SYMPOSIA LIST BY DAY

SUNDAY, July 19, 2020 – ALL DAY

ASAS-NANP Pre-Conference Symposium: Mathematical Modeling in Animal Nutrition: Training the Future Generation in Data and Predictive Analytics for a Sustainable Development
- Dr. Gota Morota, Virginia Tech University – Interactive visualization of agricultural science data using R Shiny
- Dr. Dan Tulpan, University of Guelph – A brief overview, comparison and practical applications of machine learning models
- Dr. Walter Gerrits, Wageningen University – Digestion kinetics and feed evaluation in swine
- Dr. Emma Stephens, AAFC/AAC – Building models using system dynamics methodology

MONDAY, July 20, 2020 – MORNING

Companion Animal Symposium: Food Fraud and Food Safety in Companion Animal Foods
- Dr. David B. Edwards, FDA-CVM – Preventative steps to avoid food fraud: Pet food perspective
- Bill Bookout, National Animal Supplement Council (NASC) – Pet supplements: Is fraud a concern?
- Dr. Yi-Cheng Wang, University of Illinois at Urbana-Champaign, Food Science & Human Nutrition – Use of biosensors to address food-safety and intelligent packaging

Comparative Gut Physiology Symposium: Gut Microbiome-organs Axes: Role in Ruminants and Monogastric Health and Performance
- Dr. Dylan Dodd, Stanford University – Overview-Metabolic foundations of microbiota-host interactions
- Dr. Michael Surette, McMaster University, Canada – Gut microbiome-lung axis - Human perspective
- Dr. Trevor Alexander, Agriculture and Agri-Food Canada – Gut microbiome-lung axis - Beef perspective
- Dr. Rodrigo Bicalho, Cornell University – Gut microbiome-repro axis - Ruminants perspective
- Dr. Ehsan Khafipour, Cargill, Diamond V – Gut microbiome-mammary axis - Human and dairy perspectives

Swine Species/Animal Health Symposium: African Swine Fever
MONDAY AFTERNOON

Animal Breeding and Genetics Symposium: The Future of Phenomics in Livestock Breeding (Sponsored by CSAS)
- Dr. Mike Coffey, Scotland’s Rural College (SRUC) – TBA
- Dr. Nina Krattenmacher, Institute of Animal Breeding and Husbandry, Keil University, Germany – Towards an increasing number and complexity of breeding goal traits in dairy cattle
- Dr. Ricardo Ventura, Universidade de Sao Paulo, Faculdade de Medicina Veterinária e Zootecnia (FMVZ), Brazil – TBA
- Dr. Yachun Wang, China Agricultural University – TBA
- Dr Chinyere Ekine-Dsivenu, International Livestock Research Institute (ILRI), Kenya – TBA
- Dr. Carina Visser, Department of Animal and Wildlife Science, University of Pretoria, South Africa – TBA

Companion Animal Symposium: Feeding Behavior & Management
- Dr. Jill Villarreal, Harris-Stowe State University – Why kennel and cattery food preference trials may not predict pet preferences in home?
- Dr. Thomas Gettys, Louisiana State University – Dietary methionine restriction: An approach to treating obesity that does not involve food restrictions
- Dr. Kadri Koppel, Kansas State University – Sensory analysis related to feeding behavior
- Dr. Aulus Cavalieri Carciofi, UNESP – Dietary Diversity
- Dr. Robert Pretlow, eHealth International, Inc. – What’s causing obesity in pets and what can we do about it?

- Dr. Michael Galyean, Texas Tech University – The Need for Forage Intake Measurements
- Dr. Eric J. Scholljegerdes, New Mexico State University – External Markers: Generic discussion with sight toward TiO2
- Dr. Robert Kallenbach, University of Missouri – Digital technologies ease the burden of pasture intake measurements: A new hope
- Dr. Paul Greenwood, Department of Primary Industries, New South Wales – Innovative Technology: Senor-determined behavior
TUESDAY, July 21, 2020 – MORNING

Animal Breeding and Genetics Symposium: Advances in Genomic Analyses including GWAS and Long-term Effects
- Dr. Ignacy Misztal, University of Georgia – Modeling changes of genetic parameters under genomic selection
- Li Ma, University of Maryland – Methods of genome-wide association studies and their applications in dairy cattle
- Juan Steibel, Michigan State University - GWAS for complex models accounting for populations structure with GBLUP and ssGBLUP
- Dr. Daniela Lourenco, University of Georgia – Increased fluctuations of genetic evaluations with genomic selection

Beef Species: Soil Carbon
- Dr. Jocelyn Lavallee, Colorado State University – Formation, persistence, and function of soil organic matter: how recent scientific advances apply in agroecosystems
- Dr. Alan Franzluebbers, USDA-ARS – Cattle and Carbon on pastures – hearsay or evidence?
- Dr. Richard Teague, Texas A&M University – TBA

Companion Animals Symposium: Dairy Ingredients and Their Application in Pet Food
- Dr. Emily Arentson-Lantz, University of Texas Medical Branch – Practical applications of whey protein in promoting skeletal muscle maintenance, recovery, and reconditioning
- Kun-Ho Seo, Konkuk University, Korea – Health benefit and safety of probiotics originated from keifir in pet food
- Louise Bennet, Monash University – Whey proteins in prevention and intervention of Alzheimer’s Disease
- Sharon Donovan, University of Illinois Urbana-Champaign – Milk fat globule membrane from bovine milk on brain development of early life
- Manabu Nakano, Morinaga Milk Industry Co., LTD – The use of lactoferrin and lactoperoxidase for oral health

Meat Science and Muscle Biology Symposium: Poultry and pork muscle defects and meat quality--consequences, causes, and management
- Dr. Casey Owens-Hanning, University of Arkansas and Ria Jackson, Cobb-Vantress – Meat Quality Matters: Trends and Mitigation Strategies for Muscle Myopathies in the Broiler Meat Industry
- Dr. Jessica Starkey, Auburn University – Role of Skeletal Muscle Satellite Cells in the Broiler Chicken Wooden Breast Meat Quality Defect
- Dr. Alexander Stelzleni, University of Georgia – Utilizing Chicken Breast with Wooden Breast and White Striping in Processed Meat Products

Swine Species Symposium: Recent Developments in Swine Research (Sponsored by CSAS)
TUESDAY AFTERNOON

Animal Health Symposium: Biosecurity Through the Lenses of Multiple Disciplines
  - Scott Merrill, University of Vermont – A systems approach to understanding biosecurity decision-making
  - Lee Schulz, Iowa State University – Economic perspectives on biosecurity decision-making
  - Timothy Sellnow, University of Central Florida – Communities of practices as preferred sources of biosecurity information in crisis situations
  - Jeannette McDonald, TLCProjects, LLC – Educational tools promoting biosecurity through discovery learning

Horse Species Symposium: Microbiome Beyond the Gut
  - Dr. Eldin Jašarević, University of Maryland School of Medicine – Microbial origins in the developmental programming of offspring health
  - Dr. Aaron Ericsson, University of Missouri Metagenomics Center (MUMC) – The gut microbiota of research animals and implications for research on the gut-brain axis
  - Dr. Adam Moeser, Michigan State University, College of Veterinary Medicine – Early life factors shaping gut development and lifelong disease risk

Production, Management and Environment: Techniques for Livestock Production using Big Data, Artificial Intelligence, Smart Farming
  - Dr. Daniela Lourenco, University of Georgia at Athens – Genetics and Genomics Analysis in Livestock with Increasing Datasets
  - Isabella Condotta, University of Illinois Urbana-Champaign – TBD
  - Dr. Joao R. Dorea, University of Wisconsin-Madison – Harnessing the Power of Computer Vision System to Improve Management Decisions in Livestock Operations
  - Dr. Tracy Jennings, Allflex Livestock Intelligence – Validation and Improvement of a Monitoring System Overtime and its Overall Capabilities

Ruminant Nutrition Symposium: Comparative Animal Micronutrient
  - Dr. Stephanie Hansen, Iowa State University – Vitamin C and transit stress in beef cattle
  - Ramesh Selvaraj, The University of Georgia – Effect of trace minerals (25-hydroxycholecalciferol, Zinc and Manganese) supplementation on the immune responses of livestock
  - Dr. Olivia Schroeder Genther, Purina Animal Nutrition, Land O'Lakes – Interactions between zinc, copper, and growth promoting technologies in beef cattle
WEDNESDAY, July 22, 2020 – MORNING

**Beef Species Symposium: Liver Abscess**
- Dr. Brandon Reinbold, Elanco Animal Health – Updating the acidosis-rumenitis-liver abscess disease complex dogma of feedlot cattle
- Dr. Paul Morley, Director of Research VERO, West Texas A&M University – New insights on liver abscess syndrome in cattle using metagenomic investigations

**Cell Biology Symposium: Best Practices for Omics Based Approaches in Animal Sciences**
- Dr. David Eckersall, University of Glasgow – Proteomics in Animal Science and Vet Medicine
- Dr. Shengfa F. Liao, Mississippi State University – Animal Nutrigenomics Studies
- Dr. George Liu, USDA-ARS – TBD

**Contemporary and Emerging Issues Symposium: Public Policy: New Ag Guide**
- Dr. Janeen Salak-Johnson, Oklahoma State University – The AAALAC uses the Ag Guide and why it is important
- Kelly Heath, University of Nebraska-Lincoln – How the IACUC uses the Ag Guide to ensure the best care
- Michael MacNeil, Delta G – Changes to the Ag Guide that are important for animal scientists
- Dr. Gary Williams, Texas A&M AgriLife Research Station – The Ag Guide: How to for Young Investigators

**Meat Science and Muscle Biology Symposium: Palatability of Beef Productions**
- Dr. Jerrad Legako, Texas Tech University – Beef Flavor Chemistry and How It Influences Sensory Perception
- Dr. Jason Apple, Texas A&M University-Kingsville – TBA
- Ross Wyatt, Archer Daniels Midland – TBA
- Bridget Wasser, National Cattlemen’s Beef Association – Palatability of Beef Products: A Perspective on Future Expectations
- Diana Clark, Certified Angus Beef – TBA

**Nonruminant Nutrition Symposium: Amino Acid Nutrition in Monogastrics**
- Dr. Kirk Klasing, University of California-Davis – TBA
- Dr. Thomas Burkey, University of Nebraska-Lincoln – TBA
- Dr. John Htoo, Evonic – Amino acid nutrition in monogastrics: Going beyond the ideal protein
WEDNESDAY AFTERNOON

Growth and Development Symposium: Improving the high-quality animal-sourced products

Horse Species Symposium: Bisphosphate

Physiology and Endocrinology: Pregnancy Losses in Livestock
- Dr. Vitor R.G. Mercadante, Virginia Tech University – Economic Consequences of Pregnancy Loss in Beef Cattle
- Ky G. Pohler, Texas A&M University – The Timing of Pregnancy Losses in Beef Cattle
- Dr. J. Lannett Edwards, University of Tennessee – Heat-induced Hyperthermia; Foe or Friend?
- Dr. Rodney D. Geisert, University of Missouri-Columbia – Early Embryonic Loss is an Important Mechanism for Maximizing Litter Size in the Pig

Production, Management and Environment: Application of Big Data, Artificial Intelligence, Smart Farming for Livestock Production
- Dr. Alessio Checcinato, University of Padova-Italy – Precision Phenotyping using Infrared Spectroscopy to Improve the Quality of Animal Products
- Dr. Roger Lyons, Werk Thoroughbred Consultants, Inc. – Making-Do When Big Data Isn't Big Enough: Limitations and pathways of possible development in the prediction of Thoroughbred racing performance as a breeding outcome
- Dr. Paul Greenwood, University of New England – Smart Beef Farming for Grazing Animals
- Dr. Ilan Halachmi, Volcani Center, Israel – Sensor Technology and Data Science Tools in Dairy Production: Individual feed efficiency, attenuating heat stress, health, and welfare aspects

Ruminant Nutrition Symposium: New Frontiers in Ruminant Nutrition
- Matthew Crouse, North Dakota State University – Micronutrients, One-Carbon Metabolism, and Epigenetics: Potential Developmental and Production Outcomes
- Dr. Shawn Archebique, Colorado State University – Energetics, Methane Capture, and the Net Energy System; Linking Nutrition, Production and Environmental aspects of Ruminant Livestock Production
- Dr. T. G. Nagaraja, Kansas State University – Nutrition and the Ruminal Microbiome; Emerging Frontiers from an Old Friend
- Dr. Gerald Huntington, North Carolina State University – Past, Present, and Future of Protein Nutrition and N metabolism in Ruminants
Swine Species Symposium: Mortality in Pigs

- Dr. Chris Hostetler, National Pork Board – Impact of pig mortality on U.S. pig producers
- Dr. Jason Ross, Iowa State University – Towards improving pig livability: Strategies to understand and mitigate sow mortality
- Dr. Mike Tokach, Kansas State University – Opportunities to enhance wean-to-finish swine survival
- Dr. Victor G. Perez, DuPont – A Nutribiosis approach for pig performance and health