

# **SOUTHERN SECTION**

**American Society of Animal Science**

## **ANNUAL MEETING**

**February 1-4, 2014  
Dallas, Texas**

**In conjunction with the 2014 Annual  
Convention of the Southern Association  
of Agricultural Scientists**

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**Swine Industry Award for Innovation**  
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Elanco Animal Health  
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Vetmedica Division  
St. Joseph, MO

**Young Animal Scientist – Education**  
Alltech  
Thomasville, GA

**Undergraduate Paper Competition**

**Graduate Student Research Abstract  
Competition**

## **PROGRAM EVENTS**

*Most events will take place at the Sheraton Dallas Hotel (SH) and the Downtown Dallas Conference Center (DDCC); these two buildings are connected via skywalk. Please make note of which building the listed room is located in.*

### **Friday, January 31**

Academic Quadrathlon (AQ)  
9:00 PM Advisors Meeting  
Courtyard by Marriott  
College Station, TX

### **Saturday, February 1**

AQ Lab Practicum and Written Exam  
Department of Animal Science  
Texas A&M University  
College Station, TX

### **Sunday, February 2**

AQ Oral Preparation  
6:30 AM–noon  
Pearl Rooms 1, 2, 3, 4 (SH)

AQ Oral Presentation  
8:00 AM–Noon  
Pearl Room 5 (SH)

AQ Quiz Bowl  
8:00 AM–1:00 PM  
Austin Ballroom 2 (SH)

AQ Quiz Bowl Championship/Awards  
and Awards Program  
8:00 AM–4:00 PM  
Austin Ballroom 1 (SH)

SCC 81: Sustainable Small Ruminant  
Production IEG  
8:30 AM–4:00 PM  
Majestic Room 1 (SH)

Registration  
11:00 AM–4:00 PM  
Grand Hall Preconvene (DDCC)

SERA 41: Beef Cattle Production Using  
Forages in the Southeast  
1:00 PM–4:00 PM  
Pearl Room 5 (SH)

SAAS Board Meeting  
2:30 PM–3:30 PM  
Dallas Ballroom A1 (DDCC)

SAAS Business Meeting  
4:00 PM–4:15 PM  
Dallas Ballroom A1 (DDCC)

SAAS Current Sessions and Graduate  
Student Mixer  
4:15 PM–5:30 PM  
Dallas Ballrooms A1, A2, A3 (DDCC)

SAAS Reception/Super Bowl Party  
5:30 PM–10:00 PM  
Eddie Deen's Ranch - Offsite  
(Continuous Bus Shuttle will start at 5 PM –  
Outside Draft Lounge)

SS-ASAS Advisory Committee and  
Executive Committee  
6:00 PM–8:00 PM  
Majestic Room 2 (SH)

### **Monday, February 3**

*Interested in taking the ARPAS exam at the ASAS  
Southern Section meeting?  
Contact ARPAS at [arpas@assochq.org](mailto:arpas@assochq.org) for  
information or to schedule an exam.*

Registration  
7:30 AM–4:00 PM  
Grand Hall Preconvene (DDCC)

SS-ASAS Coffee Break  
9:30 AM–10:30 AM

SS-ASAS Business Meeting and  
Awards Ceremony  
5:00 PM–7:00 PM  
Dallas Ballroom A2 (DDCC)

Small Ruminant Subcommittee of the  
NAGP  
7:00 PM–9:15 PM  
Majestic Room 5 (SH)

**Tuesday, February 4**

SAAS Board Breakfast Meeting

7:00 AM–10:00 AM

Chef's Table (SH)

Registration

8:00 AM–Noon

Grand Hall Preconvene (DDCC)

Graduate Student Lunch and Learn

Noon–2:00 PM

Kitchen's Garden (SH)

Extension Luncheon

Noon–2:00 PM

Dallas Ballroom C (DDCC)



# SYMPOSIA AND ORAL SESSIONS

## Monday, February 3

### Bill E. Kunkle Interdisciplinary Beef Symposium from NOVUS International

Chair: Jeffrey W. Lehmkuhler,  
University of Kentucky  
Majestic Room 6, Sheraton Dallas Hotel

8:00 AM

#### **Introduction.**

*J. W. Lehmkuhler, University of Kentucky, Lexington*

8:10 AM

1

**Bill E. Kunkle Interdisciplinary Beef Symposium.**  
*J. D. Arthington<sup>\*1</sup> and M. H. Poore<sup>2, 1</sup>UF/IFAS Range  
Cattle Research and Education Center, Ona, FL,  
<sup>2</sup>North Carolina State University, Raleigh*

8:30 AM

2

**Practical developments in managing animal  
welfare in beef cattle. What does the future hold?**  
*M. S. Calvo-Lorenzo<sup>\*</sup>, Oklahoma State University,  
Stillwater*

9:15 AM

3

**Integrating physiological responses with  
endocrine biomarkers to effectively evaluate  
stress and well-being in beef cattle.**  
*J. A. Carroll<sup>\*</sup>, USDA-ARS, Livestock Issues Research  
Unit, Lubbock, TX*

10:00 AM

**Break**

10:15 AM

4

**Animal welfare concerns for livestock exposed to  
adverse environmental conditions.**  
*T. L. Mader<sup>\*</sup>, University of Nebraska, Lincoln*

11:00 AM

5

**Temperament and training influences growth and  
reproduction in *Bos taurus* and *B. indicus* cattle.**  
*R. F. Cooke<sup>\*</sup>, Oregon State University - EOARC  
Burns, Burns*

This symposium was sponsored by:



## Graduate Student Competition I

Chair: Matthew J. Hersom,  
University of Florida  
Majestic Room 5, Sheraton Dallas Hotel

- 8:00 AM 29  
**Relationship between the rumen microbiome and residual feed intake-efficiency of Brahman Bulls stocked on Bermudagrass pastures**  
*J. C. McCann<sup>1</sup>, L. M. Wiley<sup>1</sup>, T. D. Forbes<sup>2</sup>, F. M. Rouquette<sup>3</sup> and L. O. Tedeschi<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas A&M AgriLife Research, Uvalde, <sup>3</sup>Texas A&M AgriLife Research, Overton*
- 8:15 AM 30  
**Evaluation of lactic acid and sodium metasilicate on microbial parameters of fresh beef**  
*S. L. DeGeer<sup>1</sup>, L. Wang<sup>2</sup>, M. Singh<sup>3</sup> and C. Bratcher<sup>2</sup>, <sup>1</sup>Auburn University, Auburn University, AL, <sup>2</sup>Auburn University, Auburn, AL, <sup>3</sup>Purdue University, West Lafayette, IN*
- 8:30 AM 31  
**Learning and memory recall of horses tranquilized with acepromazine maleate.**  
*L. N. Powell<sup>1</sup>, C. A. McCall<sup>1</sup>, W. H. McElhenney<sup>2</sup> and P. J. Tyler<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Tuskegee University, Tuskegee, AL*
- 8:45 AM 32  
**Prenatal stress influences the insulin response to a glucose challenge in yearling Brahman Heifers.**  
*S. E. Schmidt<sup>1,2</sup>, M. C. Roberts<sup>1,2</sup>, D. M. Price<sup>2,3</sup>, B. P. Littlejohn<sup>2,3</sup>, R. C. Vann<sup>4</sup>, J. A. Carroll<sup>5</sup>, N. C. Burdick Sanchez<sup>5</sup>, D. A. Neuendorff<sup>2</sup>, A. W. Lewis<sup>2</sup>, T. H. Welsh, Jr.<sup>3,6</sup> and R. D. Randel<sup>1</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 Department of Animal Science, College Station, <sup>4</sup>MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond, <sup>5</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>6</sup>Texas A&M AgriLife Research, College Station*
- 9:00 AM 33  
**The effects of a tannin-rich pine bark pellet diet on parasitic nematode infections and carcass characteristics of grazing meat goats.**  
*D. Reynolds<sup>1</sup>, B. R. Min<sup>1</sup>, O. Bolden-Tiller<sup>2</sup>, N. K. Gurung<sup>1</sup>, W. H. McElhenney<sup>1</sup>, E. Rhoden<sup>1</sup>, J. E. Miller<sup>3</sup>, J. H. Lee<sup>4</sup> and J. K. Shin<sup>1</sup>, <sup>1</sup>Tuskegee University, Tuskegee, AL, <sup>2</sup>Tuskegee University, Tuskegee Institute, AL, <sup>3</sup>Louisiana State University, Baton Rouge, <sup>4</sup>Fort-Valley State University, Fort-Valley, GA*
- 9:15 AM 34  
**Effects of stacking technologies on hay consumption, waste and performance in a cow/calf enterprise.**  
*A. M. Rippe<sup>1</sup>, J. D. Sparks, S. K. Linneen, A. L. McGee and D. L. Lalman, Oklahoma State University, Stillwater*

9:30 AM

35

**Effect of surgical castration with or without oral meloxicam on the acute inflammatory response in yearling beef bulls.**

*S. L. Roberts<sup>1</sup>, H. D. Hughes<sup>1</sup>, N. C. Burdick Sanchez<sup>2</sup>, J. A. Carroll<sup>2</sup>, J. G. Powell<sup>3</sup>, D. Hubbell<sup>4</sup> and J. T. Richeson<sup>1</sup>, <sup>1</sup>Department of Agricultural Sciences, West Texas A&M University, Canyon, <sup>2</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>3</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, <sup>4</sup>Livestock and Forestry Research Station, University of Arkansas Division of Agriculture, Batesville*

9:45 AM

**Break**

10:00 AM

36

**Using performance data and reproductive measurements to predict fertility in replacement beef heifers.**

*M. W. Studstill<sup>1</sup>, L. Stewart, A. L. Jones, R. D. Berghaus and P. T. Cannon, University of Georgia, Athens*

10:15 AM

37

**Production, digestion and ruminal fermentation by beef cattle limit-fed co-product feedstuffs.**

*W. B. Smith<sup>1</sup>, K. P. Coffey<sup>1</sup>, J. D. Tucker<sup>2</sup>, D. S. Hubbell, III<sup>2</sup>, R. T. Rhein<sup>1</sup>, E. B. Kegley<sup>1</sup>, D. Philipp<sup>1</sup>, J. D. Caldwell<sup>3</sup> and A. N. Young<sup>1</sup>, <sup>1</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, <sup>2</sup>Livestock and Forestry Research Station, University of Arkansas Division of Agriculture, Batesville, <sup>3</sup>Department of Agriculture and Environmental Sciences, Lincoln University, Jefferson City, MO*

10:30 AM

38

**Survival comparison of shiga toxin producing Escherichia coli (STEC) O26 and farm isolated O26 in ground beef and the environment.**

*C. E. Palmer<sup>1</sup>, C. L. Bratcher<sup>1</sup>, M. Singh<sup>2</sup> and L. Wang<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Purdue University, West Lafayette, IN*

10:45 AM

39

**Stocker cattle performance on cereal rye and rye-based cool season annual mixtures.**

*E. M. Ford<sup>1</sup>, D. Hancock and L. Stewart, University of Georgia, Athens*

11:00 AM

40

**Utilization of by-product feeds to decrease feed cost while maintaining performance of yearling beef bulls.**

*J. M. Lourenço<sup>1</sup>, N. DiLorenzo<sup>2</sup>, A. M. Stelzleni<sup>1</sup> and R. L. Stewart, Jr.<sup>1</sup>, <sup>1</sup>University of Georgia, Athens, <sup>2</sup>University of Florida, Quincy*

11:15 AM

41

**Effects of dam cow size on subsequent female offspring dry matter and residual feed intake.**

*R. Martin, B. Buttrey and R. Walker, Hill Farm Research Station, LSU AgCenter, Homer, LA*

11:30 AM 42

**National Pork Board Swine Industry Award for Innovation: The economic impact of removing ractopamine from pork production.**

*M. D. Johnson<sup>1</sup>, D. P. Anderson<sup>1</sup>, T. A. Wickersham<sup>1</sup> and J. E. Sawyer<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas AgriLife Research, College Station*

**Undergraduate Student Competition**

Chair: James R. Strickland,  
USDA - ARS, Forage Animal Prod Res Unit  
Majestic Room 4, Sheraton Dallas Hotel

9:00 AM 110

**Palatability of teff grass by horses.**

*R. R. Cummins<sup>1</sup>, K. P. Coffey<sup>1</sup>, N. E. Jack<sup>1</sup>, K. Jogan<sup>1</sup>, E. E. Gbur<sup>2</sup>, R. T. Rhein<sup>1</sup>, D. Philipp<sup>1</sup>, M. Adams<sup>1</sup>, W. B. Smith<sup>1</sup> and K. N. Clayton<sup>1</sup>, <sup>1</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, <sup>2</sup>Dept. of Agri. Statistics, Univ. of Arkansas Division of Agriculture, Fayetteville*

9:15 AM 111

**Effect of Hydration Hay™ on water intake, blood urea nitrogen to creatinine ratio and vital signs of horses transported long distances during the summer.**

*H. M. Huff<sup>1</sup>, J. L. Wahrmund<sup>1</sup>, H. N. Graham<sup>1</sup>, M. E. Gordon<sup>2</sup>, K. R. Vineyard<sup>2</sup> and K. L. Dowdle<sup>1</sup>, <sup>1</sup>Texas A&M University-Commerce, Commerce, <sup>2</sup>Purina Animal Nutrition LLC, St. Louis, MO*

9:30 AM 112

**Neuropeptide and adipokine gene expression profiles differ between lean and obese Mangalica pigs.**

*M. Marvin<sup>1</sup>, S. Perkins, J. Bartosh, C. Foradori and T. D. Brandebourg, Auburn University, Auburn, AL*

9:45 AM 113

**Relationship between circulating concentrations of bovine pregnancy associated glycoproteins (bPAGs) and embryonic growth during early gestation.**

*K. M. Doran<sup>1</sup>, K. G. Pohler<sup>2</sup> and M. F. Smith<sup>2</sup>, <sup>1</sup>Berry College, Mount Berry, GA, <sup>2</sup>University of Missouri, Columbia*

10:00 AM 114

**Magnesium bioavailability from dolomitic limestone using ram lambs.**

*T. N. Drane<sup>1</sup>, W. B. Smith<sup>1</sup>, J. D. Caldwell<sup>2</sup>, K. P. Coffey<sup>1</sup>, A. N. Young<sup>1</sup>, E. A. Backes<sup>1,2</sup>, B. C. Shanks<sup>2</sup> and J. Scaggs<sup>3</sup>, <sup>1</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, <sup>2</sup>Department of Agriculture and Environmental Sciences, Lincoln University, Jefferson City, MO, <sup>3</sup>Ozark Minerals, LLC, Patterson, MO*

10:15 AM Break

- 10:30 AM 115  
**Influence of ambient temperature on exercise performance in young horses.**  
*K. S. Carlson<sup>1</sup>, M. J. Anderson<sup>2</sup>, K. N. Walter<sup>3</sup> and J. L. Lucia<sup>2</sup>, <sup>1</sup>Sam Houston State University, Huntsville, TX, <sup>2</sup>Sam Houston State University, Huntsville, TX, <sup>3</sup>Truman State University, Kirksville, MO*
- 10:45 AM 116  
**The alleviation of pain associated with disbudding.**  
*A. Mathias<sup>1</sup>, J. Gilliam<sup>2</sup>, D. R. Stein<sup>1</sup> and M. S. Calvo-Lorenzo<sup>1</sup>, <sup>1</sup>Oklahoma State University, Stillwater, <sup>2</sup>Oklahoma State University Center for Veterinary Health Sciences, Stillwater*
- 11:00 AM 117  
**Hair shedding scores relating to maternal traits and productivity in beef cattle.**  
*L. D. Watson<sup>1</sup>, A. H. Brown, Jr.<sup>2</sup>, J. G. Powell<sup>2</sup>, K. Anschutz<sup>2</sup>, B. R. Lindsey<sup>1</sup> and C. F. Rosenkrans<sup>2</sup>, <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville*
- 11:15 AM 118  
**Isoflupredone acetate as ancillary therapy for bovine respiratory disease in high-risk stocker calves.**  
*C. E. Crews<sup>1</sup>, J. G. Powell<sup>2</sup>, E. B. Kegley<sup>2</sup>, J. L. Reynolds<sup>1</sup> and P. Hornsby<sup>1</sup>, <sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville*

## **Breeding and Genetics**

Chair: Matthew D. Garcia  
Baton Rouge, LA

Majestic Room 6, Sheraton Dallas Hotel

- 1:00 PM 6  
**Growth and reproductive performances in F1 crossbred heifers from Hereford, Braford, and Bonsmara sires and Angus and Brangus dams.**  
*W. E. Wyatt<sup>1</sup>, R. J. Collier<sup>2</sup>, D. C. Blouin<sup>3</sup>, G. Scaglia<sup>1</sup> and J. L. Collier<sup>2</sup>, <sup>1</sup>LSU AgCenter, Jeanerette, LA, <sup>2</sup>University of Arizona, Tucson, <sup>3</sup>LSU AgCenter, Baton Rouge, LA*
- 1:15 PM 7  
**Evaluation of SNP's located on three candidate genes with milk production and fertility traits in dairy cattle.**  
*M. D. Garcia<sup>1</sup>, LSU, Baton Rouge, LA*
- 1:30 PM 8  
**Penalization of treated records for use in the estimation of genetic parameters in Dorper sheep.**  
*L. Ngere<sup>1</sup>, D. G. Riley<sup>2</sup> and J. VanWyk<sup>3</sup>, <sup>1</sup>Texas A & M University, College Station, <sup>2</sup>Texas A&M AgriLife Research, College Station, <sup>3</sup>University of Pretoria, Onderstepoort, South Africa*

1:45 PM

9

**Breed and sex influence on calf birth weight in purebred and crossbred Angus and Nellore calves.**

*L. W. Bauer<sup>\*1</sup>, J. O. Sanders<sup>1</sup>, D. G. Riley<sup>1</sup> and A. D. Herring<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas AgriLife Research, College Station*

2:00 PM

10

**Influence of inclusion of genomic or pedigree relatedness and designed family structure on association analyses of calf birth weight.**

*D. G. Riley<sup>\*1</sup>, A. D. Herring<sup>1</sup>, P. K. Riggs<sup>1</sup>, C. A. Gill<sup>1</sup>, J. E. Sawyer<sup>2</sup> and J. O. Sanders<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas AgriLife Research, College Station*

2:15 PM

**Break**

2:30 PM

11

**Estimation of genetic parameters for performance traits in Brahman stocker cattle.**

*M. R. Woolfolk<sup>1</sup>, Texas A&M University, College Station*

2:45 PM

12

**Relationships between temperament and hematological responses of crossbred steers following bovine viral diarrhea virus challenge.**

*X. Fang<sup>\*1</sup>, E. D. Downey<sup>1</sup>, C. A. Runyan<sup>1</sup>, T. B. Hairgrove<sup>2</sup>, J. E. Sawyer<sup>3</sup>, W. Mwangi<sup>1</sup>, C. A. Gill<sup>1</sup> and A. D. Herring<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas AgriLife Extension, College Station, <sup>3</sup>Texas AgriLife Research, College Station*

3:00 PM

13

**Carcass weight and behavior of Angus- and Angus-Hereford crossbred steers are associated with heat shock protein 70 genetic polymorphisms.**

*M. L. Thomas<sup>\*1</sup>, Y. V. Thaxton<sup>2</sup>, A. H. Brown, Jr.<sup>1</sup>, J. T. Richeson<sup>3</sup>, J. G. Powell<sup>1</sup> and C. F. Rosenkrans<sup>1</sup>, <sup>1</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, <sup>2</sup>Center for Food Animal Wellbeing, University of Arkansas, Fayetteville, <sup>3</sup>Department of Agricultural Sciences, West Texas A&M University, Canyon*

3:15 PM

14

**Effect of hair shedding on performance in Angus, Hereford, and Charolais dams and the relationship to surface temperatures.**

*S. R. Plank<sup>1</sup>, T. Smith<sup>1</sup>, S. T. Willard<sup>1</sup> and N. B. Simmons<sup>1</sup>, Mississippi State University, Mississippi State*

## Graduate Student Competition II

Chair: Matthew J. Hersom,  
University of Florida  
Majestic Room 5, Sheraton Dallas Hotel

1:00 PM 43

**Sampling post-scalding does not impair RNA integrity or real-time PCR in market weight Yorkshire pigs.**

*A. E. Bohan<sup>1</sup>, M. Marvin, S. Perkins, J. Bartosh, C. Bratcher, W. G. Bergen and T. D. Brandebourg, Auburn University, Auburn, AL*

1:15 PM 44

**Effects of sugar substitutes on feed intake and growth performance of broiler chicks.**

*A. A. Zender<sup>1</sup>, M. D. Hudson<sup>2</sup> and C. I. Shipp<sup>1</sup>,  
<sup>1</sup>Missouri State University, Springfield, <sup>2</sup>Missouri State University, Brighton*

1:30 PM 45

**Effects of increasing levels of distillers dried grains on in vitro ruminal gas production.**

*C. I. Shipp<sup>1</sup>, A. A. Zender<sup>2</sup> and M. D. Hudson<sup>3</sup>,  
<sup>1</sup>Missouri State University, Dadeville, <sup>2</sup>Missouri State University, Springfield, <sup>3</sup>Missouri State University, Brighton*

1:45 PM 46

**Age influences the expression of estrogen receptor isoforms alpha and beta in the choroid plexus of developing gilts.**

*L. Ayala<sup>1</sup>, A. A. Arellano<sup>1</sup>, A. Calderon<sup>1</sup>, R. A. Flores<sup>1</sup>, E. C. Taylor<sup>1</sup>, R. L. Stanko<sup>1,2</sup> and M. R. Garcia<sup>1</sup>,  
<sup>1</sup>Texas A&M University-Kingsville, Kingsville, <sup>2</sup>Animal Reproduction Laboratory, Texas A&M University Agricultural Research Station, Beeville*

2:00 PM 47

**Changes in trace minerals in lambs fed sericea lespedeza and administered sodium molybdate.**

*M. Acharya<sup>1</sup>, J. M. Burke<sup>2</sup>, J. E. Miller<sup>3</sup>, T. H. Terrill<sup>4</sup>, K. P. Coffey<sup>5</sup>, E. Smyth<sup>1</sup> and C. F. Rosenkrans<sup>5</sup>,  
<sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>USDA, ARS, Booneville, AR, <sup>3</sup>Louisiana State University, Baton Rouge, <sup>4</sup>Fort Valley State University, Fort Valley, GA, <sup>5</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville*

2:15 PM 48

**Microbial diversity of deli roast beef and survival of *Listeria monocytogenes*.**

*J. W. Broady<sup>1</sup>, M. Liles, C. L. Bratcher, E. Schwartz and L. Wang, Auburn University, Auburn, AL*

2:30 PM 49

**Effect of dietary starch level on muscle glycogen replenishment in performance horses.**

*C. E. Vonderohe<sup>1</sup>, S. I. Valasek<sup>2</sup>, B. R. McKim<sup>2</sup>, C. A. Cavinder<sup>2</sup>, J. D. Fluckey<sup>2</sup> and D. H. Sigler<sup>2</sup>,  
<sup>1</sup>Purdue University, West Lafayette, IN, <sup>2</sup>Texas A&M University, College Station*

2:45 PM **Break**

3:00 PM 50

**Impact of receiving bovine respiratory disease and ancillary therapy utilization on steer finishing performance, efficiency, carcass characteristics, and lung scores.**

*B. K. Wilson<sup>\*</sup>, C. L. Maxwell, D. L. Step, C. Richards and C. R. Krehbiel, Oklahoma State University, Stillwater*

3:15 PM 51

**Performance and behavioral measurements by fall-born heifer calves traditionally weaned with or without companion goats 1-year summary.**

*E. A. Backes<sup>1,2</sup>, J. G. Powell<sup>2</sup>, J. D. Caldwell<sup>1</sup>, E. B. Kegley<sup>2</sup>, A. W. Ryan<sup>2</sup>, P. Hornsby<sup>2</sup>, J. L. Reynolds<sup>2</sup>, M. L. Thomas<sup>2</sup>, K. Anschutz<sup>2</sup> and B. C. Shanks<sup>1</sup>,  
<sup>1</sup>Department of Agriculture and Environmental Sciences, Lincoln University, Jefferson City, MO,  
<sup>2</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville*

3:30 PM 52

**Site of prostaglandin injection does not alter effectiveness of estrous synchronization protocols.**

*L. K. Mabry<sup>\*1</sup>, W. Greene<sup>2</sup>, D. M. Kniffen<sup>3</sup>, C. L. Pickworth Poole<sup>1,2</sup> and D. H. Poole<sup>1</sup>,  
<sup>1</sup>North Carolina State University, Raleigh,  
<sup>2</sup>The Ohio State University/ATI, Wooster,  
<sup>3</sup>The Pennsylvania State University, University Park*

3:45 PM 53

**Effects of meal timing on ghrelin, growth hormone, and insulin sensitivity in male holstein calves.**

*E. L. Chartier<sup>\*</sup>, C. C. Williams, B. F. Jenny, D. L. Thompson, S. Blair, J. Anderson and A. H. Dolejsiova, Louisiana State University, Baton Rouge*

4:00 PM 54

**Vaccinated Angus-Nellore yearling steers have reduced platelet and lymphocyte decline following bovine viral diarrhea virus type 1b challenge.**

*E. D. Downey<sup>\*1</sup>, X. Fang<sup>1</sup>, C. Runyan<sup>1</sup>, J. E. Sawyer<sup>1,2</sup>, T. B. Hairgrove<sup>3</sup>, J. F. Ridpath<sup>4</sup> and A. D. Herring<sup>1,2</sup>,  
<sup>1</sup>Texas A&M University, College Station,  
<sup>2</sup>Texas AgriLife Research, College Station,  
<sup>3</sup>Texas AgriLife Extension, College Station,  
<sup>4</sup>National Animal Disease Center, USDA-ARS, Ames, IA*

4:15 PM 55

**Effect of Hydration Hay™ on blood metabolites, packed cell volume, and vital signs of horses transported long distances during summer conditions.**

*H. N. Graham<sup>\*1</sup>, J. L. Wahrmond<sup>1</sup>, M. E. Gordon<sup>2</sup>, K. R. Vineyard<sup>2</sup>, K. L. Dowdle<sup>1</sup> and L. L. Walton<sup>1</sup>,  
<sup>1</sup>Texas A&M University-Commerce, Commerce,  
<sup>2</sup>Purina Animal Nutrition LLC, St. Louis, MO*



4:30 PM

56

**Relationship between single nucleotide polymorphisms of the bovine IL-8, NOS2, and NOS3 genes with disease resistance and performance in newly received beef calves.**

*A. J. Davis<sup>1</sup>, D. L. Kreider<sup>1</sup>, E. B. Kegley<sup>1</sup>, J. T. Richeson<sup>2</sup>, D. L. Galloway<sup>1</sup>, R. W. Rorie<sup>1</sup> and J. Hawley<sup>1</sup>, <sup>1</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, AR, <sup>2</sup>Department of Agricultural Sciences, West Texas A&M University, Canyon, TX*

## **Ruminant Animal Production I**

Chair: Ryan Reuter,  
The Noble Foundation, Inc.  
Dallas Ballroom A2, Downtown Dallas  
Conference Center

1:00 PM

77

**Starch utilization in cattle fed SFC-based finishing diets containing post-extraction algal residue for nitrogen supplementation.**

*C. L. Brauer<sup>1</sup>, J. O. Sarturi<sup>2</sup>, J. C. MacDonald<sup>3</sup>, T. A. Wickersham<sup>4</sup>, N. A. Cole<sup>5</sup>, B. Clark<sup>5</sup> and F. T. McCollum<sup>6</sup>, <sup>1</sup>West Texas A & M University, Canyon, <sup>2</sup>Texas Tech University, Lubbock, <sup>3</sup>University of Nebraska-Lincoln, Lincoln, <sup>4</sup>Texas A&M University, College Station, <sup>5</sup>USDA ARS, Bushland, TX, <sup>6</sup>Texas A & M AgriLife Research and Extension Center, Amarillo*

1:15 PM

78

**Prevalence of E. coli O157:H7 shedding at weaning and post-weaning in Brahman calves.**

*E. Gart<sup>1</sup>, T. H. Welsh, Jr.<sup>2</sup>, R. D. Randel<sup>3</sup>, R. Vann<sup>4</sup> and S. D. Lawhon<sup>1</sup>, <sup>1</sup>College of Veterinary Medicine, Texas A&M University, College Station, <sup>2</sup>Texas A&M Department of Animal Science, College Station, <sup>3</sup>Texas A&M AgriLife Research, Overton, <sup>4</sup>MAFES-Brown Loam, Mississippi State University, Raymond*

1:30 PM

79

**Effects of creep feeding a protein supplement on performance of cows and calves grazing limpgrass pastures.**

*P. A. Lancaster<sup>1</sup>, J. M. B. Vendramini<sup>2</sup>, A. D. Aguiar<sup>2</sup>, O. F. R. Cunha<sup>2</sup>, G. Caputti<sup>2</sup>, C. Bazzo<sup>2</sup> and J. D. Arthington<sup>2</sup>, <sup>1</sup>Oklahoma Agricultural Experiment Station, Stillwater, <sup>2</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL*

1:45 PM

80

**Assessment of copper deficiency in beef cattle through blood and skin biomarkers.**

*J. G. Carter<sup>1</sup>, J. Haffner<sup>2</sup>, J. D. West<sup>3</sup> and W. W. Gill<sup>4</sup>, <sup>1</sup>Middle Tennessee State Univ, Murfreesboro, <sup>2</sup>Middle Tennessee State University, Murfreesboro, <sup>3</sup>Vanderbilt University, Nashville, TN, <sup>4</sup>MTSU, Murfreesboro, TN*

2:00 PM 81

**The effects of prenatal stress and temperament on feeding behavior in post-weaning Brahman bulls.**

*M. C. Roberts<sup>\*1,2</sup>, R. C. Vann<sup>3</sup>, J. P. Banta<sup>2</sup>, D. G. Riley<sup>1</sup>, J. A. Carroll<sup>4</sup>, B. P. Littlejohn<sup>1,2</sup>, D. M. Price<sup>2,5</sup>, T. H. Welsh<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>MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond, <sup>4</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, <sup>5</sup>Texas A&M Department of Animal Science, College Station*

2:15 PM **Break**

2:30 PM 82

**Effects of Rumensin and Fenbendazole administration on measures of gastrointestinal parasite load and performance of early weaned beef calves.**

*P. G. M. D. A. Martins<sup>\*1</sup>, J. D. Arthington<sup>1</sup>, G. P. Caputti<sup>1</sup>, O. F. R. Cunha<sup>1</sup>, A. C. J. Pereira<sup>2</sup> and J. M. B. Vendramini<sup>1</sup>, <sup>1</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL, <sup>2</sup>Elanco Animal Health, Greenfield, IN*

2:45 PM 83

**Effect of protein supplementation and forage allowance on heifer growth and reproductive development.**

*S. E. Lyons<sup>\*1</sup>, M. H. Poore<sup>1</sup>, D. H. Poole<sup>1</sup>, S. R. Freeman<sup>1</sup>, A. D. Shaeffer<sup>1</sup>, M. L. Alley<sup>1</sup> and M. E. Drewnoski<sup>2</sup>, <sup>1</sup>North Carolina State University, Raleigh, <sup>2</sup>University of Idaho, Moscow*

3:00 PM 84

**Effect of replacing dried distillers' grains with post extraction algal residue on performance of growing steers.**

*C. J. Hayes<sup>\*</sup>, Texas A&M University, College Station*

3:15 PM 85

**Evaluation of weight gain and rectal temperature across vaccine type in Bos indicus crossbred steers challenged with bovine viral diarrhea virus.**

*C. A. Runyan<sup>\*1</sup>, X. Fang<sup>2</sup>, E. D. Downey<sup>2</sup>, J. E. Sawyer<sup>3</sup>, T. B. Hairgrove<sup>4</sup>, J. F. Ridpath<sup>5</sup> and A. D. Herring<sup>2</sup>, <sup>1</sup>Angelo State University, San Angelo, TX, <sup>2</sup>Texas A&M University, College Station, <sup>3</sup>Texas AgriLife Research, College Station, <sup>4</sup>Texas AgriLife Extension, College Station, <sup>5</sup>National Animal Disease Center, ASDA-ARS, Ames, IA*

3:30 PM 86

**Supplementation of monensin to beef cows consuming low-quality forage during late gestation and early lactation.**

*S. K. Linneen<sup>\*</sup>, J. D. Sparks, A. L. McGee, D. L. Lalman, D. R. Stein and G. W. Horn, Oklahoma State University, Stillwater*

3:45 PM

87

**Effect of stocker production systems on estimated greenhouse gas emissions.**

*P. A. Lancaster\*, B. D. Wallis, J. G. Warren, D. B. Arnall, T. E. Ochsner, S. R. Lancaster and G. W. Horn, Oklahoma Agricultural Experiment Station, Stillwater*

## **Meats**

Chair: Susan K. Duckett,  
Clemson University

Majestic Room 3, Sheraton Dallas Hotel

2:00 PM

57

**Beef cattle carcass characteristics from continuously stocked pastures of wheat, triticale and ryegrass mixtures.**

*C. J. Weissend\*, K. B. Marchant and C. Bratcher, Auburn University, Auburn, AL*

58

Withdrawn by Author

2:15 PM

59

**Fatty acid analysis of specific adipose locations when steers were fed corn by-products.**

*S. E. Belanger\*, L. Stewart, J. O. Segers, R. J. Kersey and A. M. Stelzleni, University of Georgia, Athens*

2:30 PM

60

**Characterizing growth performance and meat quality in Mangalica pigs.**

*M. McMurray\*, S. Perkins, M. Marvin, J. Bartosh, C. Bratcher and T. D. Brandebourg, Auburn University, Auburn, AL*

# Tuesday, February 4

## Extension I

Chair: R. Lawton Stewart, Jr.,  
University of Georgia  
Dallas Ballroom D3, Downtown Dallas  
Conference Center

- 8:30 AM 15  
**Hands-On workshop for women cattle producers: advanced BQA training and truck/trailer safety.**  
*A. D. Shaeffer<sup>1</sup>, M. H. Poore and M. L. Alley, North Carolina State University, Raleigh*
- 8:45 AM 16  
**Evaluation of internet traffic on a statewide beef cattle extension website.**  
*J. A. Parish<sup>1</sup> and B. B. Karisch, Mississippi State University, Mississippi State*
- 9:00 AM 17  
**Hands-on workshop presents alternative forages for North Carolina beef cattle producers.**  
*P. M. Kennedy<sup>1</sup>, M. H. Poore, S. E. Lyons, A. D. Shaeffer and S. R. Freeman, North Carolina State University, Raleigh*
- 9:15 AM 18  
**Impact of a beef cattle youth leadership camp.**  
*B. B. Karisch<sup>1</sup>, J. A. Parish<sup>1</sup>, L. L. Peters<sup>2</sup> and S. B. Blossum<sup>2</sup>, <sup>1</sup>Mississippi State University, Mississippi State, <sup>2</sup>Mississippi Cattlemen's Association, Jackson, MS*
- 9:30 AM 19  
**Stakeholder feedback regarding the Department of Animal Science teaching programs at the University of Arkansas.**  
*T. R. Troxel<sup>1</sup>, M. L. Looper<sup>2</sup>, R. Poling<sup>1</sup> and B. Butler<sup>3</sup>, <sup>1</sup>University of Arkansas, Little Rock, <sup>2</sup>University of Arkansas, Division of Agriculture, Fayetteville, <sup>3</sup>University of Arkansas, Fayetteville*
- 9:45 AM **Break**
- 10:00 AM 20  
**Stakeholder feedback regarding the Department of Animal Science extension programs at the University of Arkansas.**  
*T. R. Troxel<sup>1</sup>, M. L. Looper<sup>2</sup>, R. Poling<sup>1</sup> and B. Butler<sup>3</sup>, <sup>1</sup>University of Arkansas, Little Rock, <sup>2</sup>University of Arkansas, Division of Agriculture, Fayetteville, <sup>3</sup>University of Arkansas, Fayetteville*
- 10:15 AM 21  
**Stakeholder feedback regarding the Department of Animal Science research programs at the University of Arkansas.**  
*M. L. Looper<sup>1</sup>, T. R. Troxel<sup>2</sup>, R. Poling<sup>2</sup> and B. Butler<sup>3</sup>, <sup>1</sup>University of Arkansas, Division of Agriculture, Fayetteville, <sup>2</sup>University of Arkansas, Little Rock, <sup>3</sup>University of Arkansas, Fayetteville*

10:30 AM 22

**Impact of a 4-H Replacement Beef Heifer Development Contest.**

*F. D. Jousan<sup>1</sup>, B. B. Karisch<sup>1</sup>, R. D. Higdon, III<sup>2</sup> and J. A. Parish<sup>1</sup>, <sup>1</sup>Mississippi State University, Mississippi State, <sup>2</sup>Mississippi State University Extension Service, Quitman*

10:45 AM 23

**Assessment of an environmental stewardship clinic series and a partnership among agencies to deliver watershed management education.**

*M. L. Marks<sup>1</sup>, N. V. Haley<sup>1</sup>, D. S. Miller<sup>1</sup>, M. K. Stanford<sup>1</sup>, C. M. Becker<sup>1</sup>, J. M. Johnson<sup>1,2</sup>, E. F. Brantley<sup>1,2</sup> and C. P. Landrem<sup>3</sup>, <sup>1</sup>Alabama Cooperative Extension System, Auburn, AL, <sup>2</sup>Auburn University, Auburn, AL, <sup>3</sup>Cherokee County Soil and Water District, Centre, AL*

## **Pastures and Forages**

Chair: Vanessa A. Corriher  
Texas A&M University  
Pearl Room 5, Sheraton Dallas Hotel

9:00 AM 61

**Beef cattle performance from grazed mixtures of triticale and wheat with ryegrass.**

*K. B. Marchant<sup>1</sup>, C. M. Holland<sup>1</sup>, B. E. Gamble<sup>2</sup>, S. P. Schmidt<sup>1</sup> and R. B. Muntifering<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Wiregrass Research and Extension Center, Headland, AL*

9:15 AM 62

**Stockpiled 'Tifton 85' bermudagrass for cow-calf production as influenced by nitrogen fertilization. I: Productivity and nutritive value.**

*C. M. Holland<sup>1</sup>, K. B. Marchant<sup>1</sup>, L. A. Kriese-Anderson<sup>1</sup>, B. E. Gamble<sup>2</sup> and R. B. Muntifering<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Wiregrass Research and Extension Center, Headland, AL*

9:30 AM 63

**Stockpiled 'Tifton 85' bermudagrass for cow-calf production as influenced by nitrogen fertilization. II: Cow and calf performance.**

*C. M. Holland<sup>1</sup>, K. B. Marchant<sup>1</sup>, L. A. Kriese-Anderson<sup>1</sup>, B. E. Gamble<sup>2</sup> and R. B. Muntifering<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Wiregrass Research and Extension Center, Headland, AL*

9:45 AM 64

**Evaluation of wheat and triticale forage for stocker production in the Gulf Coast region.**

*S. L. Dillard<sup>1</sup>, M. K. Mullenix<sup>2</sup>, B. E. Gamble<sup>3</sup>, C. M. Lin<sup>4</sup> and R. B. Muntifering<sup>4</sup>, <sup>1</sup>Auburn University, Auburn University, AL, <sup>2</sup>University of Florida, Gainesville, <sup>3</sup>Wiregrass Research and Extension Center, Headland, AL, <sup>4</sup>Auburn University, Auburn, AL*

10:00 AM **Break**

10:15 AM 65

**Incorporating crimson clover (*Trifolium incarnatum*) into ryegrass (*Lolium multiflorum* Lam.) pastures: Impact on yield, forage quality, and pasture N status.**

S. R. Freeman<sup>\*1</sup> and M. H. Poore<sup>2</sup>, <sup>1</sup>NC State University, Raleigh, <sup>2</sup>North Carolina State University, Raleigh

10:30 AM 66

**Setting stocking rate of wheat pasture based on forage allowance.**

P. Beck<sup>\*1</sup>, T. Hess<sup>2</sup> and D. Hubbell<sup>3</sup>, <sup>1</sup>University of Arkansas SWREC, Hope, <sup>2</sup>University of Arkansas LFRS, Batesville, <sup>3</sup>Livestock and Forestry Research Station, University of Arkansas Division of Agriculture, Batesville

10:45 AM 67

**Addition of clovers to tall fescue pastures improves nitrogen status of animals, forages and soils.**

H. M. Glennon<sup>\*</sup>, J. M. Luginbuhl, J. P. Mueller, J. Grossman and M. Schroeder-Moreno, North Carolina State University, Raleigh

11:00 AM 68

**The effects of mixed or sequential grazing on performance and reproductive measurements of Katahdin ewes and fall-calving Angus cows grazing stockpiled toxic tall fescue – 1 year summary.**

R. E. Daugherty Jr.<sup>\*1</sup>, J. D. Caldwell<sup>2</sup>, B. C. Shanks<sup>2</sup>, C. L. Boeckman<sup>1</sup>, C. A. DeOrnellis<sup>2</sup> and A. N. V. Stewart<sup>1</sup>, <sup>1</sup>Lincoln University, Jefferson City, MO, <sup>2</sup>Department of Agriculture and Environmental Sciences, Lincoln University, Jefferson City, MO

## Physiology

Chair: Jamie E. Larson,  
Mississippi State University  
Pearl Room 4, Sheraton Dallas Hotel

9:00 AM 69

**Growth and reproduction of replacement beef heifers is influenced by growth-promoting implants.**

T. Devine<sup>\*1</sup>, C. F. Rosenkrans<sup>2</sup>, D. Philipp<sup>2</sup>, D. Hubbell<sup>3</sup>, E. A. Backes<sup>2</sup>, A. Davis<sup>1</sup>, T. Lester<sup>1</sup>, R. W. Rorie<sup>2</sup>, C. Orr<sup>1</sup>, R. T. Rhein<sup>2</sup> and M. L. Loofer<sup>1</sup>, <sup>1</sup>University of Arkansas, Division of Agriculture, Fayetteville, <sup>2</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, <sup>3</sup>Livestock and Forestry Research Station, University of Arkansas Division of Agriculture, Batesville

9:15 AM

70

**Endophyte-infected fescue alters components of the acute phase response to lipopolysaccharide in beef heifers.**

A. W. Altman<sup>1</sup>, N. C. Burdick Sanchez<sup>2</sup>, J. A. Carroll<sup>2</sup>, T. B. Schmidt<sup>3</sup>, K. R. McLeod<sup>1</sup>, G. E. Aiken<sup>4</sup> and E. S. Vanzant<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, <sup>2</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>3</sup>University of Nebraska, Lincoln, <sup>4</sup>USDA-ARS, Lexington, KY

9:30 AM

71

**Form of selenium (Se) in free-choice mineral mix fed to maturing beef heifers differentially affects hepatic expression of genes responsible for Se metabolism.**

J. D. Patterson<sup>\*</sup> and J. C. Matthews, University of Kentucky, Lexington

9:45 AM

72

**Effects of maternal nutrient restriction during mid-to late gestation on uterine blood flow in beef cows.**

A. R. Coley<sup>\*</sup>, K. E. Brockus, C. G. Hart, L. V. Durst, S. R. Plank, T. Smith, J. E. Larson, B. J. Rude and C. O. Lemley, Mississippi State University, Mississippi State

10:15 AM

73

**The grazing of toxic tall fescue negatively impacts bull fertility.**

N. M. Long<sup>\*</sup>, J. G. Andrae, S. K. Duckett and S. L. Pratt, Clemson University, Clemson, SC

10:30 AM

74

**Yeast cell wall supplementation alters immune parameters in response to a Salmonella challenge in weaned pigs.**

N. C. Burdick Sanchez<sup>1</sup>, J. A. Carroll<sup>1</sup>, J. R. Corley<sup>2</sup>, J. O. Buntyn<sup>3</sup>, T. B. Schmidt<sup>4</sup>, P. R. Broadway<sup>5</sup> and T. R. Callaway<sup>6</sup>, <sup>1</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>2</sup>Lesaffre Feed Additives, Iola, TX, <sup>3</sup>University of Nebraska, Department of Animal Science, Lincoln, <sup>4</sup>University of Nebraska, Lincoln, <sup>5</sup>Texas Tech University, Wolfforth, <sup>6</sup>USDA-ARS, College Station, TX

10:45 AM

75

**Variations in the preferential binding of yeast probiotics to gram positive or gram negative bacteria.**

G. Posadas<sup>1</sup>, J. A. Carroll<sup>2</sup>, J. R. Corley<sup>3</sup>, A. Lawrence<sup>1</sup> and J. R. Donaldson<sup>1</sup>, <sup>1</sup>Mississippi State University, Mississippi State, <sup>2</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>3</sup>Saf Agri/Lesaffre Feed Additives, Iola, TX

11:00 AM

76

**Influence of a prenatal stressor on ACTH-induced cortisol secretion in yearling Brahman heifers.**

*S. E. Schmidt<sup>1,2</sup>, M. C. Roberts<sup>1,2</sup>, D. M. Price<sup>1,3</sup>, B. P. Littlejohn<sup>1,3</sup>, R. C. Vann<sup>4</sup>, J. A. Carroll<sup>5</sup>, N. C. Burdick Sanchez<sup>5</sup>, D. A. Neuendorff<sup>1</sup>, A. W. Lewis<sup>1</sup>, T. H. Welsh, Jr.<sup>3,6</sup> and R. D. Randel<sup>1</sup>, <sup>1</sup>Texas A&M AgriLife Research, Overton, <sup>2</sup>Texas A&M University, College Station, <sup>3</sup>Texas A&M Department of Animal Science, College Station, <sup>4</sup>MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond, <sup>5</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>6</sup>Texas A&M Agrilife Research, College Station*

## **Ruminant Animal Production II**

Chair: Ryan Reuter,  
The Noble Foundation, Inc.  
Austin Ballroom 2, Sheraton Dallas Hotel

9:00 AM

120

**SS-ASAS Emerging Scholar Award: Influence of Horn Flies and breed type on milk production, calf performance, and pasture behavior of beef cattle.**

*A. R. Mays<sup>\*1</sup>, M. A. Brown<sup>2</sup> and C. F. Rosenkrans, Jr.<sup>1</sup>, <sup>1</sup>University of Arkansas, Fayetteville, <sup>2</sup>ARS, USDA, Grazinglands Research Laboratory, El Reno, OK*

9:45 AM

88

**Evaluation of two sugarcane molasses feeding systems on measures of performance of replacement beef heifers.**

*P. G. M. D. A. Martins<sup>\*</sup>, J. D. Arthington, P. Moriel and J. M. B. Vendramini, UF/IFAS Range Cattle Research and Education Center, Ona, FL*

10:00 AM

89

**Performance and carcass traits of different Guzerat-based beef cattle genetic groups.**

*S. D. J. Villela<sup>\*1,2</sup>, F. B. Diniz<sup>1</sup>, M. H. F. Mourthé<sup>1</sup>, P. V. R. Paulino<sup>3</sup>, C. A. Boari<sup>1</sup>, J. Ribeiro<sup>4</sup> and P. G. M. D. A. Martins<sup>5</sup>, <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri, Diamantina, Brazil, <sup>2</sup>Texas A&M University, College Station <sup>3</sup>Nutron Alimentos Ltda, Campinas, Brazil, <sup>4</sup>Universidade Federal de Alagoas, Arapiraca, Brazil, <sup>5</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL*

10:15 AM

90

**Relationships among age and body weight at puberty and rate of gain in developing beef heifers: A meta-analysis.**

*P. A. Lancaster<sup>\*</sup>, UF/IFAS Range Cattle Research and Education Center, Ona, FL*

10:30 AM

**Break**



10:45 AM

91

**Factors influencing preweaning ultrasound body composition of Brahman calves.**

*B. P. Littlejohn<sup>1,2</sup>, D. M. Price<sup>1,2</sup>, A. W. Lewis<sup>1</sup>, D. A. Neuendorff<sup>1</sup>, J. P. Banta<sup>1</sup>, D. G. Riley<sup>2,3</sup>, J. A. Carroll<sup>4</sup>, T. H. Welsh, Jr.<sup>2,3</sup>, R. D. Randel<sup>1</sup> and R. C. Vann<sup>5</sup>, <sup>1</sup>Texas A&M AgriLife Research, Overton, <sup>2</sup>Texas A&M Department of Animal Science, College Station, <sup>3</sup>Texas A&M Agrilife Research, College Station, <sup>4</sup>USDA-ARS, Livestock Issues Research Unit, Lubbock, TX, <sup>5</sup>MAFES - Brown Loam Experiment Station, Mississippi State University, Raymond*

11:00 AM

92

**Effect of growth implant timing on health, performance, and immunity of beef stocker cattle.**

*H. D. Hughes<sup>1</sup>, P. A. Beck<sup>2</sup>, D. Hubbell<sup>3</sup>, S. Gadberry<sup>4</sup>, E. B. Kegley<sup>2</sup>, J. G. Powell<sup>2</sup>, F. L. Prouty<sup>5</sup> and J. T. Richeson<sup>1</sup>, <sup>1</sup>Department of Agricultural Sciences, West Texas A&M University, Canyon, <sup>2</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville, <sup>3</sup>Livestock and Forestry Research Station, University of Arkansas Division of Agriculture, Batesville, <sup>4</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Little Rock, <sup>5</sup>Zoetis, Louisburg, KS*

11:15 AM

93

**Effects of increasing levels of distillers dried grains on intake and apparent digestibility of moderate quality fescue Hay.**

*C. I. Shipps<sup>1</sup>, A. A. Zender<sup>2</sup> and M. D. Hudson<sup>3</sup>, <sup>1</sup>Missouri State University, Dadeville, <sup>2</sup>Missouri State University, Springfield, <sup>3</sup>Missouri State University, Brighton*

11:30 AM

94

**Application of technologies in cattle finishing programs.**

*M. H. Poore<sup>\*</sup>, A. D. Shaeffer and G. L. Shaeffer, North Carolina State University, Raleigh*

11:45 AM

95

**Methodology to measure void space and bulk density of feed ingredients.**

*C. J. Boardman<sup>1</sup>, C. J. Hayes<sup>1</sup>, T. A. Wickersham<sup>1</sup>, and J. E. Sawyer<sup>2</sup>, <sup>1</sup>Texas A&M University, College Station, <sup>2</sup>Texas AgriLife Research, College Station*

## Small Ruminant Production I

Chair: Steven Jones,  
University of Arkansas  
Austin Ballroom 3, Sheraton Dallas Hotel

9:00 AM 96

**Evaluating the impact of breed and pregnancy on body temperature of hair sheep ewes in the tropics.**

*R. W. Godfrey<sup>1</sup>, W. D. Preston<sup>1</sup>, A. M. Jung<sup>1</sup>, S. Joseph<sup>1</sup>, L. LaPlace<sup>1</sup>, P. E. Hillman<sup>2</sup>, K. G. Gebremedhim<sup>2</sup>, C. N. Lee<sup>3</sup> and R. J. Collier<sup>4</sup>,  
<sup>1</sup>University of the Virgin Islands, St Croix, US Virgin Islands, <sup>2</sup>Cornell University, Ithaca, NY, <sup>3</sup>University of Hawaii, Manoa, HI, <sup>4</sup>University of Arizona, Tucson*

9:15 AM 97

**Response to increasing levels of soy hull supplementation in hair sheep lambs grazing fescue pasture.**

*S. Wildeus<sup>1</sup> and C. D. Teutsch<sup>2</sup>, <sup>1</sup>Virginia State University, Petersburg, <sup>2</sup>Virginia Tech, Blackstone*

9:30 AM 98

**Evaluating the impact of breed, hair coat and pregnancy on sweating rate of hair sheep ewes in the tropics.**

*R. W. Godfrey<sup>1</sup>, W. D. Preston<sup>1</sup>, A. M. Jung<sup>1</sup>, S. Joseph<sup>1</sup>, L. LaPlace<sup>1</sup>, P. E. Hillman<sup>2</sup>, K. G. Gebremedhim<sup>2</sup>, C. N. Lee<sup>3</sup> and R. J. Collier<sup>4</sup>,  
<sup>1</sup>University of the Virgin Islands, St Croix, US Virgin Islands, <sup>2</sup>Cornell University, Ithaca, NY, <sup>3</sup>University of Hawaii, Manoa, <sup>4</sup>University of Arizona, Tucson*

9:45 AM 99

**Effects of protein supplementation on growth of parasitized organic lambs while grazing.**

*C. Crawford<sup>\*</sup>, D. Mata-Padrino, D. Belesky and S. Bowdrige, West Virginia University, Morgantown*

10:00 AM **Break**

10:15 AM 100

**Evaluation of forage yield in sequential grazing of cattle and goats under an intensive rotational system.**

*Y. Ghebreyessus<sup>\*</sup>, M. Berhane, R. Marshall, C. Adams, E. Runles and S. Gebrelul, Southern University Ag. Center, Baton Rouge, LA*

10:30 AM 101

**Effect of feeding sericea lespedeza leaf meal pellets on *Eimeria* spp and gastrointestinal nematodes in lambs and kids.**

*T. Vines<sup>\*</sup>, D. S. Kommuru<sup>1</sup>, T. Barker<sup>1</sup>, J. M. Burke<sup>2</sup>, J. E. Miller<sup>3</sup>, J. A. Mosjidis<sup>4</sup>, N. Kamisetti<sup>1</sup> and T. H. Terrill<sup>1</sup>, <sup>1</sup>Fort Valley State University, Fort Valley, GA, <sup>2</sup>USDA-ARS, Booneville, AR, <sup>3</sup>Louisiana State University, Baton Rouge, <sup>4</sup>Auburn University, Auburn, AL*

10:45 AM 102

**Quebracho tannins aid in the control of Eimeria spp. and alter serum concentrations of trace minerals in lambs.**

*J. M. Burke<sup>1</sup>, J. E. Miller<sup>2</sup>, T. H. Terrill<sup>3</sup>, M. Acharya<sup>4</sup> and C. F. Rosenkrans<sup>5</sup>, <sup>1</sup>USDA-ARS, Booneville, AR, <sup>2</sup>Louisiana State University, Baton Rouge, <sup>3</sup>Fort Valley State University, Fort Valley, GA, <sup>4</sup>University of Arkansas, Fayetteville, <sup>5</sup>Department of Animal Science, University of Arkansas Division of Agriculture, Fayetteville*

103 Withdrawn by Author

11:15 AM 104

**Sire breed differences in pregnancy rate of hair sheep ewes following liquid semen vaginal artificial insemination.**

*S. Wildeus<sup>\*</sup>, Virginia State University, Petersburg*

## Extension II

Chair: R. Lawton Stewart, Jr.,  
University of Georgia  
Dallas Ballroom A2, Downtown Dallas  
Conference Center

1:30 PM 24

**Beef programming across state lines: SERA 41 webinars.**

*L. Stewart<sup>1</sup>, J. W. Lehmkuhler<sup>2</sup>, M. H. Poore<sup>3</sup>, J. D. Arthington<sup>4</sup> and D. L. Rankins<sup>5</sup>, <sup>1</sup>University of Georgia, Athens, <sup>2</sup>University of Kentucky, Lexington, <sup>3</sup>North Carolina State University, Raleigh, <sup>4</sup>UF/IFAS Range Cattle Research and Education Center, Ona, FL, <sup>5</sup>Auburn University, Auburn, AL*

1:45 PM 25

**All Things Equine: a unique opportunity to teach youth about equine management topics.**

*N. L. Walker<sup>\*</sup> and L. Keating, Louisiana State University Agricultural Center, Baton Rouge*

2:00 PM 26

**Response of beef cows, not exposed to mineral supplements, to an injectable trace mineral supplement.**

*M. S. Gadberry<sup>1</sup> and K. Simon<sup>2</sup>, <sup>1</sup>University of Arkansas Coop. Ext. Svc., Little Rock, <sup>2</sup>University of Arkansas, Cooperative Extension Service, Little Rock*

2:15 PM 119

**Response of beef calves, not exposed to free-choice mineral supplements, to an injectable trace mineral supplement**

*M. S. Gadberry<sup>1</sup> and K. Simon<sup>2</sup>, <sup>1</sup>University of Arkansas Coop. Ext. Svc., Little Rock, <sup>2</sup>University of Arkansas, Cooperative Extension Service, Little Rock*

2:30 PM 27

**Evaluation of warm season annuals for forage finishing in the piedmont region on animal performance and meat quality.**

*E. M. Ford<sup>\*</sup>, A. M. Stelzleni, D. Hancock and L. Stewart, University of Georgia, Athens*

2:45 PM

28

**Implants for short-term heifer grazing in Northeast Oklahoma.**

*E. Ward<sup>1</sup>, R. Pirtle<sup>2</sup>, K. Swanson<sup>3</sup>, G. Milliman<sup>4</sup>, W. Cabbage<sup>5</sup>, K. Long<sup>6</sup>, R. Sproul<sup>7</sup> and C. Richards<sup>8</sup>,  
<sup>1</sup>Oklahoma State University, Muskogee, <sup>2</sup>Oklahoma State University, Bartlesville, <sup>3</sup>Oklahoma State University, Bartlesville, <sup>4</sup>Oklahoma State University, Nowata, <sup>5</sup>Oklahoma State University, Pawhuska, <sup>6</sup>Oklahoma State University, Vinita, <sup>7</sup>Oklahoma State University, Jay, <sup>8</sup>Oklahoma State University, Stillwater*

**Small Ruminant Production II**

Chair: Steven Jones,  
University of Arkansas  
Austin Ballroom 3, Sheraton Hotel Dallas

1:30 PM

105

**Sustainable year-round forage system for goat production in southern USA.**

*B. R. Min, S. Solaiman, N. K. Gurung and W. H. McElhenney, Tuskegee University, Tuskegee, AL*

1:45 PM

106

**The effect of sequential grazing on the performance of does under an intensive rotational system.**

*R. Marshall, C. Adams, S. Manuel, Y. Ghebreiyessus and S. Gebrelul, Southern University Ag. Center, Baton Rouge, LA*

2:00 PM

107

**The effect of sequential grazing on the performance of kids under an intensive rotational system.**

*S. Manuel, R. Marshall, C. Adams, E. Runles, M. Berhane and S. Gebrelul, Southern University Ag. Center, Baton Rouge, LA*

2:15 PM

108

**Suitable winter forages for goats: Productivity, quality, and goats' preference.**

*U. Karki<sup>1</sup>, L. B. Karki<sup>2</sup>, N. K. Gurung<sup>1</sup> and A. W. Elliott<sup>1</sup>, <sup>1</sup>Tuskegee University, Tuskegee, AL, <sup>2</sup>PadmaDal Memorial Foundation, Auburn, AL*

2:30 PM

109

**Using webinar short courses to educate small ruminant producers.**

*S. Schoenian<sup>1</sup>, J. Semler<sup>2</sup> and R. J. Brzozowski<sup>3</sup>,  
<sup>1</sup>University of Maryland, Keedysville, <sup>2</sup>University of Maryland, Boonsboro, <sup>3</sup>University of Maine, Falmouth*