



SYMPOSIA LIST BY DAY

Monday, July 8, 2019

ALL DAY

ASAS-NANP Pre-Conference Symposium

- Dr. Mark Hanigan, Virginia Tech University – Introduction to mathematical models
- Dr. Benjamin Turner, Texas A&M University – System Dynamics
- Dr. Robin White, Virginia Tech University – Introduction to R scripting and data analyses
- Dr. Luis Tedeschi, Texas A&M University – Model evaluation and a brainteaser on machine learning

Tuesday, July 9, 2019

ALL DAY

Beef Species Symposium: Cattle Adapted to Tropical/Subtropical Environments

- Dr. Rodolfo Cardoso, Texas A&M University – Nutritional programming of puberty in Bos indicus-influenced heifers
- Dr. G. Cliff Lamb, Texas A&M University – Reproductive management of beef females in tropical and sub-tropical environments
- Dr. Ky Pohler, Texas A&M University – Reproductive challenges of cattle adapted to tropical and subtropical environments
- Dr. Jose Luiz Moraes Vasconcelos, Sao Paulo State University – Reproductive management of beef females in South America
- Dr. David Riley, Texas A&M University – Genetic aspects of livestock adaptation
- Dr. Jared Decker, University of Missouri – Matching cow's genetics to the environment using genomics
- Dr. Joao Vendramini, University of Florida – Warm-season perennial grass management in tropical and subtropical regions
- Dr. Philippe Moriel, University of Florida – Nutritional management of forage-based cow-calf operations
- Dr. Luis Tedeschi, Texas A&M University – Nutritional management for tropical-subtropical-adapted cattle receiving high-concentrate diets
- Dr. Courtney Daigle, Texas A&M University – Welfare and behavior considerations for cattle in tropical and subtropical environments
- Dr. Steve Smith, Texas A&M University – Carcass development and quality of tropically/subtropically adapted cattle
- Dr. Ronaldo Cerri, University of British Columbia – Dairy cattle overview in tropical and subtropical environments



TUESDAY MORNING

Beef Species Symposium: Handling Heat Stress in Beef Cattle Production – Sponsored by ARPAS

- Dr. R. Rhoads, Virginia Tech University – Physiology of heat stress
- Dr. F. M. Mitloehner, University of California, Davis – The impact of heat stress on feedlot operations; design and management options to reduce its impact
- Dr. Jenny Jennings, Texas A&M University – The impact of heat stress on feedlot operations; nutritional and breeding options to reduce its impact

Breeding and Genetics Symposium: How genomic selection has changed livestock breeding in the past 10 years and what is coming next

- Dr. Ignacy Misztal, University of Georgia – Current status of Genomic selection
- Dr. Tom Lawlor, US Holstein Association – Genomic Selection in the dairy industry: excitement, challenges, and future directions
- Dr. Egbert Knol, Topigs Norsvin – Is genomic selection beneficial for the pig industry?
- Dr. Dan Moser, Angus Genetics Inc. – Genomic selection in the beef industry: current achievements and future directions
- Dr. Mak Geha, Corteva – Genomic selection and gene editing in plant breeding—an industry perspective
- Dr. Jack Dekkers, Iowa State University – How new technologies will help livestock breeding in the next years

Cell Biology Symposium

- Dr. Danica Chen, University of California, Berkeley – Mitochondrial metabolic checkpoint, stem cell aging and rejuvenation
- Dr. Fernando J. Peña Vega, University of Extremadura – Redox regulation of stallion spermatozoa and its impact on reproductive biotechnologies
- Dr. Marie-France Palin, Agriculture and Agri-Food Canada – Carnosine prevents oxidative damage in myoblast cells derived from porcine skeletal muscle
- Dr. Josh Selsby, Iowa State University – The Heat is On: Heat stress induces radical changes in skeletal muscle

Companion Animal Symposium: Nutrition and Health: Companion Animal Applications

- Dr. Elizabeth Bobeck, Iowa State University – Functional nutrition to modulate the immune response
- Dr. Jan Suchodolski, Texas A&M University – Effect of dietary intervention on gut microbiome and microbial-derived metabolites
- Dr. David Waters, Gerald P. Murphy Cancer Foundation – Nutrition and pet aging: Principles inform practice
- Dr. Ray Matulka, Burdock Group – Nutritive feed ingredients that pose toxicological potential



Contemporary and Emerging Issues Symposium: Communicating the Importance of Animal Science

- “Food Evolution” documentary film provided by Shawn Archibeque
- Dr. Alison Van Eenennaam, University of California, Davis – TBD
- Jessica Eise, Purdue University – Values and Perception: Communicating Controversial Issues in Animal Agriculture
- Vance Crowe, Director of Millennial Engagement, Bayer/Monsanto
- Dr. Wes Jamison, Palm Beach Atlantic University – Gen Z goes Venmo: a case study on communicating agriculture in a cluttered, complex world

Meat Science and Muscle Biology Symposium: Strategies, fresh meat consequences, and economics of manipulating the nutritional value of meat

- Dr. Glynn Tonsor, Kansas State University – Economics of enhancing the nutritive value of meat
- Dr. Derris Burnett, Mississippi State University – Biology of altering the fatty acid profile of meat
- Dr. Kelsey Phelps-Ronningen, Cargill Meat Solutions – Effect of altering fatty acid profile on fresh meat color stability
- Dr. Jerrad Legako, Texas Tech University – Effect of altering fatty acid profile on fresh meat palatability

TUESDAY AFTERNOON

Animal Behavior and Well-Being Symposium: Precision Technology and Animal Welfare

- Dr. Lindsey Hulbert, Kansas State University – Precision animal welfare for pigs
- Dr. Courtney Daigle, Texas A&M University – Knowledge hybrid vigor: improving beef cattle management with the integration of environmental and behavioral technologies
- Dr. Gosia Zobel, AgResearch NZ – Individual information and its role in dairy goat management
- Dr. Jasmeet Kaler, The University of Nottingham – Increasing animal welfare and efficiency on-farm with the use of precision technology tools: Technology development, application, and use
- Dr. Joao Cardoso Costa, University of Kentucky – Precision dairy cattle welfare: Use of technology for individual measures, record keeping and early disease detection

ASAS Publications Symposium: A How to Guide to Publishing

- Dr. James Sartin, Auburn University – Editorial Process
- Dr. Sally Johnson, Virginia Tech University – Editorial Pet Peeves
- Dr. Hans Stein, University of Illinois – How to make nutrition tables and figures that work
- Dr. Meghan Wulster-Radcliffe, American Society of Animal Science – Copyright versus plagiarism
- Dr. Teresa Davis, Baylor University – Do we need a Plan B for Plan S?
- Dr. Kristin Govoni, University of Connecticut – ASAS publications—the big picture



Companion Animal Symposium: Comparative Animal Nutrition: Sustainability of Meat and Fish Ingredients

- Dr. Peter Tyedmeiers, University of British Columbia – Sustainability of fish-derived feed inputs: An ecological perspective
- Dr. Nathan Pelletier, University of British Columbia – Sustainability of terrestrial protein sources
- Dr. Maria Godoy, University of Illinois – Current knowledge in plant protein sources
- Dr. Anna-Kate Shoveller, University of Guelph – Can we help support protein sustainability by considering optimizing dietary protein delivery?
- Dr. Jose Villanon, Nutreco – Current trends in protein sourcing for aquaculture diets

Immunometabolism Symposium: From concepts to applications in animal production – Sponsored by Pancosma

- Dr. Barry Bradford, Kansas State University – Immunometabolism—emerging concepts and potential applications in livestock
- Dr. Greg Penner, University of Saskatchewan – Immune activation and glucose utilization
- Dr. Johanna Fink-Gremmels, Utrecht University – Natural feed additives enhancing innate immunity: the gateway to sustainable animal health
- Dr. Mark Lyte, Iowa State University – Microbial endocrinology: The evolutionary-based integration of microbiology and neurobiology as applied to the health and nutrition of farm production animals
- Dr. Andrew Richard Williams, University of Copenhagen – Regulation of pathogen-specific immune function by dietary phytonutrients

Nonruminant Nutrition Symposium

- Dr. Artemis P. Simopoulos, Center for Genetics, Nutrition and Health – Nutrigenetics/Nutrigenomics: Nutrient-gene interactions in humans and animals
- Dr. Shengfa F. Liao, Mississippi State University – A nutrigenomics approach using RNA sequencing technology to study nutrient-gene interactions in agricultural animals
- Dr. Maria Oczkowicz, National Research Institute of Animal Production Cracow, Poland – Effects of different sources of fat in the diet of pigs on the liver transcriptome estimated by 3`RNA-sequencing
- Dr. Nares Trakooljul, Institute for Genome Biology, Leibniz Institute for Farm Animal Biology, Dummerstorf, Germany – Immediate and long-term consequences of methylating micronutrient supplementation during pregnancy on the offspring's phenotype



WAAP/CSAS Symposium: Enhancing the Efficiency of Livestock

- Dr. Graham Plastow, University of Alberta – Continuing to enhance efficiency in swine
- Dr. Flavio Schenkel, University of Guelph – Breeding for enhancing feed efficiency in dairy cattle
- Dr. Tim McAllister, Agriculture and Agri-Food Canada – Strategies to improve the efficiency of beef cattle production
- Dr. Naomi Duijvesteijn, University of New England – How dual-purpose chickens can help African smallholder farmers
- Dr. Ben Wood, Hybrid Turkeys, Hendrix Genetics – Enhancing the efficiency of poultry production by optimising selection objectives and breeding strategies
- Dr. Rich Moccia, University of Guelph – TBD

Wednesday, July 10, 2019

MORNING

Animal Health Symposium: CSAS Technology in the Dairy Industry: Old MacDonald or Brave New World?

- Dr. Nancy Charlton, DeLaval – Beyond Stainless Steel and Milk Pump: Precision Technology in the Milking Equipment World
- Dr. Joao Cardoso Costa, University of British Columbia – Using precision dairy tools to manage youngstock and dairy cattle: options and practical tools
- Dr. Mike Lohuis, Monsanto – TBD
- Dr. Trevor DeVries, University of Guelph – Utilizing automation to improve efficiency, health, and production in the dairy industry

Breeding and Genetics Symposium: Challenges and opportunities with big data in animal breeding

- Dr. Tim Smith, USDA – Genomics in animal agriculture: current technologies and applications
- Dr. Miguel Pérez-Enciso, Universitat Autònoma de Barcelona – DNA sequence assisted prediction: The uncomfortable truth
- Dr. Han Mulder, Wageningen University & Research – Big data and the development of resilience indicators for animal breeding
- Dr. Guilherme Rosa, University of Wisconsin – Leveraging on high-throughput phenotyping technologies to optimize livestock genetic improvement and husbandry

Companion Animal Symposium: Analytical Tools and Techniques to Advance Companion Animal Nutrition

- Dr. Trevor Faber, Trouw Nutrition – Digestibility and fermentation models
- Dr. Rondo Middleton, Nestle Purina – "Omics" tools in nutrition
- Dr. Leslie McKnight, Trouw Nutrition – Tracers for tracking energetics
- Dr. Kristen Carnagy, Hill's Pet Nutrition – Wearable devices, behavior, and health outcomes



Contemporary and Emerging Issues Symposium: Women in Animal Science

Horse Species Symposium

- Dr. Jim Heird, Texas A&M University – Horses and the horse industry, Texas and beyond
- Dr. Molly McCue, University of Minnesota – Using genomics to better understand muscle function and dysfunction
- Dr. Brian Nielsen, Michigan State University – Attempts to improve equine athletic performance via hypoxia-inducing techniques
- Dr. Sarah White, Texas A&M University – Using skeletal muscle mitochondrial profiles to create individual management programs for elite performance horses

WEDNESDAY AFTERNOON

Animal Behavior Symposium: Animal welfare–From Farm-gate to Facebook – Sponsored by ELANCO

- Dr. Courtney Daigle, Texas A&M University – Impact of labor issues on animal welfare
- Dr. Michelle Sarah Calvo-Lorenzo, ELANCO – A review of animal welfare data for cattle and swine
- Dr. Karen Christensen, Tyson Foods – Food Animal Welfare: Why Producers Should Care about Animal Welfare
- Dr. Sara Place, National Cattlemen’s Beef Association – To tweet or not to tweet: What does science communication look like in 2019?

Breeding Symposium: Genome Editing: Science and Commercialization

- Dr. David Taylor, University of Texas at Austin – Structure and mechanism of CRISPR/Cas9
- Dr. Kristin Whitworth, University of Missouri – Protecting Pigs from Viral Infectivity with Gene Editing
- Dr. Michael Thomson, Texas A&M University – Genome editing applications in plants: High-throughput CRISPR/Cas editing for crop improvement
- Dr. Clint Nesbitt, BIO – Global regulatory landscape for evaluation of products derived from gene editing
- Dr. Amy te Plate-Church, The Center for Food Integrity – Earning Public Trust in Gene Editing

Ruminant Nutrition Symposium



Thursday, July 13, 2019

MORNING

ASAS-NANP Symposium: Ruminant/Nonruminant Feed Composition Symposium

- Dr. Andres Schlageter, University of Kentucky – Overview of the NRSP-9/NANP Program
- Dr. William Weiss, The Ohio State University – Statistical methods and importance of screening ingredient composition data sets
- Dr. Elizabeth Koutsos, EnviroFlight LLC – Novel ingredients and challenges for feed formulation
- Dr. George Fahey, University of Illinois – Carbohydrate composition: Challenges to the optimal use of fiber across animal species, and potential solutions

Beef Symposium: Perinatal nutrient availability in beef calves: Causes and consequences

- Dr. Allison Meyer, University of Missouri – Perinatal nutrient availability in beef calves: Causes and consequences

Companion Animal Symposium: Companion Animal Teaching Symposium: Incorporating Companion Animals into an Animal Science Curriculum

- Dr. Lisa Karr, University of Nebraska-Lincoln – Integration of teaching and extension of companion animal biology and nutrition
- Dr. Sarah Richardson, University of Illinois – Companion animals outside the classroom: An Overview of experiential learning opportunities
- Dr. Gary Davenport, ADM – An employer perspective: What are employers looking for in terms of companion animal knowledge
- Dr. Beth Kitts-Morgan, Lincoln Memorial University – Challenges and opportunities in developing a companion animal nutrition curriculum for veterinary students

Forges and Pastures Symposium: Plant Secondary Compounds in Ruminant Production and Functional Foods Development

Meat Science and Muscle Biology Symposium

AFTERNOON

Beef Symposium: High Plains Beef

- Gary Vogel, Elanco Animal Health – Benchmark Program data on deaths throughout the feeding period
- Nicole Burdick Sanchez, USDA-ARS – Stress and Immunity
- Jon Beckett, Beckett Consulting Services – Holsteins

Nonruminant Symposium