2</sup>*Texas A&M University, College Station*
- 4:20 PM 23 **Effects of Timing of Weaning on Calf Performance and Maintenance Energy Requirements in Primiparous Beef Cows.**  
*A. R. Wiseman*<sup>\*</sup>, *M. D. Redden*, *C. M. Spencer*, *A. L. McGee*, *R. Reuter*, and *D. L. Lalman*, *Oklahoma State University, Stillwater*
- 4:25 PM 24 **Grazing Novel or Endophyte-Infected Tall Fescue during Midgestation Impacts Cow Performance.**  
*M. A. Newsome*<sup>\*</sup>, *R. E. Monn*, *K. Mayberry*, *R. K. Poole*, *Z. Young*, *M. H. Poore*, and *D. H. Poole*, *North Carolina State University, Raleigh*
- 4:30 PM 25 **Prediction of Residual Feed Intake in Feedlot Steers Based on Phenotypic Associations with Feeding Behavior and Carcass Ultrasound Traits.**  
*I. L. Parsons*<sup>\*</sup>, *J. R. Johnson*, *W. C. Kayser*, *M. D. Miller*, and *G. E. Carstens*, *Texas A&M University, College Station*
- 4:35 PM 26 **The Effect of Feeding Ferric Citrate on Rumen Microbial Communities and Methanogenesis in Growing Beef Steers.**  
*E. A. Melchior*<sup>\*1</sup>, *K. E. Hales*<sup>2</sup>, *A. K. Lindholm-Perry*<sup>3</sup>, *J. E. Wells*<sup>3</sup>, and *P. R. Myer*<sup>1</sup>, <sup>1</sup>*University of Tennessee, Knoxville*, <sup>2</sup>*USDA-ARS, Clay Center, NE*, <sup>3</sup>*USDA-ARS U.S. Meat Animal Research Center, Clay Center, NE*
- 4:40 PM 27 **Maternal Stress at Weaning Impacts Calf Growth.**  
*G. C. Ott*<sup>\*</sup>, *S. R. Freeman*, *M. H. Poore*, and *C. L. Pickworth*, *North Carolina State University, Raleigh*

- 4:45 PM 28 **Relationships between Antral Follicle Numbers and Postpartum Interval in Multiparous Brahman Cows.**  
*L. K. Quail<sup>\*1,2</sup>, M. E. Mund<sup>1,2</sup>, D. A. Neuendorff<sup>2</sup>, R. A. d'Orey Branco<sup>1</sup>, J. P. Banta<sup>3</sup>, T. H. Welsh, Jr.<sup>1</sup>, and R. D. Randel<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas A&M AgriLife Research, Overton, <sup>3</sup>Texas A&M AgriLife Extension, Overton*
- 4:50 PM 29 **Pre- and Postweaning Injections of Bovine Somatotropin to Optimize Puberty Achievement of Purebred *Bos indicus* Beef Heifers.**  
*M. Piccolo<sup>\*1</sup>, B. I. Cappellozza<sup>2</sup>, R. Cooke<sup>3</sup>, M. Miranda<sup>4</sup>, R. Carvalho<sup>4</sup>, E. A. Colombo<sup>4</sup>, F. Santili<sup>4</sup>, V. Ferreira<sup>4</sup>, L. Batista<sup>4</sup>, R. Filho<sup>4</sup>, J. L. M. Vasconcelos<sup>4</sup>, and P. Moriel<sup>1</sup>, <sup>1</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL, <sup>2</sup>Elanco Saúde Animal, São Paulo, Brazil, <sup>3</sup>Texas A&M University, College Station, <sup>4</sup>Department of Animal Production, São Paulo State University, Botucatu, Brazil*
- 4:55 PM 30 **Differences in Fecal Egg Count, Performance, Blood Parameters, and Lactate Dehydrogenase Activity of Stocker Calves Treated with Various Anthelmintics.**  
*C. A. Hooks<sup>\*1</sup>, N. R. Denney<sup>1</sup>, M. R. Hovey<sup>1</sup>, J. F. Miller<sup>2</sup>, B. M. Papajeski<sup>1</sup>, J. C. Robertson<sup>1</sup>, E. A. Backes<sup>3</sup>, C. A. Porr<sup>1</sup>, and A. J. Davis<sup>1</sup>, <sup>1</sup>Murray State University, Hutson School of Agriculture, Murray, KY, <sup>2</sup>Murray State University, Hutson School of Agriculture, Breathitt Veterinary Center, Hopkinsville, KY, <sup>3</sup>Purina Animal Nutrition, LLC, Gray Summit, MO*
- 5:00 PM 31 **Prevalence of Internal Parasites in the Feral Hog Population of East Texas.**  
*E. B. Merdian<sup>\*</sup>, D. R. Ullrich, K. J. Stutts, M. J. Anderson, and M. M. Beverly, Sam Houston State University, Huntsville, TX*
- 5:05 PM 32 **Effect of Exercise on Calf Productivity, Health, and Behavior.**  
*E. E. Van Raay<sup>\*</sup>, J. E. Sawyer, T. A. Wickersham, R. Gill, and C. L. Daigle, Texas A&M University, College Station*

- 5:10 PM 33 **Effect of Supplementing Live Yeast Cultures on the Performance of Weaned Beef Cattle.**  
*G. M. D'Souza<sup>\*1</sup>, D. R. Eborn<sup>1</sup>, S. B. Blezinger<sup>2</sup>, and G. J. Eckerle<sup>3</sup>, <sup>1</sup>Texas A&M University–Commerce, Commerce, <sup>2</sup>Reveille Livestock Concepts, Sulphur Springs, TX, <sup>3</sup>San Antonio Steel Company, San Antonio, TX*
- 5:15 PM 34 **Relationship of Blood-Borne Markers of Subclinical Infection and Residual Feed Intake Status in Brangus Heifers.**  
*K. N. Nielsen<sup>\*</sup>, C. P. Tadych, M. A. Edmondson, L. A. Kriese-Anderson, and T. D. Brandebourg, Auburn University, Auburn, AL*
- 5:20 PM **Networking.**

## UNDERGRAD COMPETITION

**Chair: Janeal W. Yancey, University of Arkansas**

**5:00 PM – 6:40 PM**

**Texas CD**

- 5:00 PM **Welcoming Remarks.**
- 5:05 PM 140 **Effects of Postweaning Mat-Feeding Frequency on Piglet Health and Performance.**  
*M. A. Nagai<sup>\*</sup> and E. K. Buttrey, University of Tennessee at Martin, Martin*
- 5:10 PM 141 **Effects of Winter Wheat Grazing on Subsequent Crop Yield.**  
*J. M. Curtis<sup>\*</sup> and E. K. Buttrey, University of Tennessee at Martin, Martin*
- 5:15 PM 142 **Impact of Protein Supplementation on Physiological Response of Steers Consuming Endophyte-Infected Tall Fescue Seed.**  
*C. M. Womble<sup>\*</sup>, R. K. Poole, D. H. Poole, and C. L. Pickworth, North Carolina State University, Raleigh*
- 5:20 PM 143 **Flushing and Synchronization Protocol Impacts on Out-Of-Season Breeding in Ewes.**  
*J. Sheffield<sup>\*</sup>, C. Roman, B. L. Roper, R. K. Poole, and C. L. Pickworth, North Carolina State University, Raleigh*



- 5:25 PM 144 **Growth Factors Influence Cell Cycle Progression in Equine Satellite Cells.**  
*M. Gonzalez\**, *A. M. Brandt*, and *S. E. Johnson*,  
*Virginia Tech, Blacksburg*
- 5:30 PM 145 **Determination of the Optimal Stage of Lactation for Infectious Bovine Keratoconjunctivitis Vaccination.**  
*A. R. Dhom\**, *L. A. Flatow*, *M. E. Griffin*,  
*W. M. Gribble*, and *J. C. Stucky*, *Berry College*,  
*Mount Berry, GA*
- 5:35 PM 146 **Evaluation of Immune Response in Piglets during Processing.**  
*M. D. Fuentes\**, *Tarleton State University*,  
*Stephenville, TX*
- 5:40 PM 147 **Calpastatin Isoforms Related to Meat Tenderness in Beef Cattle.**  
*M. K. Stotz\**<sup>1</sup>, *B. W. Smith*<sup>1</sup>, *K. Herrygers*<sup>1</sup>,  
*C. Bidwell*<sup>2</sup>, *J. Brady*<sup>3</sup>, and *J. Waddell*<sup>1</sup>, <sup>1</sup>*Tarleton State University, Stephenville, TX*, <sup>2</sup>*Purdue University, Lafayette, IN*, <sup>3</sup>*Texas A&M University, College Station*
- 5:45 PM 148 **Measuring the Impact of a Feeder Calf Board Sale Program through a Survey of Producer Attitudes.**  
*K. S. Hyman\**<sup>1</sup>, *B. B. Karisch*<sup>2</sup>, and  
*D. J. Peterson*<sup>3</sup>, <sup>1</sup>*University of Arkansas, Fayetteville*, <sup>2</sup>*Mississippi State University, Mississippi State*, <sup>3</sup>*Mississippi State University, School of Human Sciences, Mississippi State*
- 5:50 PM 149 **Using Carbon Emissions, Oxygen Consumption, and Energy Retention to Estimate Dietary ME Intake by Beef Steers.**  
*C. Burrus\**<sup>1</sup>, *S. A. Gunter*<sup>2</sup>, *D. W. Sanson*<sup>1</sup>,  
*C. A. Moffer*<sup>2</sup>, and *P. Gregorini*<sup>3</sup>, <sup>1</sup>*Southern Arkansas University, Magnolia*, <sup>2</sup>*USDA-ARS, Woodward, OK*, <sup>3</sup>*Lincoln University, Christchurch, New Zealand*
- 5:55 PM 150 **Implementing Shade and Slick Hair Phenotypes Improves Heifer Performance.**  
*R. E. Monn\**, *T. P. Shea*, *K. Mayberry*,  
*S. R. Freeman*, *D. H. Poole*, and *M. H. Poore*,  
*North Carolina State University, Raleigh*
- 6:00 PM 151 **Lean Percentage, Storage Times, and Griddle Temperature Affect Raw and Cooked Visual and Instrumental Color and Cooking Loss in Fresh Ground Beef Patties.**  
*Z. M. Hicks\**<sup>1</sup>, *J. W. S. Yancey*<sup>1</sup>, *J. A. Apple*<sup>1</sup>,  
*T. M. Johnson*<sup>1</sup>, and *B. E. Jenschke*<sup>2</sup>, <sup>1</sup>*University of Arkansas, Fayetteville*, <sup>2</sup>*Cargill Protein, Monticello, MN*

- 6:05 PM 152 **Effects of Group Housing on Sow Production and Behavior.**  
*M. A. Martino\**, *D. L. Peery*, *Z. T. Poynter*,  
*C. A. Sanders*, *C. Powers*, and *A. K. Sexten*,  
*Eastern Kentucky University, Richmond*
- 6:10 PM 1 53 **Progesterone Concentration, Follicle Diameter, and Corpus Luteum Volume in Beef Cows Supplemented with Ca Salts of Soybean Oil.**  
*D. Powers\**, *C. L. Timlin*, *N. W. Dias*,  
*F. V. Santili*, and *V. R. G. Mercadante*, *Virginia Tech, Blacksburg*
- 6:15 PM 154 **Efficacy of a Fecal DNA-Based Method to Measure Diet Components in Cattle.**  
*M. M. Drakeley\** and *R. Reuter*, *Oklahoma State University, Stillwater*
- 6:20 PM 155 **Validation of Glucometer Technology for Measurement of Glycemia during Glucose Tolerance Tests and Endotoxin Challenge in Pigs.**  
*M. K. Gohlke\**, *W. Z. Nunnelley*, *H. S. Maxwell*,  
*J. E. Bayne*, and *T. D. Brandebourg*, *Auburn University, Auburn, AL*
- 6:25 PM **Networking.**

## GRADUATE STUDENT COMPETITION: PHD DIVISION

**Chair: Nicole C. Burdick Sanchez, USDA-ARS,  
Livestock Issues Research Unit**

**5:45 PM – 7:00 PM  
Texas AB**

- 5:45 PM **Welcoming Remarks.**
- 5:50 PM 35 **Effect of Temperament Measures on Feedlot Cattle Performance.**  
*K. Bruno\**<sup>1</sup>, *L. J. McPhillips*<sup>1</sup>, *M. Calvo-Lorenzo*<sup>2</sup>,  
*U. Desilva*<sup>1</sup>, *C. R. Krehbiel*<sup>1</sup>, *M. M. Rolf*<sup>3</sup>,  
*S. E. Place*<sup>4</sup>, *D. L. Step*<sup>5</sup>, *R. G. Mateescu*<sup>6</sup>,  
*D. L. VanOverbeke*<sup>1</sup>, and *T. C. Husz*<sup>1</sup>, <sup>1</sup>*Oklahoma State University, Stillwater*, <sup>2</sup>*Elanco Animal Health, Fayetteville, AR*, <sup>3</sup>*Kansas State University, Manhattan*, <sup>4</sup>*National Cattlemen's Beef Association, Centennial, CO*, <sup>5</sup>*Department of Veterinary Clinical Science, Oklahoma State University, Stillwater*, <sup>6</sup>*University of Florida, Gainesville*

- 5:55 PM 36 **Quantifying Stress and Anxiety: Development and Validation of a Novel Fear Test for Cattle.**  
*A. Mathias\**, *L. Forehand*, *G. E. Carstens*, and *C. L. Daigle*, *Texas A&M University, College Station*
- 6:00 PM 37 **Effects of Feeding Different Levels of Quebracho (*Schinopsis balansae*) Extract in a High-Roughage Total Mixed Ration on Manure Gas Emissions.**  
*A. B. Norris*<sup>1</sup>, *L. O. Tedeschi*<sup>1</sup>, *K. D. Casey*<sup>2</sup>, *J. C. B. Dubeux Jr.*<sup>3</sup>, *J. L. Foster*<sup>4</sup>, *J. P. Muir*<sup>5</sup>, and *W. E. Pinchak*<sup>6</sup>, <sup>1</sup>*Texas A&M University, College Station*, <sup>2</sup>*Texas A&M AgriLife Research, Amarillo*, <sup>3</sup>*University of Florida, North Florida Research and Education Center, Marianna*, <sup>4</sup>*Texas A&M AgriLife Research, Beeville*, <sup>5</sup>*Tarleton State University, Stephenville, TX*, <sup>6</sup>*Texas A&M AgriLife Research, Vernon*
- 6:05 PM 38 **Effect of Forage Source on Digestion and Ruminal Fermentation in Limit-Fed Steers.**  
*C. N. Truelock\**, *J. E. Sawyer*, and *T. A. Wickersham*, *Texas A&M University, College Station*
- 6:10 PM 39 **Effects of Growth-Promoting Implants at Branding in Suckling Steers Prior to Weaning.**  
*J. J. Ball\**, *E. B. Kegley*, *E. A. Palmer*, *T. D. Lester*, *W. Gragg*, and *J. G. Powell*, *University of Arkansas, Fayetteville*
- 6:15 PM 40 **Forms of Selenium in Vitamin–Mineral Mixes Differentially Affect the Expression of Genes Responsible for Prolactin and ACTH Synthesis in Pituitaries of Steers Grazing Endophyte-Infected Tall Fescue.**  
*Q. Li\**, *Y. Jia*, *P. Bridges*, and *J. C. Matthews*, *University of Kentucky, Lexington*
- 6:20 PM 41 **Effect of Protein Supplementation on Immune Response of Weaned Steers Consuming Endophyte-Infected Tall Fescue Seed.**  
*R. K. Poole\**, *C. M. Womble*, *C. L. Pickworth*, and *D. H. Poole*, *North Carolina State University, Raleigh*

- 6:25 PM 42 **Performance, Health, and Physiological Responses of Newly Weaned Cattle Supplemented with Feed-Grade Antibiotics or Alternative Feed Additives during Feedlot Receiving.**  
*K. M. Schubach<sup>\*1,2</sup>, R. Cooke<sup>1</sup>, K. A. Souza<sup>2</sup>, T. F. Schumacher<sup>2</sup>, N. S. da Silva<sup>2</sup>, D. W. Bohnert<sup>2</sup>, and R. Marques<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Oregon State University—EOARC Burns, Burns*
- 6:30 PM 43 **Evaluation of Dietary Trace Mineral Source on Markers of Cartilage Metabolism in Weanling Horses Challenged with Lipopolysaccharide.**  
*A. A. Millican<sup>\*1</sup>, J. L. Leatherwood<sup>1</sup>, J. A. Coverdale<sup>1</sup>, C. E. Arnold<sup>1</sup>, A. N. Bradbery<sup>1</sup>, K. Fikes<sup>1</sup>, M. S. Goehring<sup>1</sup>, E. C. Dickson<sup>1</sup>, C. M. Latham<sup>1</sup>, C. J. Hartz<sup>1</sup>, C. B. Paulk<sup>2</sup>, T. H. Welsh, Jr.<sup>1</sup>, S. H. White<sup>1</sup>, C. K. Larson<sup>3</sup>, E. D. Lamprecht<sup>4</sup>, and T. A. Wickersham<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Kansas State University, Manhattan, <sup>3</sup>Zinpro Corporation, Eden Prairie, MN, <sup>4</sup>Cargill Incorporated, Elk River, MN*
- 6:35 PM 44 **The Form of Selenium in Free-Choice Vitamin–Mineral Mixes Affects the Percentage of Circulating Neutrophils and Lymphocytes in Beef Calves Subjected to Combined Weaning and Shipping Events.**  
*Y. Jia<sup>\*1</sup>, A. A. Adams<sup>2</sup>, W. R. Burris<sup>3</sup>, P. Bridges<sup>1</sup>, and J. C. Matthews<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, <sup>2</sup>The Gluck Equine Research Center, University of Kentucky, Lexington, <sup>3</sup>University of Kentucky, Princeton*
- 6:40 PM 45 **Analysis of the Gastrointestinal Tract–Associated Microbiome of Calves Supplemented during the Suckling Phase.**  
*J. M. Lourenço<sup>\*1</sup>, T. J. Kieran<sup>2</sup>, J. C. McCann<sup>3</sup>, T. C. Glenn<sup>2</sup>, and L. Stewart<sup>1</sup>, <sup>1</sup>University of Georgia, Athens, <sup>2</sup>University of Georgia Environmental Health Science, Athens, <sup>3</sup>University of Illinois at Urbana-Champaign, Urbana*
- 6:45 PM 46 **Effects of Packaging Conditions on Volatile Compounds of Raw Beef from Two Muscles.**  
*T. Cramer<sup>\*</sup>, J. F. Legako, J. A. Ponce, and J. C. Brooks, Texas Tech University, Lubbock*

- 6:50 PM 47 **Post-AI Supplementation with Ca Salts of Soybean Oil Increases Pregnancy Success in *Bos taurus* Beef Cows.**  
*A. P. Brandao<sup>\*1,2</sup>, R. Cooke<sup>1</sup>, K. M. Schubach<sup>1,2</sup>, R. Marques<sup>2</sup>, K. G. Pohler<sup>3</sup>, R. Carvalho<sup>3</sup>, R. L. A. Cerri<sup>4</sup>, D. W. Bohnert<sup>2</sup>, and V. R. G. Mercadante<sup>5</sup>*, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Oregon State University–EOARC Burns, Burns, <sup>3</sup>University of Tennessee, Knoxville, <sup>4</sup>Applied Animal Biology, Faculty of Land and Food Systems, University of British Columbia, Vancouver, BC, Canada, <sup>5</sup>Virginia Polytechnic Institute and State University, Blacksburg
- 6:55 PM **Networking.**

## Monday, February 5, 2018

### BREEDING AND GENETICS

**Chairs: Clare Gill, Texas A&M University;  
 Brittni P. Littlejohn, Texas A&M AgriLife Research  
 and Department of Animal Science**

**8:00 AM – 9:30 AM  
 Texas CD**

- 8:00 AM **Welcoming Remarks.**
- 8:05 AM 1 **Comparison of Linear Mixed Model and Random Regression Model for Weaning Weight in Hereford Cattle over a United States Longitudinal Gradient.**  
*J. M. Langdon II<sup>\*1</sup>, J. S. Delgadillo<sup>1</sup>, A. D. Herring<sup>1,2</sup>, H. D. Blackburn<sup>3</sup>, S. E. Speidel<sup>4</sup>, S. Sanders<sup>5</sup>, B. C. Krehbiel<sup>4</sup>, and D. G. Riley<sup>1,2</sup>*, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas AgriLife Research, College Station, <sup>3</sup>National Animal Germplasm Program ARS-USDA, Fort Collins, CO, <sup>4</sup>Colorado State University, Fort Collins, <sup>5</sup>American Hereford Association, Kansas City, MO

- 8:20 AM 2 **Genetic Parameters for Lamb Mortality Associated with Pneumonia.**  
*P. W. Holland<sup>\*1</sup>, L. L. Hulsman Hanna<sup>2</sup>, K. A. Vonnahme<sup>2</sup>, L. P. Reynolds<sup>2</sup>, J. B. Taylor<sup>3</sup>, and D. G. Riley<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>North Dakota State University, Fargo, <sup>3</sup>USDA-ARS, Rangeland Sheep Production Efficiency Research, Dubois, ID*
- 8:35 AM 3 **Breed Matters: Consistency of Bull Temperament across Time and Relationship between Temperament and Productivity.**  
*R. M. Park<sup>\*1</sup>, G. Toro<sup>2</sup>, and C. L. Daigle<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Sexing Technologies Genetics, Navasota, TX*
- 8:50 AM 4 **Heritability Estimations for Intramuscular Fat in Hereford Cattle Using Random Regressions.**  
*J. S. Delgadillo Liberona<sup>\*1</sup>, J. M. Langdon II<sup>1</sup>, D. G. Riley<sup>1</sup>, H. D. Blackburn<sup>2</sup>, S. E. Speidel<sup>3</sup>, B. C. Krehbiel<sup>4</sup>, S. Sanders<sup>5</sup>, and A. D. Herring<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>National Animal Germplasm Program ARS-USDA, Fort Collins, CO, <sup>3</sup>Colorado State University, Fort Collins, <sup>4</sup>National Animal Germplasm Program, National Laboratory for Genetic Resources Preservation, USDA-ARS, Fort Collins, CO, <sup>5</sup>American Hereford Association, Kansas City, MO*
- 9:05 AM 5 **Relationships Between Breeding Soundness Exam Parameters and Exam Results in Angus Bulls.**  
*F. W. Harrelson<sup>\*</sup>, K. R. Vencill, P. Prater, and P. L. Harrelson, Morehead State University, Morehead, KY*
- 9:20 AM **Networking.**

## KUNKLE SYMPOSIUM

**Chairs: Jason P. Banta, Texas A&M AgriLife Extension;  
Pedro L. P. Fontes, University of Florida, North Florida  
Research and Education Center**

**8:00 AM – 11:30 AM  
Texas AB**

- 8:00 AM **Welcoming Remarks.**
- 8:05 AM 48 **Changes in the U.S. Cow Herd and Their Implications on Heifer Development.**  
*D. L. Lalman\**, *A. L. McGee*, *C. M. Spencer*,  
*and A. R. Wiseman, Oklahoma State University, Stillwater*
- 8:50 AM 49 **Lessons Learned from University Heifer Development Programs.**  
*J. D. Rhinehart\**, *University of Tennessee, Knoxville*
- 9:35 AM **Break.**
- 9:45 AM 50 **Nutritional Programming of Puberty in Heifers: Developmental, Genomic, and Functional Implications.**  
*G. L. Williams<sup>1</sup>*, *B. R. C. Alves<sup>2</sup>*, *and R. C. Cardoso<sup>3</sup>*, *<sup>1</sup>Texas A&M AgriLife Research, Beeville, <sup>2</sup>University of Nevada, Reno, <sup>3</sup>Texas A&M University, College Station*
- 10:30 AM 51 **Target Prebreeding Body Weight and Age in Replacement Heifers – Implications of Environment and Management.**  
*R. S. Walker\**, *Noble Research Institute, Ardmore, OK*
- 11:15 AM **Discussion.**

## MEATS

**Chairs: Gregg Rentfrow, University of Kentucky;  
Berlin S. Howell, University of Arkansas**

**8:00 AM – 10:45 AM  
Crystal B**

- 8:00 AM Welcoming Remarks.
- 8:05 AM 52 **Evaluation of Production Economics and a Value of Carcasses Processed into Wholesale Cuts from Steers Finished in a Conventional System Compared with Carcasses Processed into Ground Beef from Steers Finished on a Grass-Based System.**  
*T. W. Glascock<sup>\*1</sup>, J. A. Apple<sup>1</sup>, J. G. Powell<sup>1</sup>, P. A. Beck<sup>2</sup>, J. J. Ball<sup>1</sup>, T. M. Johnson<sup>1</sup>, and J. T. Sawyer<sup>3</sup>, <sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>University of Arkansas Division of Agriculture SWREC, Hope, <sup>3</sup>Tarleton State University, Department of Animal Science and Veterinary Technology, Stephenville, TX*
- 8:20 AM 53 **Impact of Packaging Types on Cooked Beef Volatile Flavor Compounds.**  
*K. R. Vierck<sup>\*</sup>, J. F. Legako, J. A. Ponce, and J. C. Brooks, Texas Tech University, Lubbock*
- 8:35 AM 46 **Effects of Packaging Conditions on Volatile Compounds of Raw Beef from Two Muscles.**  
*T. Cramer<sup>\*</sup>, J. F. Legako, J. A. Ponce, and J. C. Brooks, Texas Tech University, Lubbock*
- 8:50 AM 147 **Calpastatin Isoforms Related to Meat Tenderness in Beef Cattle.**  
*M. K. Stotz<sup>\*1</sup>, B. W. Smith<sup>1</sup>, K. Herrygers<sup>1</sup>, C. Bidwel<sup>2</sup>, J. Brady<sup>3</sup>, and J. Waddell<sup>1</sup>, <sup>1</sup>Tarleton State University, Stephenville, TX, <sup>2</sup>Purdue University, Lafayette, IN, <sup>3</sup>Texas A&M University, College Station*
- 9:05 AM 151 **Lean Percentage, Storage Times, and Griddle Temperature Affect Raw and Cooked Visual and Instrumental Color and Cooking Loss in Fresh Ground Beef Patties.**  
*Z. M. Hicks<sup>\*1</sup>, J. W. S. Yancey<sup>1</sup>, J. A. Apple<sup>1</sup>, T. M. Johnson<sup>1</sup>, and B. E. Jenschke<sup>2</sup>, <sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>Cargill Protein, Monticello, MN*
- 9:20 AM 54 **Beef Muscle and Packaging Type Influence Descriptive Sensory Attributes.**  
*J. A. Ponce<sup>\*</sup>, J. F. Legako, and J. C. Brooks, Texas Tech University, Lubbock*
- 9:35 AM **Break.**



- 9:50 AM 55 **Effect of Two Dietary Crude Protein Levels on Finishing Performance, Carcass Characteristics, and Meat Quality of Lambs.**  
*Y. Huang\**, *S. Shelby*, *X. Wang*, *J. A. Apple*, and *K. P. Coffey*, *University of Arkansas, Fayetteville*
- 10:05 AM 56 **Proteomic Changes in the Sarcoplasmic Fraction of Three Differentially Color Stable Beef Muscles during Aging.**  
*M. Narayanan Nair*<sup>\*1,2</sup>, *S. Li*<sup>2</sup>, *C. Beach*<sup>2</sup>, *G. Rentfrow*<sup>2</sup>, and *S. P. Suman*<sup>2</sup>, <sup>1</sup>*Colorado State University, Fort Collins*, <sup>2</sup>*University of Kentucky, Lexington*
- 10:20 AM 57 **The Impact of Consumer Handling Behaviors in Retail Locations and during Vehicular Transport on Fresh Red Meat Temperature, Color, and Palatability.**  
*D. A. Griffing*, *S. R. Wilkerson\**, and *C. L. Bratcher*, *Auburn University, Auburn, AL*
- 10:35 AM **Networking.**

## SMALL RUMINANT PRODUCTION I

**Chairs: Steve P. Hart, Langston University;  
Emily A. Melchior, University of Tennessee**

**8:00 AM – 11:05 AM  
Crystal A**

- 8:00 AM **Welcoming Remarks.**
- 8:05 AM 22 **Evaluation of a Starter Ration on Growth and Performance of White-Tailed Deer Fawns.**  
*M. A. Sain*<sup>\*1</sup>, *K. J. Stutts*<sup>1</sup>, *J. K. Suagee-Bedore*<sup>1</sup>, *M. J. Anderson*<sup>1</sup>, and *J. L. Leatherwood*<sup>2</sup>, <sup>1</sup>*Sam Houston State University, Huntsville, TX*, <sup>2</sup>*Texas A&M University, College Station*
- 8:20 AM 122 **Quality Parameters of Goat Meat As Influenced by Peanut Skin Supplementation.**  
*D. Kafle*<sup>1</sup>, *J. H. Lee*<sup>\*1</sup>, and *B. R. Min*<sup>2</sup>, <sup>1</sup>*Fort Valley State University, Fort Valley, GA*, <sup>2</sup>*Tuskegee University, Tuskegee, AL*
- 8:35 AM 123 **Small Ruminant Beginning Farmer Training.**  
*N. C. Whitley*<sup>\*1</sup>, *L. Davies*<sup>2</sup>, *J. Gaskin*<sup>2</sup>, *T. Waldrop*<sup>3</sup>, *F. Connelly*<sup>2</sup>, *T. Seanima*<sup>4</sup>, *A. Speir*<sup>2</sup>, *M. Stephens*<sup>2</sup>, *A. Tedrow*<sup>2</sup>, *P. Burke*<sup>2</sup>, *S. Butcher*<sup>2</sup>, *M. Sheffield*<sup>2</sup>, *J. Dawson*<sup>1</sup>, and *K. Hammond*<sup>2</sup>, <sup>1</sup>*Fort Valley State University, Fort Valley, GA*, <sup>2</sup>*University of Georgia Extension, Athens*, <sup>3</sup>*Georgia Department of Education, Tifton*, <sup>4</sup>*Georgia Organics, Atlanta*

- 8:50 AM 124 **The Effect of Water Restriction at Weaning on Hair Sheep Ewes and Lambs in the Tropics.**  
*R. W. Godfrey\**, *S. A. Lakos*, and *S. R. Joseph*,  
*Agricultural Experiment Station, University of the Virgin Islands, St. Croix, U.S. Virgin Islands*
- 9:05 AM 125 **Assessment of the Effect of Cracked Corn Energy Supplementation on Animal Performance, Rumen Fermentation, and Carcass Traits in Grazing Goats during the Winter Months.**  
*F. Abrahamsen\**, *C. H. Fry*, *B. R. Min*,  
*N. K. Gurung*, *S. Stewart*, *L. Means*, *A. Shipp*,  
and *R. Johnson*, *Tuskegee University, Tuskegee, AL*
- 9:20 AM **Break.**
- 9:35 AM 126 **Effect of Sire Breed on Gain, Carcass Characteristics, and Parasite Resistance of Katahdin Crossbred Feedlot-Finished Lambs: Year 3.**  
*C. L. Maierle*<sup>1</sup>, *J. J. Garza*<sup>1</sup>, *E. A. Shepherd*<sup>1</sup>,  
*B. Russ*<sup>1</sup>, *D. Middleton*<sup>1</sup>, *A. M. Zajac*<sup>2</sup>,  
*S. P. Greiner*<sup>2</sup>, and *S. A. Bowdridge*<sup>1</sup>, <sup>1</sup>*West Virginia University, Morgantown*, <sup>2</sup>*Virginia Polytechnic Institute and State University, Blacksburg*
- 9:50 AM 127 **Effect of Terminal Sire Breed on Feed Efficiency in Katahdin Crossbred Feedlot-Finished Lambs.**  
*C. L. Maierle\**, *West Virginia University, Morgantown*
- 10:05 AM 128 **Effects of Level of Brackish Water and Salinity on Feed Intake, Digestion, and Heat Energy in Growing Boer Goat Wethers and Mature Boer Goat and Katahdin Sheep Wethers.**  
*H. Yirga*<sup>1,2</sup>, *R. Puchala*<sup>1</sup>, *Y. Tsukahara*<sup>1</sup>,  
*K. Tesfai*<sup>1</sup>, *T. Sahlul*<sup>1</sup>, *U. L. Mengistu*<sup>2</sup>, and  
*A. L. Goetsch*<sup>1</sup>, <sup>1</sup>*American Institute for Goat Research, Langston University, Langston, OK*, <sup>2</sup>*Department of Animal and Range Sciences, Haramaya University, Dire Dawa, Ethiopia*
- 10:20 AM 129 **Evaluation of Terminal Sire Breeds for Hair Sheep Production Systems on Lamb Birth, Weaning, and Grazing Performance: Year 3.**  
*A. R. Weaver*<sup>1</sup>, *D. L. Wright*<sup>1</sup>, *D. R. Notter*<sup>1</sup>,  
*A. M. Zajac*<sup>1</sup>, *S. A. Bowdridge*<sup>2</sup>, and  
*S. P. Greiner*<sup>1</sup>, <sup>1</sup>*Virginia Polytechnic Institute and State University, Blacksburg*, <sup>2</sup>*West Virginia University, Morgantown*

- 10:35 AM 130 **The Effects of Dietary Octacosanol on Ram Semen Quality Parameters.**  
*C. M. Harris\**, *C. A. Runyan*, and *J. W. Dickison*,  
*Angelo State University, San Angelo, TX*
- 10:50 AM **Networking.**

## NONRUMINANT NUTRITION

**Chair: Bryan Kutz, University of Arkansas;  
Kaitlyn M. Sarlo, Texas A&M University**

**10:00 AM – 11:45 AM  
Continental**

- 10:00 AM **Welcoming Remarks.**
- 10:05 AM 140 **Effects of Postweaning Mat-Feeding Frequency on Piglet Health and Performance.**  
*M. A. Nagai\** and *E. K. Buttrey*, *University of Tennessee at Martin, Martin*
- 10:20 AM 146 **Evaluation of Immune Response in Piglets during Processing.**  
*M. D. Fuentes\**, *Tarleton State University, Stephenville, TX*
- 10:35 AM 152 **Effects of Group Housing on Sow Production and Behavior.**  
*M. A. Martino\**, *D. L. Peery*, *Z. T. Poynter*,  
*C. A. Sanders*, *C. Powers*, and *A. K. Sexten*,  
*Eastern Kentucky University, Richmond*
- 10:50 AM 43 **Evaluation of Dietary Trace Mineral Source on Markers of Cartilage Metabolism in Weanling Horses Challenged with Lipopolysaccharide.**  
*A. A. Millican*<sup>\*1</sup>, *J. L. Leatherwood*<sup>1</sup>,  
*J. A. Coverdale*<sup>1</sup>, *C. E. Arnold*<sup>1</sup>, *A. N. Bradbery*<sup>1</sup>,  
*K. Fikes*<sup>1</sup>, *M. S. Goehring*<sup>1</sup>, *E. C. Dickson*<sup>1</sup>,  
*C. M. Latham*<sup>1</sup>, *C. J. Hartz*<sup>1</sup>, *C. B. Paulk*<sup>2</sup>,  
*T. H. Welsh, Jr.*<sup>1</sup>, *S. H. White*<sup>1</sup>, *C. K. Larson*<sup>3</sup>,  
*E. D. Lamprecht*<sup>4</sup>, and *T. A. Wickersham*<sup>1</sup>, <sup>1</sup>*Texas A&M University, College Station*, <sup>2</sup>*Kansas State University, Manhattan*, <sup>3</sup>*Zinpro Corporation, Eden Prairie, MN*, <sup>4</sup>*Cargill Incorporated, Elk River, MN*

- 11:05 AM 155 **Validation of Glucometer Technology for Measurement of Glycemia during Glucose Tolerance Tests and Endotoxin Challenge in Pigs.**  
*M. K. Gohlke\**, *W. Z. Nunnelley*, *H. S. Maxwell*, *J. E. Bayne*, and *T. D. Brandebourg*, Auburn University, Auburn, AL
- 11:20 AM 31 **Prevalence of Internal Parasites in the Feral Hog Population of East Texas.**  
*E. B. Merdian\**, *D. R. Ullrich*, *K. J. Stutts*, *M. J. Anderson*, and *M. M. Beverly*, Sam Houston State University, Huntsville, TX
- 11:35 AM **Networking.**

## PASTURES AND FORAGES: CONSERVED FORAGES

**Chairs: Paul A. Beck, University of Arkansas;  
Jose M. Diaz, University of Arkansas**

**1:00 PM – 3:00 PM  
Citizens AB**

- 1:00 PM **Welcoming Remarks.**
- 1:05 PM 21 **Impact of Different Maturity Stages on Yield and Quality of Ensiled Johnsongrass [*Sorghum halepense* (L.) Pers].**  
*C. Silva\**<sup>1</sup>, *M. L. Bass*<sup>1</sup>, *D. W. Hancock*<sup>2</sup>, and *R. L. Stewart, Jr.*<sup>1</sup>, <sup>1</sup>University of Georgia, Athens, <sup>2</sup>Department of Crop and Soil Sciences, University of Georgia, Athens
- 1:20 PM 58 **Comparison of a Full Season and Early Maturing Forage Sorghum Silage with Corn Silage for Growing Cattle.**  
*S. Ingram\** and *M. Poore*, North Carolina State University, Raleigh
- 1:35 PM 59 **Effects of Delayed Wrapping and Moisture Content on Intake and Digestibility of Ryegrass Silage by Growing Lambs.**  
*M. A. Hays*<sup>1</sup>, *K. P. Coffey*<sup>1</sup>, *P. A. Beck*<sup>2</sup>, *W. K. Coblenz*<sup>3</sup>, *C. P. Weiss*<sup>1</sup>, *T. S. Crook*<sup>1</sup>, and *D. Philipp*<sup>1</sup>, <sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>University of Arkansas, Hope, <sup>3</sup>USDA-ARS, U.S. Dairy Forage Research Center, Marshfield, WI

- 1:50 PM 60 **Evaluating Yield, Nutritive Value, and Storage Length of Tifton-85 Bermudagrass and Tifton-85 Bermudagrass–Alfalfa Mixtures as Baleage in the Southeast.**  
*T. J. Hendricks<sup>\*1</sup>, J. J. Tucker<sup>2</sup>, D. W. Hancock<sup>3</sup>, and L. Stewart<sup>1</sup>, <sup>1</sup>University of Georgia, Athens, <sup>2</sup>University of Georgia–Tifton, Tifton, <sup>3</sup>University of Georgia, Department of Crop and Soil Sciences, Athens*
- 2:05 PM 61 **Feeding Alfalfa Hay Improves Nursing Performance of Awassi Ewes and Performance of Growing Lambs When Used As a Source of Roughage Compared with Wheat Straw.**  
*B. S. Obeidat<sup>\*1</sup>, H. S. Subih<sup>1</sup>, and J. B. Taylor<sup>2</sup>, <sup>1</sup>Jordan University of Science and Technology, Irbid, Jordan, <sup>2</sup>USDA-ARS, Rangeland Sheep Production Efficiency Research, Dubois, ID*
- 2:20 PM 62 **Time of Wrapping and the Use of Fermentation Enhancers on Forage Preservation Characteristics of Annual Ryegrass Baleage.**  
*M. E. Griffin<sup>\*1</sup>, K. Mullenix<sup>1</sup>, L. Roth<sup>2</sup>, J. B. Elmore<sup>3</sup>, K. M. Mason<sup>1</sup>, and L. C. Burdette<sup>4</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Provimi North America, Montgomery, MN, <sup>3</sup>Alabama Cooperative Extension System, Auburn, <sup>4</sup>E.V. Smith Research Center, Shorter, AL*
- 2:35 PM 63 **Evaluation of Warm-Season Annual Baleage in a Cow/Calf Production System.**  
*M. S. Hargaden<sup>\*1</sup>, M. K. Mullenix<sup>1</sup>, C. G. Prevatt<sup>2</sup>, R. W. Peacock<sup>1</sup>, S. Moisa<sup>1</sup>, and R. B. Muntifering<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>University of Florida, Ona*
- 2:50 PM **Networking.**

## PHYSIOLOGY I

**Chairs: Michelle R. Garcia, Texas A&M University–Kingsville; Rebecca K. Poole, North Carolina State University; Allison A. Millican, Texas A&M University**

**1:00 PM – 4:30 PM  
Texas CD**

- 1:00 PM Welcoming Remarks.
- 1:15 PM 76 **Fetal-to-Maternal Signaling in the Timing of Birth.**  
*C. R. Mendelson<sup>\*1</sup>, A. P. Montalbano<sup>2</sup>, and L. Gao<sup>2</sup>, <sup>1</sup>Depts. of Biochemistry and Ob-Gyn, Univ. Texas Southwestern Medical Center, Dallas, <sup>2</sup>Dept of Physiology, Second Military Medical University, Shanghai, China*
- 2:00 PM 29 **Pre- and Postweaning Injections of Bovine Somatotropin to Optimize Puberty Achievement of Purebred *Bos indicus* Beef Heifers.**  
*M. Piccolo<sup>\*1</sup>, B. I. Cappellozza<sup>2</sup>, R. Cooke<sup>3</sup>, M. Miranda<sup>4</sup>, R. Carvalho<sup>4</sup>, E. A. Colombo<sup>4</sup>, F. Santili<sup>4</sup>, V. Ferreira<sup>4</sup>, L. Batista<sup>4</sup>, R. Filho<sup>4</sup>, J. L. M. Vasconcelos<sup>4</sup>, and P. Moriel<sup>1</sup>, <sup>1</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL, <sup>2</sup>Elanco Saúde Animal, São Paulo, Brazil, <sup>3</sup>Texas A&M University, College Station, <sup>4</sup>Department of Animal Production, São Paulo State University, Botucatu, Brazil*
- 2:15 PM 36 **Quantifying Stress and Anxiety: Development and Validation of a Novel Fear Test for Cattle.**  
*A. Mathias<sup>\*</sup>, L. Forehand, G. E. Carstens, and C. L. Daigle, Texas A&M University, College Station*
- 2:30 PM 28 **Relationships between Antral Follicle Numbers and Postpartum Interval in Multiparous Brahman Cows.**  
*L. K. Quail<sup>\*1,2</sup>, M. E. Mund<sup>1,2</sup>, D. A. Neuendorff<sup>2</sup>, R. A. d'Orey Branco<sup>1</sup>, J. P. Banta<sup>3</sup>, T. H. Welsh, Jr.<sup>1</sup>, and R. D. Randel<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas A&M AgriLife Research, Overton, <sup>3</sup>Texas A&M AgriLife Extension, Overton*

- 2:45 PM 77 **Effects of Supplementing Various Ratios of Polyunsaturated Fatty Acids to In Vitro Production of Bovine Embryos.**  
*C. L. Timlin\**, *L. K. Wooldridge*, *A. D. Ealy*, and *V. R. G. Mercadante*, Virginia Tech, Blacksburg
- 3:00 PM 78 **Influence of Synchronization of Ovulation and Pregnancy on Concentrations of Corticosteroid-Binding Globulin in Beef Heifers.**  
*S. A. Lockwood\**, *H. G. Kattesh*, *K. G. Pohler*, and *J. D. Rhinehart*, University of Tennessee, Knoxville
- 3:15 PM 79 **The Effects of the DFM Clostat® and Experimental Salmonella Challenge on the Microbiome of the Ileum in Weaned Holstein Steer Calves.**  
*P. R. Broadway\**<sup>1</sup>, *J. A. Carroll*<sup>1</sup>, *N. C. Burdick Sanchez*<sup>1</sup>, *T. R. Callaway*<sup>2</sup>, *S. D. Lawhon*<sup>3</sup>, *L. K. Bryan*<sup>3</sup>, *E. V. Gart*<sup>3</sup>, *H. D. Hughes*<sup>4</sup>, *J. E. Hergenreder*<sup>5</sup>, *P. W. Rounds*<sup>5</sup>, and *K. E. Griswold*<sup>5</sup>, <sup>1</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>2</sup>University of Georgia, Athens, <sup>3</sup>Texas A&M University, Department of Veterinary Pathobiology, College Station, <sup>4</sup>SciWrite Consulting, Canyon, TX, <sup>5</sup>Kemin Industries, Des Moines, IA
- 3:30 PM 80 **Comparison of Three Methods of Determining Feed Efficiency on Productivity of Brahman Heifers.**  
*S. E. O'Daniel\**<sup>1</sup>, *D. G. Riley*<sup>1</sup>, *D. A. Neuendorff*<sup>2</sup>, *T. D. Forbes*<sup>3</sup>, *J. P. Banta*<sup>4</sup>, *T. H. Welsh, Jr*<sup>1</sup>, *F. M. Rouquette, Jr*<sup>2</sup>, and *R. D. Rande*<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas A&M AgriLife Research, Overton, <sup>3</sup>Texas A&M AgriLife Research, Uvalde, <sup>4</sup>Texas A&M AgriLife Extension, Overton
- 3:45 PM 81 **Effects of IGF1 on Proliferation, Fusion, and Protein Synthesis in Equine Satellite Cells.**  
*A. Pyne\**<sup>1</sup>, *P. Hessel*<sup>1</sup>, and *S. E. Johnson*<sup>1</sup>, <sup>1</sup>Virginia Tech, Blacksburg
- 4:00 PM 82 **Equine Trophectoderm Cells and Their Role in Fetal–Maternal Recognition.**  
*S. Bonometti*, *B. C. Menarim*, *A. M. Brandt\**, *A. D. Ealy*, and *S. E. Johnson*, Virginia Tech, Blacksburg

- 4:15 PM 47 **Post-AI Supplementation with Ca Salts of Soybean Oil Increases Pregnancy Success in *Bos taurus* Beef Cows.**  
*A. P. Brandao<sup>\*1,2</sup>, R. Cooke<sup>1</sup>, K. M. Schubach<sup>1,2</sup>, R. Marques<sup>2</sup>, K. G. Pohler<sup>3</sup>, R. Carvalho<sup>3</sup>, R. L. A. Cerri<sup>4</sup>, D. W. Bohnert<sup>2</sup>, and V. R. G. Mercadante<sup>5</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Oregon State University-EOARC Burns, Burns, <sup>3</sup>University of Tennessee, Knoxville, <sup>4</sup>Applied Animal Biology, Faculty of Land and Food Systems, University of British Columbia, Vancouver, BC, Canada, <sup>5</sup>Virginia Polytechnic Institute and State University, Blacksburg*

## RUMINANT ANIMAL PRODUCTION: COW-CALF

**Chairs: Philipe Moriel, UF/IFAS, Range Cattle Research and Education Center; Juliana Ranches, UF/IFAS Range Cattle Research and Education Center**

**1:00 PM – 4:30 PM  
Continental**

- 1:00 PM Welcoming Remarks.
- 1:05 PM 93 **Production and Economic Effects of Developing Heifers on Three Different Levels of Single Stair-Step Nutrition Programs.**  
*E. J. Stribling<sup>\*1</sup>, T. A. Wickersham<sup>1</sup>, R. C. Cardos<sup>1</sup>, and J. E. Sawyer<sup>1,2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas AgriLife Research, College Station*
- 1:20 PM 150 **Implementing Shade and Slick Hair Phenotypes Improves Heifer Performance.**  
*R. E. Monn<sup>\*</sup>, T. P. Shea, K. Mayberry, S. R. Freeman, D. H. Poole, and M. H. Poore, North Carolina State University, Raleigh*
- 1:35 PM 94 **Effect of Forage Type and Supplement Frequency on Heifer Growth and Reproductive Performance.**  
*M. J. Hersom<sup>\*</sup> and J. V. Yelich, Department of Animal Sciences, University of Florida, Gainesville*
- 1:50 PM 96 **Effects of Diet Type on Nutrient Utilization and Energy Balance of Limit-Fed Bred Heifers in a Drylot.**  
*J. R. Baber<sup>\*1</sup>, T. A. Wickersham<sup>1</sup>, J. E. Sawyer<sup>1</sup>, H. C. Freetly<sup>2</sup>, and K. E. Hales<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>USDA-ARS, U.S. Meat Animal Research Center, Clay Center, NE*



- 2:05 PM 23 **Effects of Timing of Weaning on Calf Performance and Maintenance Energy Requirements in Primiparous Beef Cows.**  
*A. R. Wiseman\**, *M. D. Redden*, *C. M. Spencer*, *A. L. McGee*, *R. Reuter*, and *D. L. Lalman*, *Oklahoma State University, Stillwater*
- 2:20 PM 99 **Impacts of Estrus Expression during a Timed-AI Protocol on Variables Associated with Fertility and Pregnancy Success in *Bos indicus* Beef Cows.**  
*K. M. Schubach*<sup>1,2</sup>, *R. Cooke*<sup>1</sup>, *A. P. Brandao*<sup>1,2</sup>, *R. Marques*<sup>2</sup>, and *R. L. A. Cerri*<sup>3</sup>, <sup>1</sup>*Texas A&M University, College Station*, <sup>2</sup>*Oregon State University–EOARC Burns, Burns*, <sup>3</sup>*Applied Animal Biology, Faculty of Land and Food Systems, University of British Columbia, Vancouver, BC, Canada*
- 2:35 PM 100 **Low-Moisture, Cooked Molasses Blocks for Limit Creep: A Method for Supplementing Trace Minerals to Preweaned Beef Calves.**  
*J. Ranches*<sup>\*1</sup>, *J. S. Drouillard*<sup>2</sup>, *L. D. Silva*<sup>2</sup>, *G. Zylberlicht*<sup>2</sup>, *A. D. Moreira*<sup>1</sup>, *J. S. Heldt*<sup>3</sup>, and *J. D. Arthington*<sup>1</sup>, <sup>1</sup>*UF/IFAS Range Cattle Research and Education Center, Ona, FL*, <sup>2</sup>*Kansas State University, Manhattan*, <sup>3</sup>*Micronutrients, Indianapolis, IN*
- 2:50 PM 103 **Evaluation of Net Returns to Risk and Management in an Intensified Cow-Calf Production System.**  
*A. L. McGee*<sup>\*1</sup>, *J. R. Cole*<sup>1</sup>, *C. L. Bayliff*<sup>f</sup>, *M. D. Redden*<sup>1</sup>, *C. M. Spencer*<sup>1</sup>, *A. R. Wiseman*<sup>1</sup>, *J. G. Warren*<sup>1</sup>, *R. Reuter*<sup>1</sup>, *D. Doye*<sup>1</sup>, *G. W. Horn*<sup>2</sup>, and *D. L. Lalman*<sup>1</sup>, <sup>1</sup>*Oklahoma State University, Stillwater*, <sup>2</sup>*Oklahoma Agricultural Experiment Station, Stillwater*
- 3:05 PM 105 **Effect of a Hydrolyzed Yeast Product on Body Weight, Body Condition Score, and Hair Coat Score in Cows Grazing Endophyte-Infected Tall Fescue.**  
*P. L. Harrelson*<sup>\*1</sup>, *C. B. Rogers*<sup>1</sup>, *R. A. Martin*<sup>2</sup>, *B. N. Bosley*<sup>1</sup>, *F. M. Kilgallin*<sup>1</sup>, and *F. W. Harrelson*<sup>1</sup>, <sup>1</sup>*Morehead State University, Morehead, KY*, <sup>2</sup>*Gro-Tec Inc., Modoc, IN*
- 3:20 PM 107 **Effects of Dietary Energy Density and Intake on Energy Requirements in Beef Cows.**  
*L. A. Trubenbach*<sup>\*</sup>, *T. A. Wickersham*, *V. P. Briani*, and *J. E. Sawyer*, *Texas A&M University, College Station*

- 3:35 PM 108 **Effects of Omnigen-AF® on Cow Performance.**  
*T. S. Crook<sup>\*1</sup>, P. A. Beck<sup>2</sup>, M. S. Gadberry<sup>3</sup>, M. B. Sims<sup>2</sup>, B. Stewart<sup>2</sup>, C. Shelton<sup>2</sup>, D. J. McLean<sup>4</sup>, J. D. Chapman<sup>5</sup>, and J. E. Koltz<sup>6</sup>, <sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>University of Arkansas Division of Agriculture SWREC, Hope, <sup>3</sup>University of Arkansas, Little Rock, <sup>4</sup>Phibro Animal Health Corporation, Teaneck, NJ, <sup>5</sup>Phibro Animal Health Corporation, Quincy, IL, <sup>6</sup>Iowa State University, Ames*
- 3:50 PM 109 **Effects of Year-Round Supplementation of Sugarcane Molasses and Range Cubes on Growth Performance and Physiological Parameters of Pregnant Beef Cows.**  
*P. Moriel<sup>\*1</sup>, M. Piccolo<sup>1</sup>, M. Vedovatto<sup>2</sup>, J. Warren<sup>1</sup>, and J. Vendramini<sup>1</sup>, <sup>1</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL, <sup>2</sup>Federal University of Mato Grosso do Sul, Campo Grande, Brazil*
- 4:05 PM 110 **Evaluation of Angus Calf Performance Based on Dams' Tolerance or Susceptibility to Fescue Toxicosis.**  
*K. Mayberry<sup>\*1</sup>, P. Khanal<sup>1</sup>, M. H. Poore<sup>1</sup>, N. V. L. Serão<sup>2</sup>, and D. H. Poole<sup>1</sup>, <sup>1</sup>North Carolina State University, Raleigh, <sup>2</sup>Iowa State University, Ames*
- 4:20 PM **Networking.**

## RUMINANT ANIMAL PRODUCTION: HEALTH

**Chairs: J. Daniel Rivera, Mississippi State University South Branch Experiment Station;  
 Ira L. Parsons, Texas A&M University**

**1:00 PM – 4:00 PM  
 Texas AB**

- 1:00 PM **Welcoming Remarks.**
- 1:05 PM 32 **Effect of Exercise on Calf Productivity, Health, and Behavior.**  
*E. E. Van Raay<sup>\*</sup>, J. E. Sawyer, T. A. Wickersham, R. Gill, and C. L. Daigle, Texas A&M University, College Station*

- 1:20 PM 34 **Relationship of Blood-Borne Markers of Subclinical Infection and Residual Feed Intake Status in Brangus Heifers.**  
*K. N. Nielsen\**, *C. P. Tadych*, *M. A. Edmondson*, *L. A. Kriese-Anderson*, and *T. D. Brandebourg*, *Auburn University, Auburn, AL*
- 1:35 PM 44 **The Form of Selenium in Free-Choice Vitamin–Mineral Mixes Affects the Percentage of Circulating Neutrophils and Lymphocytes in Beef Calves Subjected to Combined Weaning and Shipping Events.**  
*Y. Jia*<sup>1</sup>, *A. A. Adams*<sup>2</sup>, *W. R. Burris*<sup>3</sup>, *P. Bridges*<sup>1</sup>, and *J. C. Matthews*<sup>1</sup>, <sup>1</sup>*University of Kentucky, Lexington*, <sup>2</sup>*The Gluck Equine Research Center, University of Kentucky, Lexington*, <sup>3</sup>*University of Kentucky, Princeton*
- 1:50 PM 95 **Assessment of On-Arrival Vaccination and Deworming on Stocker Cattle Health and Growth Performance.**  
*R. T. Wagner*<sup>\*1</sup>, *B. B. Karisch*<sup>1</sup>, *J. R. Blanton*<sup>1</sup>, *A. Woolums*<sup>1</sup>, *D. R. Smith*<sup>1</sup>, and *R. Kaplan*<sup>2</sup>, <sup>1</sup>*Mississippi State University, Mississippi State*, <sup>2</sup>*Univeristy of Georgia, Athens*
- 2:05 PM 97 **Effect of a Combination of Live Yeast and Yeast Cell Wall Products Supplemented Before and After Weaning on Heifer Growth Performance and Heat Stress.**  
*E. A. Palmer*<sup>\*1</sup>, *E. B. Kegley*<sup>1</sup>, *P. A. Beck*<sup>2</sup>, *J. J. Ball*<sup>1</sup>, *J. E. Koltcs*<sup>3</sup>, *S. Chewning*<sup>1</sup>, *J. A. Hornsby*<sup>1</sup>, *J. L. Reynolds*<sup>1</sup>, *B. P. Shoulders*<sup>1</sup>, *M. D. Cravey*<sup>4</sup>, and *J. G. Powell*<sup>1</sup>, <sup>1</sup>*University of Arkansas, Fayetteville*, <sup>2</sup>*University of Arkansas Division of Agriculture SWREC, Hope* <sup>3</sup>*Iowa State University, Ames*, <sup>4</sup>*Phileo Lesaffre Animal Care, Milwaukee, WI*
- 2:20 PM 98 **Effect of Yeast, Astragalus Polyaccharin, and Tulathromycin Administration on Receiving Performance and Physiological Responses of Transported Heifers.**  
*X. Wu*<sup>\*1,2</sup>, *P. A. Beck*<sup>3</sup>, and *Q. Meng*<sup>4</sup>, <sup>1</sup>*College of Animal Science and Technology, China Agricultural University, Beijing, China*, <sup>2</sup>*University of Arkansas, Fayetteville*, <sup>3</sup>*University of Arkansas Division of Agriculture SWREC, Hope*, <sup>4</sup>*China Agricultural University, Beijing, China*

- 2:35 PM 101 **Effects of Live Yeast Supplementation on Complete Blood Cell Count and Febrile Responses in Heifers After Viral–Bacterial Respiratory Challenge.**  
*W. C. Kayser<sup>\*1</sup>, G. E. Carstens<sup>1</sup>, K. E. Washburn<sup>2</sup>, S. D. Lawhon<sup>3</sup>, S. M. Reddy<sup>3</sup>, A. L. Skidmore<sup>4</sup>, E. Chevau<sup>4</sup>, and W. E. Pinchak<sup>5</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Department of Large Animal Clinical Sciences, Texas A&M University, College Station, <sup>3</sup>Department of Veterinary Pathobiology, Texas A&M University, College Station, <sup>4</sup>Lallemand Animal Nutrition, Milwaukee, WI, <sup>5</sup>Texas A&M AgrLife Research, Vernon*
- 2:50 PM 102 **Fecal Egg Counts and Performance of Stocker Calves Treated with Various Anthelmintics.**  
*C. A. Hooks<sup>\*1</sup>, N. R. Denney<sup>1</sup>, M. R. Hovey<sup>1</sup>, B. M. Papajeski<sup>1</sup>, J. C. Robertson<sup>1</sup>, E. A. Backes<sup>2</sup>, C. A. Porr<sup>1</sup>, and A. J. Davis<sup>1</sup>, <sup>1</sup>Murray State University, Hutson School of Agriculture, Murray, KY, <sup>2</sup>Purina Animal Nutrition, LLC, Gray Summit, MO*
- 3:05 PM 104 **Physiologic and Innate Immunity Responses of Beef Heifers Supplemented with an Immunomodulatory Feed Ingredient during a Lipopolysaccharide Challenge.**  
*A. P. Brandao<sup>\*1,2</sup>, R. Cooke<sup>1</sup>, K. M. Schubach<sup>1,2</sup>, K. A. Souza<sup>2</sup>, T. F. Schumacher<sup>2</sup>, N. S. da Silva<sup>2</sup>, D. W. Bohnert<sup>2</sup>, and R. Marques<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Oregon State University–EOARC Burns, Burns*
- 3:20 PM 106 **Progesterone Release in Controlled Internal Drug Release Devices Using Different Sterilization Methods.**  
*K. Vincent<sup>\*</sup>, D. Roper, D. Snyder, T. Jones, and B. Talsma, Tarleton State University, Stephenville, TX*
- 3:35 PM 145 **Determination of the Optimal Stage of Lactation for Infectious Bovine Keratoconjunctivitis Vaccination.**  
*A. R. Dhom<sup>\*</sup>, L. A. Flatow, M. E. Griffin, W. M. Gribble, and J. C. Stucky, Berry College, Mount Berry, GA*
- 3:50 PM **Networking.**

## SMALL RUMINANT PRODUCTION II: PARASITOLOGY & HEALTH

**Chairs: Niki Whitley, Fort Valley University;  
Kelly R. Vierck, Texas Tech University**

**1:00 PM – 2:45 PM  
Crystal A**

- 1:00 PM            **Welcoming Remarks.**
- 1:05 PM        131    **Genetic Parameters for Ewe Reproductive Performance and Periparturient Fecal Egg Counts and Their Genetic Relationships with Lamb Body Weights and Fecal Egg Counts in Katahdin Sheep.**  
*L. Ngere<sup>1,2</sup>, J. M. Burke<sup>\*1</sup>, J. E. Miller<sup>3</sup>, J. L. M. Morgan<sup>4,5</sup>, and D. R. Notter<sup>6</sup>,  
<sup>1</sup>USDA-ARS, Booneville, AR, <sup>2</sup>Oak Ridge Institute for Science and Education, Oak Ridge, TN, <sup>3</sup>Louisiana State University, Baton Rouge, <sup>4</sup>Round Mountain Consulting Service, Fayetteville, AR, <sup>5</sup>Katahdin Hair Sheep Institute, Fayetteville, AR, <sup>6</sup>Virginia Polytechnic Institute and State University, Blacksburg*
- 1:20 PM        132    **Physical Characteristics to Predict Survivability in Newborn White-Tailed Deer Fawns.**  
*K. J. Stutts<sup>\*1</sup>, E. E. Evers<sup>1</sup>, J. L. Leatherwood<sup>2</sup>, C. R. Stewart<sup>1</sup>, and M. J. Anderson<sup>1</sup>, <sup>1</sup>Sam Houston State University, Huntsville, TX, <sup>2</sup>Texas A&M University, College Station*
- 1:35 PM        133    **Efficacy of Compound X (Bedoukian Research, Inc.) on Reducing Fecal Egg Count in Lambs.**  
*M. M. France<sup>1</sup>, V. E. Kelly<sup>1</sup>, J. E. Miller<sup>\*1</sup>, J. M. Burke<sup>2</sup>, and K. M. McKenzie<sup>3</sup>, <sup>1</sup>Louisiana State University, Baton Rouge, <sup>2</sup>USDA-ARS, Booneville, AR, <sup>3</sup>Bedoukian Research, Inc., Danbury, CT*
- 1:50 PM        134    **Examining Relationships between Production and Gastrointestinal Nematode Measures in Organic and Conventionally Reared Katahdin Lambs.**  
*J. M. Burke<sup>1</sup>, A. T. Pickett<sup>\*2</sup>, B. S. Howell<sup>3,4</sup>, E. L. Wood<sup>1</sup>, M. Acharya<sup>3</sup>, and J. E. Miller<sup>5</sup>,  
<sup>1</sup>USDA-ARS, Booneville, AR, <sup>2</sup>Southern Arkansas University, Magnolia, <sup>3</sup>University of Arkansas, Fayetteville, <sup>4</sup>Oakridge Institute for Science and Education, Oakridge, TN, <sup>5</sup>Louisiana State University, Baton Rouge*

- 2:05 PM 135 **Incidence of Ovine Progressive Pneumonia in a Flock of Landrace Hair Sheep: Impact on Performance and Implications for Mode of Transmission.**  
*S. Wildeus<sup>\*1</sup> and G. Tessema<sup>2</sup>, <sup>1</sup>Virginia State University, Petersburg, <sup>2</sup>Virginia Department of Agriculture and Consumer Services, Warrenton, VA*
- 2:20 PM 136 **Seasonal Effects on Daily Gain and Fecal Egg Counts in Purebred and Crossbred Hair Sheep Lambs on Pasture.**  
*S. Wildeus<sup>1</sup>, D. O'Brien<sup>\*1</sup>, and C. D. Teutsch<sup>2</sup>, <sup>1</sup>Virginia State University, Petersburg, <sup>2</sup>University of Kentucky Research and Education Center, Princeton*
- 2:35 PM **Networking.**

## EXTENSION I DEMONSTRATIONS

**Chairs: Brandi B. Karisch, Mississippi State University;  
 P. A. Gunter, Auburn University**

**2:55 PM – 4:30 PM  
 Crystal A**

- 2:55 PM **Welcoming Remarks.**
- 3:00 PM 6 **A Comparison of Methods for Estimating Forage Mass.**  
*T. Hudspeth<sup>\*1</sup>, C. A. Ahrens<sup>2</sup>, D. S. Hubbell, III<sup>3</sup>, and S. Gadberry<sup>4</sup>, <sup>1</sup>Arkansas State University, Jonesboro, <sup>2</sup>University of Arkansas, Little Rock, <sup>3</sup>University of Arkansas Division of Agriculture Livestock and Forestry Research Station, Batesville, <sup>4</sup>University of Arkansas System Division of Agriculture, Little Rock*
- 3:15 PM 7 **Hands-On Workshops Spark Producer Interest in Improving Mineral Programs for Beef Cattle.**  
*M. H. Poore<sup>\*</sup>, A. D. Shaeffer, J. R. Rogers, and S. R. Freeman, North Carolina State University, Raleigh*
- 3:30 PM 8 **2017 Winter Forage and Hay Outlook.**  
*C. G. Prevatt<sup>\*1</sup>, K. Mullenix<sup>2</sup>, J. J. Tucker<sup>3</sup>, D. D. Harmon<sup>4</sup>, and M. O. Wallau<sup>5</sup>, <sup>1</sup>University of Florida, Ona, <sup>2</sup>Auburn University, Auburn, AL, <sup>3</sup>University of Georgia–Tifton Campus, Tifton, <sup>4</sup>Virginia Polytechnic Institute and State University, Blacksburg, <sup>5</sup>University of Florida, Gainesville*

- 3:45 PM 9 **Assessment of Performance-Tested Bull Characteristics and Their Effect on Price.**  
*B. M. Thinguldstad<sup>\*1</sup>, L. Russell<sup>1</sup>, J. J. Tucker<sup>2</sup>, G. A. Buono<sup>1</sup>, and J. R. Segers<sup>2</sup>, <sup>1</sup>University of Georgia, Athens, <sup>2</sup>University of Georgia–Tifton, Tifton*
- 4:00 PM 10 **Live and Carcass Trends, Houston Livestock Show, Junior Steers, 1974–2017.**  
*S. P. Hammack<sup>\*1</sup> and D. B. Griffin<sup>2</sup>, <sup>1</sup>Texas A&M, Stephenville, <sup>2</sup>Texas A&M, College Station*
- 4:15 PM 11 **Upcycling Bahiagrass Hay Using Cull Potatoes as an Alternative Feed Resource.**  
*M. J. Hersom<sup>\*1</sup>, T. W. Wilson<sup>2</sup>, M. Warren<sup>3</sup>, G. K. England<sup>4</sup>, and D. Baggett<sup>4</sup>, <sup>1</sup>University of Florida, Gainesville, <sup>2</sup>St. Johns County Extension–University of Florida, St. Augustine, <sup>3</sup>Flagler & Putnam Co. Extension - University of Florida, Bunnell, <sup>4</sup>Hastings Agricultural Extension Center–University of Florida, Hastings*

## Tuesday, February 6, 2018

### EXTENSION II: PROGRAMS

**Chairs: Mary K. Mullenix, Auburn University;  
Katie M. Mason, Auburn University**

**8:00 AM – 10:45 AM  
Crystal A**

- 8:00 AM **Welcoming Remarks.**
- 8:15 AM 12 **Education for Compliance with the Veterinary Feed Directive: A Report of Extension Effort.**  
*H. M. Ward<sup>\*</sup> and S. Gadberry, University of Arkansas System Division of Agriculture, Little Rock*
- 8:30 AM 13 **2016–2017 Alabama Pasture to Rail: An Educational Retained Ownership Program for Alabama Cattle Producers.**  
*D. A. Tigue<sup>\*1,2</sup>, L. A. Kriese-Anderson<sup>1</sup>, and C. L. Bratcher<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Alabama Cooperative Extension System, Guntersville*

- 8:45 AM 14 **2017 Southeast Women's Cattle Handling Program: Alabama Results.**  
*C. M. Holland<sup>\*1</sup>, L. A. Kriese-Anderson<sup>1</sup>, M. K. Mullenix<sup>1</sup>, K. Flanders<sup>1</sup>, S. L. Dillard<sup>1</sup>, M. Elmore<sup>1</sup>, G. L. Thompson<sup>2</sup>, and A. D. Shaeffer<sup>3</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Alabama Cooperative Extension System, Auburn, <sup>3</sup>North Carolina State University, Raleigh*
- 9:00 AM 15 **A Stockmanship and Stewardship Regional Event Combined with the Deep South Stocker Conference: Multi-State Extension Programming for Beef Producers.**  
*B. B. Karisch<sup>\*1</sup>, W. C. Rutherford<sup>1</sup>, R. L. Stewart, Jr.<sup>2</sup>, and M. K. Mullenix<sup>3</sup>, <sup>1</sup>Mississippi State University, Mississippi State, <sup>2</sup>University of Georgia, Athens, <sup>3</sup>Auburn University, Auburn, AL*
- 9:15 AM **Break.**
- 9:30 AM 16 **ASAS Southern Section Regional Webinar Series for Extension Agent Training.**  
*M. K. Mullenix<sup>\*1</sup>, M. S. Hargaden<sup>1</sup>, J. D. Rhinehart<sup>2</sup>, J. Vendramini<sup>3</sup>, R. L. Stewart, Jr.<sup>4</sup>, B. B. Karisch<sup>5</sup>, and S. Gadberry<sup>6</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>University of Tennessee, Knoxville, <sup>3</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL, <sup>4</sup>University of Georgia, Athens, <sup>5</sup>Mississippi State University, Mississippi State, <sup>6</sup>University of Arkansas System Division of Agriculture, Little Rock*
- 9:45 AM 17 **Creating Partnerships with the U.S. Military.**  
*S. R. Freeman<sup>\*</sup>, L. J. Lahti, and M. Poore, North Carolina State University, Raleigh*
- 10:00 AM 18 **On-Farm Workshops Improve Producers' Understanding of Winter Forage Management Strategies.**  
*J. R. Rogers<sup>\*</sup>, M. Poore, A. D. Shaeffer, and S. R. Freeman, North Carolina State University, Raleigh*
- 10:15 AM 19 **Sustainable Pasture Improvement and Grazing Management Education Program for Farmers.**  
*U. Karki<sup>\*</sup>, Tuskegee University, Tuskegee, AL*
- 10:30 AM 148 **Measuring the Impact of a Feeder Calf Board Sale Program through a Survey of Producer Attitudes.**  
*K. S. Hyman<sup>\*1</sup>, B. B. Karisch<sup>2</sup>, and D. J. Peterson<sup>3</sup>, <sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>Mississippi State University, Mississippi State, <sup>3</sup>Mississippi State University, School of Human Sciences, Mississippi State*



## PASTURES AND FORAGES

**Chairs: Ryan Reuter, Oklahoma State University;  
Taylor Garcia, Tarleton State University;  
Emily B. Merdian, Sam Houston State University**

**8:00 AM – 11:30 AM  
Citizens AB**

- 8:00 AM Welcoming Remarks.
- 8:05 AM 41 **Effect of Protein Supplementation on Immune Response of Weaned Steers Consuming Endophyte-Infected Tall Fescue Seed.**  
*R. K. Poole\*, C. M. Womble, C. L. Pickworth, and D. H. Poole, North Carolina State University, Raleigh*
- 8:20 AM 40 **Forms of Selenium in Vitamin–Mineral Mixes Differentially Affect the Expression of Genes Responsible for Prolactin and ACTH Synthesis in Pituitaries of Steers Grazing Endophyte-Infected Tall Fescue.**  
*Q. Li\*, Y. Jia, P. Bridges, and J. C. Matthews, University of Kentucky, Lexington*
- 8:35 AM 24 **Grazing Novel or Endophyte-Infected Tall Fescue during Mid Gestation Impacts Cow Performance.**  
*M. A. Newsome\*, R. E. Monn, K. Mayberry, R. K. Poole, Z. Young, M. H. Poore, and D. H. Poole, North Carolina State University, Raleigh*
- 8:50 AM 64 **Meta-Analysis of Endophyte-Infected Tall Fescue Effects on Cattle Growth Rates.**  
*D. M. Liebe\* and R. R. White, Virginia Tech, Blacksburg*
- 9:05 AM 65 **Effect of Monensin Level on Mineral Intake and Performance of Grazing Steers.**  
*C. P. Weiss<sup>1</sup>, P. A. Beck<sup>2</sup>, T. S. Crook<sup>1</sup>, S. Gadberry<sup>3</sup>, T. Hess<sup>4</sup>, and D. S. Hubbell, III<sup>4</sup>,  
<sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>University of Arkansas Division of Agriculture SWREC, Hope, <sup>3</sup>University of Arkansas System Division of Agriculture, Little Rock, <sup>4</sup>University of Arkansas Division of Agriculture Livestock and Forestry Research Station, Batesville*

- 9:20 AM 66 **Effect of Tillage System and Planting Date on Wheat Forage Production and Performance of Grazing Steers.**  
*P. A. Beck<sup>\*1</sup>, C. P. Weiss<sup>2</sup>, T. Hess<sup>3</sup>, and D. S. Hubbell, IIF<sup>3</sup>, <sup>1</sup>University of Arkansas Division of Agriculture SWREC, Hope, <sup>2</sup>University of Arkansas, Fayetteville, <sup>3</sup>University of Arkansas Division of Agriculture Livestock and Forestry Research Station, Batesville*
- 9:35 AM 67 **Evaluation of Nitrogen Delivery Methods for Stocker Cattle Grazing Annual Ryegrass: 2-Year Summary.**  
*P. A. Gunter<sup>\*</sup>, R. W. Peacock, R. B. Muntifering, and M. K. Mullenix, Auburn University, Auburn, AL*
- 9:50 AM **Break.**
- 10:05 AM 68 **Late Planting of Annual Ryegrass in Northern Alabama.**  
*M. L. Marks<sup>\*1,2</sup>, M. K. Stanford<sup>3</sup>, L. A. Kriese-Anderson<sup>2</sup>, and M. K. Mullenix<sup>2</sup>, <sup>1</sup>Alabama Cooperative Extension System, Centre, AL, <sup>2</sup>Auburn University, Auburn, AL, <sup>3</sup>Alabama Cooperative Extension System, Crossville*
- 10:20 AM 69 **Supplementing Energy in Conjunction with Monensin Improves Sustainability of Stocker Cattle Grazing Winter Wheat.**  
*L. R. Thompson<sup>1</sup>, M. R. Beck<sup>1</sup>, G. D. Williams<sup>1</sup>, S. E. Place<sup>2</sup>, and R. Reuter<sup>\*1</sup>, <sup>1</sup>Oklahoma State University, Stillwater, <sup>2</sup>National Cattlemen's Beef Association, Centennial, CO*
- 10:35 AM 141 **Effects of Winter Wheat Grazing on Subsequent Crop Yield.**  
*J. M. Curtis<sup>\*</sup> and E. K. Buttrey, University of Tennessee at Martin, Martin*
- 10:50 AM 142 **Impact of Protein Supplementation on Physiological Response of Steers Consuming Endophyte-Infected Tall Fescue Seed.**  
*C. M. Womble<sup>\*</sup>, R. K. Poole, D. H. Poole, and C. L. Pickworth, North Carolina State University, Raleigh*
- 11:05 AM 70 **Grazing Patch Intensity of Calves Grazing Tall Fescue with Varied Toxicity and Fescue Stand Percentage.**  
*J. M. Diaz<sup>\*</sup>, University of Arkansas, Fayetteville*
- 11:20 AM **Networking.**

## PHYSIOLOGY II

**Chairs: Michelle R. Garcia, Texas A&M University–Kingsville; Adam L. McGee, Oklahoma State University**

**8:00 AM – 12:20 PM**

**Continental**

- 8:00 AM Welcoming Remarks.
- 8:05 AM 83 **Reproduction in Domestic Ruminants during the Past 50 Years: Discovery to Application.**  
*M. F. Smith\*<sup>1</sup> and R. D. Geisert<sup>1</sup>, <sup>1</sup>University of Missouri, Columbia*
- 8:50 AM 85 **Conception Rates in Beef Cattle Inseminated with Either SexedUltra™ Sex-Sorted Semen or Conventional Semen after Estrus Is Synchronized for Fixed-Time Artificial Insemination Using 7-Day CO-Synch.**  
*B. R. Crites\*<sup>1</sup>, R. Vishwanath<sup>2</sup>, A. M. Arnett<sup>2</sup>, P. Bridges<sup>1</sup>, W. R. Burris<sup>3</sup>, K. R. McLeod<sup>1</sup>, and L. Anderson<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, <sup>2</sup>Sexing Technologies Inc., Navasota, TX, <sup>3</sup>University of Kentucky, Princeton*
- 9:05 AM 84 **Conception Rates in Beef Cattle Inseminated with Either SexedUltra™ or Conventional Semen after Ovulation Is Synchronized for Fixed-Time Artificial Insemination Using a 14-Day Cidr–PG Modified Protocol.**  
*B. R. Crites\*<sup>1</sup>, R. Vishwanath<sup>2</sup>, A. M. Arnett<sup>2</sup>, P. Bridges<sup>1</sup>, W. R. Burris<sup>3</sup>, and L. Anderson<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, <sup>2</sup>Sexing Technologies Inc., Navasota, TX, <sup>3</sup>University of Kentucky, Princeton*
- 9:20 AM 86 **Supplementation with an All-Natural *Saccharomyces cerevisiae* Fermentation Product Alters Intraperitoneal Temperature and Serum Proinflammatory Cytokines Following an Oral *Salmonella typhimurium* Challenge.**  
*N. C. Burdick Sanchez\*<sup>1</sup>, J. A. Carroll<sup>1</sup>, P. R. Broadway<sup>1</sup>, B. E. Bass<sup>2</sup>, and J. W. Frank<sup>2</sup>, <sup>1</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>2</sup>Diamond V, Cedar Rapids, IA*
- 9:35 AM **Break.**
- 9:50 AM 87 **Blood Glucose, Acetate, Propionate, and Beta-Hydroxybutyrate Responses to Ruminally Degradable Starch and Fiber.**  
*L. Beckett\*, A. Bedford, and R. R. White, Virginia Tech, Blacksburg*

- 10:05 AM 88 **Differing Mitochondrial Capacity in Two Separate Skeletal Muscles from Calm and Temperamental Brahman Heifers.**  
*S. H. White<sup>\*1</sup>, C. M. Latham<sup>2</sup>, C. R. Long<sup>3</sup>, R. D. Randel<sup>3</sup>, and T. H. Welsh, Jr.<sup>1</sup>, <sup>1</sup>Texas A&M AgriLife Research and Department of Animal Science, College Station, <sup>2</sup>Texas A&M University, College Station, <sup>3</sup>Texas A&M AgriLife Research, Overton*
- 10:20 AM 89 **Does Postabsorptive Propionate Clearance Influence Reproductive Status in Dairy Heifers?**  
*A. Bedford<sup>\*1</sup>, L. Beckett<sup>1</sup>, K. N. Hardin<sup>1</sup>, N. W. Dias<sup>1</sup>, V. R. G. Mercadante<sup>1</sup>, A. D. Ealy<sup>1</sup>, and R. R. White<sup>1</sup>, <sup>1</sup>Virginia Tech, Blacksburg*
- 10:35 AM 90 **Evaluating a Novel Strategy for Measuring Basal Metabolic Rate of Bovine Skeletal Muscle.**  
*L. Beckett<sup>\*1</sup>, R. Rosemond<sup>1</sup>, B. Renquist<sup>2</sup>, and R. R. White<sup>1</sup>, <sup>1</sup>Virginia Tech, Blacksburg, <sup>2</sup>The University of Arizona, Tucson*
- 10:50 AM 91 **Influence of Cell Mediated Immune Response of Brahman Cows on Postpartum Interval, Colostral Immunoglobulin Concentration, and Growth of Their Calves.**  
*M. E. Mund<sup>\*1,2</sup>, L. K. Quail<sup>1,2</sup>, C. L. Cook<sup>1</sup>, D. A. Neuendorff<sup>2</sup>, J. P. Banta<sup>3</sup>, T. H. Welsh, Jr.<sup>1</sup>, and R. D. Randel<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas A&M AgriLife Research, Overton, <sup>3</sup>Texas A&M AgriLife Extension, Overton*
- 11:05 AM 143 **Flushing and Synchronization Protocol Impacts on Out-Of-Season Breeding in Ewes.**  
*J. Sheffield<sup>\*</sup>, C. Roman, B. L. Roper, R. K. Poole, and C. L. Pickworth, North Carolina State University, Raleigh*
- 11:20 AM 144 **Growth Factors Influence Cell Cycle Progression in Equine Satellite Cells.**  
*M. Gonzalez<sup>\*</sup>, A. M. Brandt, and S. E. Johnson, Virginia Tech, Blacksburg*
- 11:35 AM 153 **Progesterone Concentration, Follicle Diameter, and Corpus Luteum Volume in Beef Cows Supplemented with Ca Salts of Soybean Oil.**  
*D. Powers<sup>\*</sup>, C. L. Timlin, N. W. Dias, F. V. Santili, and V. R. G. Mercadante, Virginia Tech, Blacksburg*

- 11:50 AM 92 **Acute Immunological Responses to a Combined Viral–Bacterial Respiratory Disease Challenge in Heifers Administered Transdermal Flunixin Meglumine.**  
*A. B. Word<sup>1</sup>, P. R. Broadway<sup>1</sup>, Y. L. Liang<sup>2</sup>, H. Newcomb<sup>3</sup>, N. C. Burdick Sanchez<sup>1</sup>, B. P. Holland<sup>4</sup>, G. B. Ellis<sup>3</sup>, B. P. Littlejohn<sup>5</sup>, S. Capik<sup>6</sup>, A. J. Fuselier<sup>3</sup>, J. P. Hutcheson<sup>3</sup>, M. A. Ballou<sup>2</sup>, and J. A. Carroll<sup>1</sup>, <sup>1</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, <sup>2</sup>Texas Tech University, Lubbock, <sup>3</sup>Merck Animal Health, Summit, NJ, <sup>4</sup>Cactus Feeders, Amarillo, TX, <sup>5</sup>Texas A&M University, College Station, <sup>6</sup>Texas A&M AgriLife Research, Amarillo*

12:05 PM **Networking.**

## RUMINANT ANIMAL PRODUCTION: NUTRITION

**Chairs: Stacey A. Gunter, USDA-ARS; Amanda Mathias, Texas A&M University**

**8:00 AM – 11:45 AM  
Texas A**

- 8:00 AM **Welcoming Remarks.**
- 8:05 AM 38 **Effect of Forage Source on Digestion and Ruminant Fermentation in Limit-Fed Steers.**  
*C. N. Truelock<sup>\*</sup>, J. E. Sawyer, and T. A. Wickersham, Texas A&M University, College Station*
- 8:20 AM 26 **The Effect of Feeding Ferric Citrate on Rumen Microbial Communities and Methanogenesis in Growing Beef Steers.**  
*E. A. Melchior<sup>\*1</sup>, K. E. Hales<sup>2</sup>, A. K. Lindholm-Perry<sup>3</sup>, J. E. Wells<sup>3</sup>, and P. R. Myer<sup>1</sup>, <sup>1</sup>University of Tennessee, Knoxville, <sup>2</sup>USDA-ARS, Clay Center, NE, <sup>3</sup>USDA-ARS, U.S. Meat Animal Research Center, Clay Center, NE*
- 8:35 AM 45 **Analysis of the Gastrointestinal Tract–Associated Microbiome of Calves Supplemented during the Suckling Phase.**  
*J. M. Lourenço<sup>\*1</sup>, T. J. Kieran<sup>2</sup>, J. C. McCann<sup>3</sup>, T. C. Glenn<sup>2</sup>, and L. Stewart<sup>1</sup>, <sup>1</sup>University of Georgia, Athens, <sup>2</sup>University of Georgia Environmental Health Science, Athens, <sup>3</sup>University of Illinois at Urbana-Champaign, Urbana*

- 8:50 AM 37 **Effects of Feeding Different Levels of Quebracho (*Schinopsis balansae*) Extract in a High-Roughage Total Mixed Ration on Manure Gas Emissions.**  
*A. B. Norris*<sup>\*1</sup>, *L. O. Tedeschi*<sup>1</sup>, *K. D. Casey*<sup>2</sup>, *J. C. B. Dubeux Jr.*<sup>3</sup>, *J. L. Foster*<sup>4</sup>, *J. P. Muir*<sup>5</sup>, and *W. E. Pinchak*<sup>6</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas A&M AgriLife Research, Amarillo, <sup>3</sup>University of Florida, North Florida Research and Education Center, Marianna, <sup>4</sup>Texas A&M AgriLife Research, Beeville, <sup>5</sup>Tarleton State University, Stephenville, TX, <sup>6</sup>Texas A&M AgriLife Research, Vernon
- 9:05 AM 111 **Development and Comparison of Methodology for Estimating Beef Cattle Contribution to Human Food Supply 1. Human Edible Protein Conversion and Methane Production.**  
*J. R. Baber*<sup>\*</sup>, *J. E. Sawyer*, and *T. A. Wickersham*, Texas A&M University, College Station
- 9:20 AM 112 **Development and Comparison of Methodology for Estimating Beef Cattle Contribution to Human Food Supply 2. Protein Quality and Net Protein Contribution.**  
*J. R. Baber*<sup>\*</sup>, *J. E. Sawyer*, and *T. A. Wickersham*, Texas A&M University, College Station
- 9:35 AM **Break.**
- 9:50 AM 113 **Effects of Bismuth Subsalcylate and Calcium-Ammonium Nitrate on Liver Mineral Concentration and Performance of Growing Beef Heifers.**  
*D. D. Henry*, *F. M. Ciriaco*, *S. Mejia*<sup>\*</sup>, *P. L. P. Fontes*, *N. Oosthuizen*, *C. D. Sanford*, and *N. DiLorenzo*, University of Florida, North Florida Research and Education Center, Marianna
- 10:05 AM 114 **Establishing the Efficacy of *Faecalibacterium prausnitzii* As a Probiotic to Enhance Prewaning Health, Growth, and Performance of Beef Calves.**  
*N. W. Dias*<sup>\*</sup>, *C. L. Timlin*, *F. V. Santili*, *T. B. Wilson*, *R. R. White*, and *V. R. G. Mercadante*, Virginia Tech, Blacksburg
- 10:20 AM 115 **Effects of Intake Restriction on Thoracic and Abdominal Organ Mass and Metabolism in Cows.**  
*L. A. Trubenbach*<sup>\*</sup>, *T. A. Wickersham*, *M. C. Satterfield*, *S. H. White*, *J. M. Long*, and *J. E. Sawyer*, Texas A&M University, College Station

- 10:35 AM 116 **Evaluation of Age of Dam and Phytoestrogens on Growth and Semen Quality Measures in Yearling Bulls.**  
*C. A. Runyan\**, *S. C. Yurrita*, *J. W. Dickison*, and *M. W. Salisbury*, *Angelo State University, San Angelo, TX*
- 10:50 AM 117 **Evaluation of the Effects of Dried Live Yeast on Rumen pH and In Situ Digestibility of Dry Matter in Growing Cattle.**  
*C. M. Cagle*<sup>1</sup>, *L. O. Tedeschi*<sup>1</sup>, *C. A. Runyan*<sup>2</sup>, *T. R. Callaway*<sup>3</sup>, and *M. D. Cravey*<sup>4</sup>, <sup>1</sup>*Texas A&M University, College Station*, <sup>2</sup>*Angelo State University, San Angelo, TX*, <sup>3</sup>*USDA-ARS, College Station, TX*, <sup>4</sup>*Phileo Lesaffre Animal Care, Milwaukee, WI*
- 11:05 AM 149 **Using Carbon Emissions, Oxygen Consumption, and Energy Retention to Estimate Dietary ME Intake By Beef Steers.**  
*C. Burrus*<sup>1</sup>, *S. A. Gunter*<sup>2</sup>, *D. W. Sanson*<sup>1</sup>, *C. A. Moffet*<sup>2</sup>, and *P. Gregorini*<sup>3</sup>, <sup>1</sup>*Southern Arkansas University, Magnolia*, <sup>2</sup>*USDA-ARS, Woodward, OK*, <sup>3</sup>*Lincoln University, Christchurch, New Zealand*
- 11:20 AM 154 **Efficacy of a Fecal DNA-Based Method to Measure Diet Components in Cattle.**  
*M. M. Drakeley\** and *R. Reuter*, *Oklahoma State University, Stillwater*
- 11:35 AM **Networking.**

## TEACHING AND UNDERGRADUATE EDUCATION

**Chairs: Janeal W. Yancey, University of Arkansas;  
Traci Cramer, Texas Tech University**

**8:00 AM – 9:20 AM  
Texas B**

- 8:00 AM **Welcoming Remarks.**
- 8:05 AM 137 **A Measure of Science Motivation in an Introduction to Animal Science Course.**  
*M. R. Russell*<sup>1</sup>, *B. Chumbley*<sup>2</sup>, and *N. L. Bell*<sup>2</sup>, <sup>1</sup>*University of Arkansas, Fayetteville*, <sup>2</sup>*Texas A&M University Kingsville, Kingsville*
- 8:20 AM 20 **An Orientation Course with Effort-Based Grading Predicts Undergraduate Student Success in Animal Science.**  
*M. J. Mann\** and *C. J. Kojima*, *Department of Animal Science, University of Tennessee, Knoxville*

- 8:35 AM 138 **Evaluation of a Two-Year Assessment of the University of Arkansas Undergraduate Animal Science Program.**  
*J. G. Powell\**, *E. B. Kegley*, *K. S. Jogan*, and *L. R. Thomas*, *University of Arkansas, Fayetteville*
- 8:50 AM 139 **Evaluation of Grit and Resilience in Preprofessional Animal Science Students.**  
*L. R. Thomas*<sup>\*1</sup>, *K. S. Jogan*<sup>1</sup>, *K. V. Johnson*<sup>2</sup>, *J. J. Ball*<sup>1</sup>, and *J. G. Powell*<sup>1</sup>, <sup>1</sup>*University of Arkansas, Fayetteville*, <sup>2</sup>*University of Arkansas Eleanor Mann School of Nursing, Fayetteville*
- 9:05 AM **Networking.**

## RUMINANT ANIMAL PRODUCTION: WEANED CALF

**Chairs: Beth Kegley, University of Arkansas;  
Kingsley Ekwemalor, North Carolina Agricultural and  
Technical State University**

**9:30 AM – 12:05 PM  
Texas B**

- 9:30 AM **Welcoming Remarks.**
- 9:35 AM 33 **Effect of Supplementing Live Yeast Cultures on the Performance of Weaned Beef Cattle.**  
*G. M. D'Souza*<sup>\*1</sup>, *D. R. Eborn*<sup>1</sup>, *S. B. Blezinger*<sup>2</sup>, and *G. J. Eckerle*<sup>3</sup>, <sup>1</sup>*Texas A&M - Commerce, Commerce*, <sup>2</sup>*Reveille Livestock Concepts, Sulphur Springs, TX*, <sup>3</sup>*San Antonio Steel Company, San Antonio, TX*
- 9:50 AM 42 **Performance, Health, and Physiological Responses of Newly Weaned Cattle Supplemented with Feed Grade Antibiotics or Alternative Feed Additives during Feedlot Receiving.**  
*K. M. Schubach*<sup>\*1,2</sup>, *R. Cooke*<sup>1</sup>, *K. A. Souza*<sup>2</sup>, *T. F. Schumacher*<sup>2</sup>, *N. S. da Silva*<sup>2</sup>, *D. W. Bohnert*<sup>2</sup>, and *R. Marques*<sup>2</sup>, <sup>1</sup>*Texas A&M University, College Station*, <sup>2</sup>*Oregon State University–EOARC Burns, Burns*
- 10:05 AM 25 **Prediction of Residual Feed Intake in Feedlot Steers Based on Phenotypic Associations with Feeding Behavior and Carcass Ultrasound Traits.**  
*I. L. Parsons*<sup>\*</sup>, *J. R. Johnson*, *W. C. Kayser*, *M. D. Miller*, and *G. E. Carstens*, *Texas A&M University, College Station*



- 10:20 AM 30 **Differences in Fecal Egg Count, Performance, Blood Parameters, and Lactate Dehydrogenase Activity of Stocker Calves Treated with Various Anthelmintics.**  
*C. A. Hooks<sup>\*1</sup>, N. R. Denney<sup>1</sup>, M. R. Hovey<sup>1</sup>, J. F. Miller<sup>2</sup>, B. M. Papajeski<sup>1</sup>, J. C. Robertson<sup>1</sup>, E. A. Backes<sup>3</sup>, C. A. Porr<sup>1</sup>, and A. J. Davis<sup>1</sup>, <sup>1</sup>Murray State University, Hutson School of Agriculture, Murray, KY, <sup>2</sup>Murray State University, Hutson School of Agriculture, Breathitt Veterinary Center, Hopkinsville, KY, <sup>3</sup>Purina Animal Nutrition, LLC, Gray Summit, MO*
- 10:35 AM 35 **Effect of Temperament Measures on Feedlot Cattle Performance.**  
*K. Bruno<sup>\*1</sup>, L. J. McPhillips<sup>1</sup>, M. Calvo-Lorenzo<sup>2</sup>, U. Desilva<sup>1</sup>, C. R. Krehbiel<sup>1</sup>, M. M. Rolf<sup>8</sup>, S. E. Place<sup>4</sup>, D. L. Step<sup>5</sup>, R. G. Mateescu<sup>6</sup>, D. L. VanOverbeke<sup>1</sup>, and T. C. Husz<sup>1</sup>, <sup>1</sup>Oklahoma State University, Stillwater, <sup>2</sup>Elanco Animal Health, Fayetteville, AR, <sup>3</sup>Kansas State University, Manhattan, <sup>4</sup>National Cattlemen's Beef Association, Centennial, CO, <sup>5</sup>Department of Veterinary Clinical Science, Oklahoma State University, Stillwater, <sup>6</sup>University of Florida, Gainesville*
- 10:50 AM **Break.**
- 11:05 AM 39 **Effects of Growth Promoting Implants at Branding in Suckling Steers Prior to Weaning.**  
*J. J. Ball<sup>\*</sup>, E. B. Kegley, E. A. Palmer, T. D. Lester, W. Gragg, and J. G. Powell, University of Arkansas, Fayetteville*
- 11:20 AM 27 **Maternal Stress at Weaning Impacts Calf Growth.**  
*G. C. Ott<sup>\*</sup>, S. R. Freeman, M. H. Poore, and C. L. Pickworth, North Carolina State University, Raleigh*
- 11:35 AM 118 **Effects of an Active Dry Yeast Supplement on Ruminal pH, Feeding Performance, and Carcass Characteristics of Feedlot Steers.**  
*W. L. Crossland<sup>\*1</sup>, A. B. Norris<sup>1</sup>, C. M. Cagle<sup>1</sup>, L. O. Tedeschi<sup>1</sup>, G. E. Carstens<sup>1</sup>, J. E. Sawyer<sup>1</sup>, T. R. Callaway<sup>2</sup>, and O. AlZahal<sup>3</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>University of Georgia, Athens, <sup>3</sup>AB Vista, Marlborough, United Kingdom*
- 11:50 AM **Networking.**

# 2018 Southern Section ASAS Committees

## General Committees

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### Academic Quadrathlon

OK	B.K. Wilson*
GA	J.A. Daniel
TX	D.W. Forrest
KY	P.L. Harrelson

### Advisory

AR	M.L. Looper*
GA	J.F. Baker
SC	J.R. Strickland
TX	G.C. Lamb

### Necrology

AL	L.W. Greene*
AR	P.A. Beck
TX	W.L. Crossland
MS	R.C. Vann

### Nominating

AL	L.W. Greene*
OK	D.L. Lalman
FL	J.D. Arthington
MS	J.A. Parish
AR	C.F. Rosenkrans, Jr.

### Resolutions

TX	G.E. Carstens*
NC	M.H. Poore
TX	T.R. Whitney
AL	S.G. Solaiman

\*Chair

## Award Committees

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### **Distinguished Service Award**

OK	S.W. Coleman*
TX	T.H. Welsh, Jr.
AR	T.R. Troxel
OK	G.W. Horn
TX	D.G. Riley

### **Emerging Scholar Award**

SC	S.K. Duckett*
TX	V.A. Corriher
MS	J.E. Larson
OK	R.R. Reuter
KY	F.W. Harrelson

### **Extension Award**

KY	L.A. Kriese-Anderson*
KY	J.W. Lehmkuhler
TN	J.D. Rhinehart
TX	J.P. Banta

### **Graduate Student Paper Competition**

TX	N.C. Burdick-Sanchez*
VA	E.R. Gilbert
TN	J.T. Mulliniks
TX	G.R. Newton
KY	A.J. Davis

### **Undergraduate Student Paper Competition**

AR	J.W. Yancey*
SC	N.M. Long
OK	B.K. Wilson
TX	J.L. Leatherwood
TN	E.K. Buttrey

### **Young Animal Scientist – Education Award**

TX	K.J. Stutts*
AL	C.L. Bratcher
AL	C.E. Huntington
OK	R. Ramanathan

## **Young Animal Scientist – Research Award**

GA	C.L. Bratcher*
FL	G.C. Lamb
FL	N. DiLorenzeno
TX	J.A. Carroll

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## **Program Committees**

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### **Breeding and Genetics**

AL	L.A. Kriese-Anderson*
FL	R.G. Mateescu*
MS	T. Smith
AR	B.R. Kutz
TX	C.A. Gill

### **Extension**

MS	B.B. Karisch*
AL	M.K. Mullenix
GA	J.R. Segers
TN	J.K. Smith

### **Meats**

KY	G.K. Rentfrow*
TX	J.F. Legako
GA	A.M. Stelzleni
TX	J.T. Sawyer

### **Pastures and Forages**

AR	P.A. Beck*
LA	G. Scaglia
TX	M.D. Cravey
OK	R.R. Reuter

### **Physiology**

TX	M.R. Garcia*
FL	V.R.G. Mercadante
TX	P.R. Broadway
NC	D.H. Poole

\*Chair

## **Ruminant Animal Production**

NC	P. Moriel*
TX	C.A. Bandyk
OK	S.A. Gunter
MS	J.D. Rivera

## **Small Ruminant Animal Production**

OK	S. Hart*
AR	C.A. Ahrens
TN	R. Browning
GA	N.C. Whitley

## **Teaching and Undergraduate Education**

AR	J.W. Yancey*
SC	N.M. Long
OK	B.K. Wilson
TX	J.L. Leatherwood
TN	E.K. Buttrey

\*Chair

## Past Presidents

2016–17	J. A. Parish	Mississippi State University
2015–16	J. D. Arthington	University of Florida
2014–15	D. L. Lalman	Oklahoma State University
2013–14	L. W. Greene	Auburn University
2012–13	R. W. Godfrey	University of the Virgin Islands
2011–12	T. H. Welsh, Jr.	Texas A&M University
2010–11	M. H. Poore	North Carolina State University
2009–10	D. G. Morrison	Louisiana State University Agricultural Center
2008–09	E. B. Kegley	University of Arkansas
2007–08	C. C. Chase, Jr.	USDA-ARS, STARS
2006–07	D. A. Coleman	Auburn University
2005–06	R. D. Randel	Texas A&M University
2003–05	K. L. Esbenshade	North Carolina State University
2002–03	D. K. Aaron	University of Kentucky
2001–02	T. R. Troxel	University of Arkansas
2000–01	L. L. Southern	Louisiana State University
1999–00	R. P. Wettemann	Oklahoma State University
1998–99	J. D. Armstrong	Purdue University
1997–98	D. G. Ely	University of Kentucky
1996–97	P. R. Harms	Texas A&M University
1995–96	P. R. Utley	University of Georgia
1994–95	D. S. Buchanan	Oklahoma State University
1993–94	P. R. Nolan	University of Arkansas
1992–93	D. R. Marple	Auburn University
1991–92	R. W. Harvey	North Carolina State University
1990–91	D. E. Franke	Louisiana State University
1989–90	A. L. Eller, Jr.	Virginia Tech University
1988–89	C. R. Long	Texas A&M University
1987–88	D. G. Spruill	University of Georgia
1986–87	G. L. Cromwell	University of Kentucky
1985–86	B. Baker, Jr.	Mississippi State University
1984–85	C. B. Ammerman	University of Florida
1983–84	W. G. Luce	Oklahoma State University
1982–83	J. R. Hill	Clemson University
1981–82	J. W. Turner	Louisiana State University
1980–81	A. M. Sorenson	Texas A&M University
1979–80	W. C. McCormick	University of Georgia
1978–79	E. R. Barrick	North Carolina State University

1977-78	R. L. McGuire	Auburn University
1976-77	J. J. Guenther	Oklahoma State University
1975-76	C. J. Brown	University of Arkansas
1974-75	S. L. Hansard	University of Tennessee
1973-74	M. Koger	University of Florida
1972-73	J. P. Fontenot	Virginia Tech University
1971-72	G. E. Mitchell, Jr.	University of Kentucky
1970-71	L. S. Pope	Texas A&M University
1969-70	L. C. Ulberg	North Carolina State University
1968-69	R. C. Carter	Virginia Tech University
1967-68	G. L. Robertson	Louisiana State University
1966-67	C. E. Lindley	Mississippi State University
1965-66	R. F. Sewell	University of Georgia
1964-65	W. M. Warren	Auburn University
1963-64	R. F. Wheeler	Clemson University
1962-63	E. J. Warrick	USDA
1961-62	G. K. Davis	University of Florida
1960-61	W. Gifford	University of Arkansas
1959-60	J. A. Whatley	Oklahoma State University
1957-58	B. L. Southwell	University of Georgia
1956-57	W. P. Garrigus	University of Kentucky
1955-56	J. C. Miller	Texas A&M University
1954-55	R. A. Damon	Louisiana State University
1953-54	A. E. Cullison	University of Georgia
1952-53	C. M. Kincaid	Virginia Tech University
1951-52	R. S. Glasscock	University of Florida
1950-51	H. H. Levek	Mississippi State University
1949-50	J. E. Foster	University of Maryland
1948-49	H. M. Briggs	Oklahoma State University
1947-48	E. C. Godbey	Clemson University
1946-47	J. C. Grimes	Auburn University
1941-42	R. E. Hunt	Virginia Tech University
1940-41	M. G. Snell	Louisiana State University
1939-40	L. E. Richardson	University of Tennessee
1938-39	E. W. Sheets	USDA
1937-38	L. I. Case	North Carolina State University
1936-37	M. P. Jarnigan	University of Georgia
1935-36	J. B. Francioni	Louisiana State University
1934-35	A. L. Shealy	University of Florida
1933-34	L. V. Starkey	Clemson University
1932-33	W. L. Blizzard	Oklahoma State University

# PAST AWARD RECIPIENTS

## Distinguished Service Award

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2017	L. W. Greene	Auburn University
2016	G. W. Horn	Oklahoma State University
2015	T. Troxel	University of Arkansas
2014	T. Welsh, Jr.	Texas A&M University
2013	D. Aaron	University of Kentucky
2012	D. Morrison	Louisiana State University
2011	P. G. Harms	Texas A&M University
2010	M. Rouquette, Jr.	Texas AgriLife Research
2009	not given	
2008	R. D. Randel	Texas A&M University
2007	A. H. Brown, Jr.	Arkansas
2006	G. M. Hill	Georgia
2005	S. W. Coleman	USDA
2004	D. G. Ely	Kentucky
2003	D. E. Franke	Louisiana
2002	F. Thrift	Kentucky
2001	R. Wettmann	Oklahoma
2000	P. Utley	Georgia
1999	P. R. Noland	Arkansas
1998	not given	
1997	W. G. Luce	Oklahoma
1996	R. W. Harvey	North Carolina
1995	G. L. Cromwell	Kentucky
1994	G. E. Mitchell, Jr.	Kentucky
1993	L. E. McDowell	Florida
1992	J. Fontenot	Virginia
1991	R. Totusek	Oklahoma
1990	V. Hays	Kentucky
1989	F. Baker	Arkansas
1988	C. B. Ammerman	Florida
1987	L. E. Walters	Oklahoma
1986	L. Goode	North Carolina
1985	O. M. Hale	Georgia
1984	L. C. Ulberg	North Carolina
1983	C. J. Brown	Arkansas
1982	W. C. McCormick	Georgia
1981	E. R. Barrick	North Carolina
1980	J. A. Whatley, Jr.	Oklahoma
1979	M. Koger	Florida
1978	T. J. Marlowe	Virginia
1977	S. Hansard	Tennessee



1976	J. C. Hillier	Oklahoma
1975	J. K. Riggs	Texas
1974	T. J. Cunha	Florida
1973	O. D. Butler	Texas
1972	G. W. Litton	Virginia
1971	R. H. Dutt	Kentucky
1970	R. C. Carter	Virginia
1969	H. H. Leveck	Mississippi
1968	W. P. Garrigus	Kentucky
1967	B. L. Southwell	Georgia
1966	C. S. Hobbs	Tennessee

### **Extension Award**

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2017	J. P. Banta	Texas A&M University
2016	J. Lehmkuhler	University of Kentucky
2015	M. Hersom	University of Florida
2014	L. Anderson	University of Kentucky
2013	C. Richards	Oklahoma State University
2012	M. S. Gadberry	University of Arkansas
2011	R. D. Coffey	University of Kentucky
2010	M. T. See	North Carolina
2009	E. van Heugten	North Carolina
2008	T. McCollum	Texas A&M University
2007	M. H. Poore	North Carolina
2006	A. F. Harper	Virginia
2005	G. Selk	Oklahoma State University
2004	R. L. McCraw	North Carolina
2003	D. Bullock	Kentucky
2002	W. Gill	Tennessee
2001	W. R. Burris	Kentucky
2000	T. R. Troxel	Arkansas
1999	G. V. Davis, Jr.	Arkansas
1998	G. L. M. Chappel	Kentucky
1997	S. H. Umberger	Virginia
1996	C. D. Lane, Jr.	Tennessee
1995	J. T. Johns	Kentucky
1994	D. W. Freeman	Oklahoma
1993	J. R. Jones	North Carolina
1992	J. B. Neel	Tennessee
1991	K. Lusby	Oklahoma
1990	J. Hughes	Oklahoma
1989	H. Webster	Clemson
1988	D. R. Gill	Oklahoma
1987	H. J. Gerken, Jr.	Virginia

1986	M. K. Cook	Georgia
1985	W. G. Luce	Oklahoma
1984	C. Cooper	Virginia
1983	C. W. Absher	Kentucky
1982	C. M. Triplett	Georgia
1981	A. N. Huff	Virginia
1980	A. L. Eller, Jr.	Virginia

### **Academic Quadrathlon Winners**

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2017	Texas Tech University
2016	Texas A&M University
2015	Oklahoma State University
2014	Texas A&M University
2013	Oklahoma State University
2012	Texas A&M University
2010	University of Florida
2009	University of Georgia
2008	University of Kentucky
2007	Texas A&M University
2006	Texas A&M University
2005	North Carolina State University
2004	University of Kentucky
2003	Texas A&M University
2002	University of Florida
2001	University of Kentucky
2000	Texas A&M University
1999	University of Kentucky
1998	University of Kentucky
1997	Oklahoma State University
1996	Oklahoma State University
1995	Virginia Tech University
1994	Oklahoma State University
1993	Texas A&M University
1992	Oklahoma State University
1991	University of Kentucky
1990	Virginia Tech University
1989	Oklahoma State University
1988	Texas A&M University
1987	University of Georgia
1986	University of Georgia
1985	University of Kentucky
1984	Texas A&M University

## Young Animal Scientist Award

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2017 <sup>1</sup>	R. Ramanathan	Oklahoma State University
2017 <sup>2</sup>	C. O. Lemley	Mississippi State University
2016 <sup>1</sup>	C. E. Huntington	Auburn University
2016 <sup>2</sup>	N. DiLorenzo	University of Florida
2015 <sup>1</sup>	C. Bratcher	Auburn University
2015 <sup>2</sup>	K. Urschel	University of Kentucky
2014 <sup>1</sup>	K. Stutts	Sam Houston State University
2014 <sup>2</sup>	C. Bratcher	Auburn University
2013 <sup>1</sup>	E. Wagner	Auburn University
2013 <sup>2</sup>	M. C. Satterfield	Texas A&M University
2012 <sup>2</sup>	S. Suman	University of Kentucky
2012 <sup>1</sup>	D. L. VanOverbeke	Oklahoma State University
2011 <sup>2</sup>	J. C. Brooks	Texas Tech University
2011 <sup>1</sup>	J. C. Brooks	Texas Tech University
2010 <sup>2</sup>	T. J. Wistuba	Morehead State University
2010 <sup>1</sup>	D. L. VanOverbeke	Oklahoma State University
2009 <sup>2</sup>	M. L. Looper	USDA-ARS
2009 <sup>1</sup>	G. Hilton	Oklahoma State University
2008 <sup>2</sup>	J. Escobar	Virginia Tech University
2008 <sup>1</sup>	J. A. Sterle	Texas A&M University
2007 <sup>2</sup>	S. W. Kim	Texas Tech University
2007 <sup>1</sup>	L. Anderson	University of Kentucky
2006 <sup>2</sup>	S. T. Willard	Mississippi State University
2006 <sup>1</sup>	M. L. Looper	USDA-ARS
2005 <sup>2</sup>	C. Krehbiel	Oklahoma State University
2004 <sup>1</sup>	M. T. See	North Carolina State University
2004 <sup>2</sup>	T. Van Kempen	North Carolina State University
2003 <sup>1</sup>	S. Jackson	Texas Tech University
2003 <sup>2</sup>	T. Spencer	Texas A&M University
2002 <sup>1</sup>	J. Yelich	University of Florida
2002 <sup>2</sup>	B. Kegley	University of Arkansas
2001 <sup>1</sup>	S. Ramsey	Texas A&M University
2001 <sup>2</sup>	J. Apple	University of Arkansas
2000 <sup>1</sup>	A. D. Herring	Texas Tech University
1999 <sup>2</sup>	C. C. Chase, Jr.	USDA-ARS
1998 <sup>1</sup>	M. F. Miller	Texas Tech University
1998 <sup>2</sup>	A. L. Goetsch	Langston University
1997 <sup>1</sup>	T. Marshall	University of Florida
1996 <sup>1</sup>	W. L. Flowers	North Carolina State University
1996 <sup>2</sup>	M. F. Miller	Texas Tech University
1995 <sup>1</sup>	C. H. Wood	University of Kentucky
1995 <sup>2</sup>	J. D. Armstrong	North Carolina State University

1994 <sup>1</sup>	D. K. Aaron	University of Kentucky
1994 <sup>2</sup>	P. J. Hansen	University of Florida
1993 <sup>1</sup>	K. Pond	North Carolina State University
1993 <sup>2</sup>	R. Geisert	Oklahoma State University
1992 <sup>1</sup>	D. S. Buchanan	Oklahoma State University
1992 <sup>2</sup>	J. L. Sartin	Auburn University
1991 <sup>1</sup>	W. E. Beal	Virginia Tech University
1991 <sup>2</sup>	W. Greene	Texas A&M University
1990 <sup>1</sup>	J. W. Mabry	University of Georgia
1990 <sup>2</sup>	T. H. Welsh	Texas A&M University
1989	J. W. Spears	North Carolina State University
1988	S. B. Smith	Texas A&M University
1987	D. L. Thompson, Jr.	Louisiana State University
1986	G. J. Hausman	USDA-ARS, Athens, GA
1985	J. W. Savell	Texas A&M University
1984	D. R. Notter	Virginia Tech University
1983	T. S. Stahly	University of Kentucky
1982	D. N. Marple	Auburn University

<sup>1</sup>Education

<sup>2</sup> Research

### **National Pork Board Swine Industry Award (discontinued in 2017)**

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2016	N. C. Burdick Sanchez	USDA-ARS
2015	P. R. Broadway	Texas Tech University
2014	M. D. Johnson	Texas A&M University
2013	J. R. Donaldson	Mississippi State University
2012	M. Estienne	Virginia Tech University
2011	M. Estienne	Virginia Tech University
2010	J. A. Carroll	USDA-ARS
2009	E. Van Heugten	NC State University
2008	S. W. Kim	North Carolina State University
2007	C. O’Gormon	Texas A&M University
2006	J. A. Carroll	USDA-ARS
2005	Z. B. Johnson	University of Arkansas
2004	J. Apple	University of Arkansas
2003	T. van Kempen	North Carolina State University
2002	K. Cole	University of Arkansas
2001	G. E. Conatser	University of Tennessee
2000	not given	
1999	not given	
1998	R. A. Cushman	North Carolina State University
1997	M. T. See	North Carolina State University

1996	W. L. Flowers	North Carolina State University
1995	M. T. See	North Carolina State University
1994	R. Dove	University of Georgia

### **Emerging Scholar Award**

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2017	W. B. Smith	Texas A&M AgriLife Research
2016	not given	
2015	D. Rosero	The Hanor Company
2014	A. Mays	University of Arkansas
2013	A. P. Foote	University of Kentucky
2012	J. Hicks	North Carolina State University
2011	R. S. Fry	North Carolina State University
	J. T. Richeson	University of Arkansas
2010	C. Taylor-Edwards	University of Kentucky

### **Joseph P. Fontenot Student Travel Scholarship**

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2017	not given	
2016	D. Price	University of Florida
2015	B. Littlejohn	Texas A&M University
	K. Sharon	Texas Tech University
2014	S. DeGeer	Auburn University
2013	L. Jury	Mississippi State University
	D. Price	University of Florida
2012	A. Mays	University of Arkansas

### **Graduate Student Paper Award**

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2017	A. L. McGee	Oklahoma State University
	A. J. Fabi	Virginia Tech
2016	C. L. Bayliff	Oklahoma State University
	N. M. Early	Texas A&M University
2015	K. Sharon	Texas Tech University
2014	L. K. Mabry	North Carolina State University
2013	P. Moriel	University of Florida
2012	L. M. Wiley	Texas A&M University
2011	L. A. Smith	Tennessee State University
2010	J. S. Fry	North Carolina State University
2009	S. J. Winterholler	Oklahoma State University
2008	S. L. Hansen	North Carolina State University
2007	P. Williams	Texas A&M University– Kingsville

2006	L. R. Legleiter	North Carolina State University
2005	M. Bowman	University of Arkansas
2004	E. G. Brown	Texas A&M University
2003	C. Realini	University of Georgia
2002	J. A. Parish	University of Georgia
2001	J. Montgomery	Texas Tech University
2000	M. R. Stivarious	University of Arkansas
1999	T. E. Engle	North Carolina State University
1998	C. Barnett	University of Tennessee
1997	D. H. Crews, Jr.	Louisiana State University
1996	not given	
1995	E. B. Kegley	North Carolina State University
1994	R. D. Coffey	University of Kentucky
1993	D. K. Bishop	Oklahoma State University
1992	R. L. Stanko	North Carolina State University
1991	G. A. Rohrer	Texas A&M University
1990	K. A. Meurer	Mississippi State Univ.
1989	G. M. Davenport	University of Kentucky
1988	M. J. Esteinne	University of Georgia
1987	T. W. Burnell	University of Kentucky
1986	M. J. Wylie	Texas A&M University
1985	M. W. Richards	Clemson University
1984	J. C. Betts	Texas A&M University
1983	J. B. Lutz	University of Georgia
1982	K. R. Pond	Texas A&M University
1981	L. W. Greene	Virginia Tech University
1980	D. K. Aaron	University of Kentucky
1979	T. W. Robb	University of Kentucky
1978	E. F. Gray	University of Kentucky
1977	T. A. Puglisi	University of Georgia
1976	D. L. Thomas	Oklahoma State University
1975	J. C. Cornwell	Louisiana State University
1974	D. M. Hallford	Oklahoma State University
1973	A. C. Mills	University of Florida
1972	C. McLellan, Jr.	Oklahoma State University
1971	C. L. Fields	University of Kentucky
1970	A. R. Bellve	North Carolina State University
1969	W. L. Brown	Auburn University
1968	W. E. Powell	Auburn University
1967	F. W. Bazer	North Carolina State University
1966	D. G. Ely	University of Kentucky
1965	R. D. Goodrich	Oklahoma State University
1964	C. K. Vincent	North Carolina State University
1963	C. B. Ramsey	University of Tennessee
1962	J. R. Crockett	University of Florida

## Undergraduate Student Paper Award

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2017	T. C. Rocha	University of Arkansas
2016	F. W. Pohlman	University of Arkansas
2015	T. Rocha	Texas A&M University
2014	K. M. Doran	Berry College
2013	A. Arellano	Texas A&M University
2012	W. B. Smith	Auburn University
2011	J. Tyus	Tennessee State University
2010	W. N. Tapp III	University of Arkansas
2009	C.M. Ballou	North Carolina State University
2008	C.R. Boldt	Texas A&M University
2007	K. Starkey	University of Arkansas
2006	D. Sykes	Mississippi State University
2005	N. Burdick	Texas A&M University- Kingsville
2004	J. L. Roberts	Oklahoma State University
2003	M. Seitz	Mississippi State University
2002	B. Spader	University of Missouri
2001	R. Horsley	Virginia Tech University
2000	B. Robbins	Virginia Tech University
1999	J. L. Bardugone	Virginia Tech University
1998	S. F. Flohr	Virginia Tech University
1997	T. M. Weick	Louisiana State University
1996	K. J. Goodson	Texas A&M University
1995	B. C. Bloom	Auburn University
1994	B. Good	Oklahoma State University
1993	C. J. Kirby	1North Carolina State University











## **Meeting Sponsors\***

### **PLATINUM LEVEL**

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Central Life Sciences

ASAS Foundation

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### **GOLD LEVEL**

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CJ America

### **SILVER LEVEL**

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WinPak

*\*as of January 4, 2018*



## **Future Meeting Locations**

**2019**

January 26–29 / Oklahoma City, OK