



Symposia List by Day

Sunday, July 8, 2018

All Day

- **ASN-ASAS Symposium: Future of Data Analytics in Nutrition: Knowledge Gaps, Data Collection and Quality, and the Role of Supporting Tools for Sustainable Development**
  - Dr. Parag Chitnis, USDA-NIFA – The role of modeling in agriculture in the 21<sup>st</sup> century
  - Dr. Meryl Wastney Pentchev, Purdue University – Mathematical Models of Nutrient Metabolism-Looking back and looking forward
  - Dr. Jaap van Milgen, INRA – Combining simplicity and complexity: creating user-applications from mechanistic nutritional models
  - Dr. Andrew Moore, CSIRO – Modeling the impact of climate change on whole farm systems
  - Dr. Antonelle Cannas, University of Sassari – Roundtable discussion
  - Dr. Lindsey Holmstrom, USDA-NAHMS – Modeling livestock disease and antimicrobial resistance
  - Dr. Charles Nicholson, Cornell University – Modeling complex problems with system dynamics: Applications in animal agriculture
  - Dr. John Hart, University of Illinois – Innovative ways to see data
  - Dr. Candido Pomar, Agri-Food Canada – Roundtable discussion

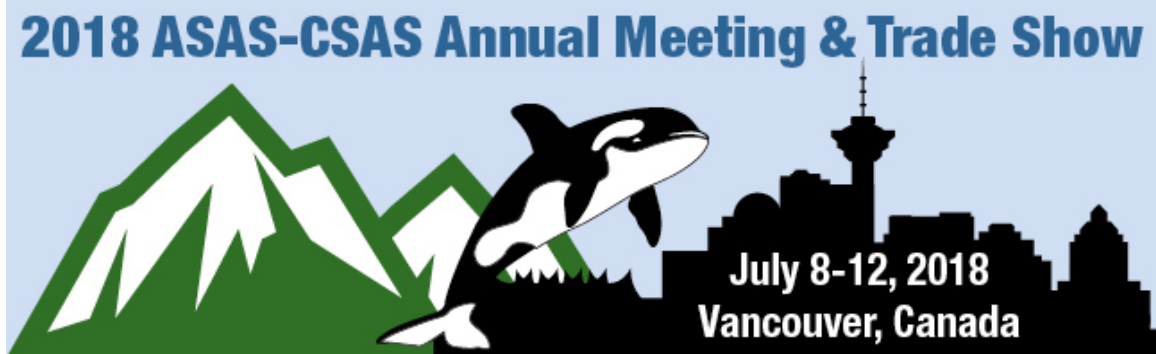


Monday, July 9, 2018

All Day

- **Cactus Beef Symposium**

- Dr. Robin White, Virginia Tech – Nutritional and environmental impacts of removing beef cattle from United States agriculture
- Dr. David Lalman, Oklahoma State University – Stewardship of energy use by beef cows: Maintenance requirements of the United States cowherd
- Dr. Tryon Wickersham, Texas A&M University – Can intensively managed cows improve efficiency of converting human-inedible feedstuffs to high-quality human edible food?
- Dr. Jim MacDonald, University of Nebraska – Systems approaches to beef cattle production: Maximizing use of alternative forages to optimize agricultural ecosystems
- Dr. Adam Summers, New Mexico State University – Opportunities for enhancing reproductive success and cow longevity through heifer development
- Dr. Travis Mulliniks, University of Nebraska – Sustainable and economically viable management options for cow/calf production through enhanced beef cow metabolic efficiency
- Dr. Craig Gifford, New Mexico University – Managing the immune system for reproductive success in beef cattle
- Dr. Sara Place, National Cattlemen’s Beef Association – Productivity, human edible feed conversion, and sustainability in beef production
- Dr. J. Daniel Rivera, Mississippi State University – Forage use in stocker programs as part of a sustainable beef production system
- Dr. John T. Richeson, West Texas A&M University – Roughage levels in receiving diets and impacts on animal health and transition to a high grain diet
- Dr. Ben Holland, Cactus Feeders – Sustainability defined and practiced in a modern cattle feeding enterprise
- Dr. Kurt Landis, Cargill – Changes and current trends in commodity use and cattle management in commercial feedlots in the Great Plains
- Dr. Karen Schwartzkopf-Genswein – Welfare practices to increase beef production and sustainability: Consumer expectation for 2050



Morning

- **Growth and Development Symposium: Stem/progenitor cells in animal growth and development**
  - Dr. Sally Johnson, Virginia Tech – Nutritional regulation of the satellite cell niche
  - Dr. Xing Fu, Louisiana State University – Improve meat quality through targeting fibro/adipogenic progenitor (FAP) cells
  - Dr. Gerlinde Van de Walle, Cornell University – The mammary stem cell secretome: from basic biology to therapeutic potential
  - Dr. Steve Stice, University of Georgia – Pluripotent stem cell differentiation to osteogenic and chondrogenic precursor cells
  - Dr. Min Du, Washington State University – A Novel Anti-sense LncRNA of CEBPA Inhibits Bovine Adipogenic Differentiation
- **Meat Science and Muscle Biology Symposium: Biological influencers of meat palatability**
  - Dr. John Michael Gonzalez, Kansas State University – The Influence of the muscle Fiber on Meat Palatability
  - Dr. Kasey Maddock Carlin, North Dakota State University – Postmortem Muscle Degradation and Meat Quality
  - Dr. Derris Burnett, Mississippi State University – Examining the Capability and Culpability of Fat in Influencing Consumer Perception and Preference for Meat Products
  - Dr. Susan Duckett, Clemson University – Accelerating Marbling Deposition in Ruminants
  - Dr. Heather Bruce, University of Alberta – Production Factors Affecting the Contribution of Collagen to Meat Toughness
  - Dr. Peter Purslow, The National University of Central Buenos Aires – Understanding the Role of Connective Tissue in the Heat-Induced Changes of Meat Palatability
- **Nonruminant Nutrition Symposium: Biomedical models**
  - Dr. Kevin Wells, University of Missouri – Lysine free pig/other EAA free pigs as well
  - Dr. Martien A.M. Groenen, Wageningen University and Research – Pig genome, disease genes on animal nutrition

# 2018 ASAS-CSAS Annual Meeting & Trade Show



- **Production, Management and the Environment Symposium: Epigenomics and non-coding RNA regulation of livestock production and health traits - Sponsored by CSAS**
  - Dr. Marc-Andre Sirard, University of Laval – Assisted Reproduction Technologies and epigenetic programming in animal production
  - Dr. Xin Zhao, McGill University – Non-coding RNAs in bovine mammary glands
  - Dr. Xin Zhiguo Li, University of Rochester – A rapid-evolving small RNA based immune system targeting avian leucosis virus in chickens
  - Dr. Helene Kiefer, INRA, France – Contribution of sperm methylome to bull fertility and interactions with DNA polymorphism
  - Dr. Stephanie McKay, University of Vermont – Profiling Conservation of DNA Methylation in Cattle

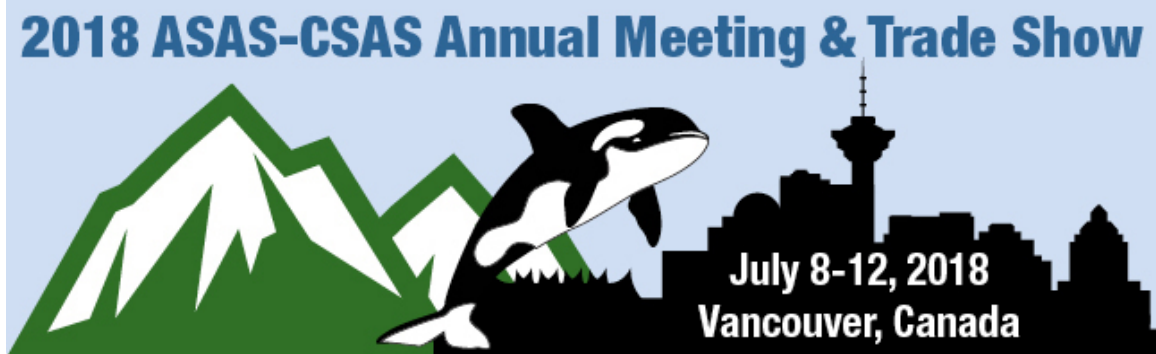
## Afternoon

- **Nonruminant Nutrition Symposium: Big data**
- **Companion Animal Symposium: Clinical Pet Nutrition**
  - Dr. Kelly Swanson, University of Illinois – Introduction
  - Dr. Andonie Vergrugghe, University of Guelph – Different protocols and technologies employed to help pets lose weight
  - Dr. Lisa Weeth, Weeth Nutrition Services – Feeding dogs and cats with renal disease: What do we really know
  - Dr. Lynn Weber and Dr. Jennifer Adolphe, University of Saskatchewan – Effects of glucose metabolism and carbohydrate sources on cardio metabolic health in dogs and cats
  - Dr. Sally Perea, Royal Canin – Feeding the critical care patient
- **Breeding and Genetics Symposium: Maturation of genomic selection in livestock breeding programs**
  - Dr. Matthew L. Spangler, University of Nebraska – Historical perspective and development of methods in use today
  - Dr. Rachel Hawken, Cobb-Vantress – Successful application of genomic selection in a poultry breeding program
  - Dr. Mike Lohuis, Semex Alliance – What's next for genomic selection in dairy?
  - Dr. Christian Maltecca, North Carolina State University – Successful application of genomic selection in a swine breeding program

# 2018 ASAS-CSAS Annual Meeting & Trade Show



- **Contemporary and Emerging Issues Symposium: Contemporary Issues that Impact Consumers' Perceptions of Animal Ag**
  - Dr. Adegbola Adesogan, University of Florida – Value of animal protein in the diet
  - Dr. Judith L. Capper, Washington State University – Having our meat and eating it – how do we reconcile livestock efficiencies with consumer perceptions?
  - Dr. Frank Mitloehner, University of California Davis – Methane and climate change
  - Dr. H. Morgan Scott, Texas A&M University – Antibiotics in Food Animal Agriculture: Stakeholder Perceptions of Use, Overuse & Misuse
  - Dr. Robin White, University of Vermont – Environmental and Nutritional Implications of Agriculture without Animals
- **Cell Biology Symposium: Metabolic responses to stress: From the animal to the cell**
  - Dr. Peter McGuire, NIH – The liver is a metabolic and immunologic organ: a reconsideration of metabolic decompensation in mitochondrial hepatopathy
  - Dr. Walter Bottje, University of Arkansas – Mitochondria related to feed efficiency in poultry
  - Dr. Kristen Govoni, University of Connecticut – Poor maternal nutrition and offspring metabolism
  - Dr. Martin Sheldon, Swansea University Medical School, UK – Link between energy metabolism and innate immunity in the bovine endometrium



Tuesday, July 10, 2018

All Day

- **Pancosma Comparative Gastrointestinal Physiology Symposium: Taste perception throughout life and evolution**
  - Dr. Soraya Shirazi-Beechey, University of Liverpool
  - Dr. Gary Beauchamp, Monell Center – Human flavor perception in early life: Developmental and functional significance
  - Dr. Margot Gosney, University of Reading
  - Dr. Kristian Daly, University of Liverpool
  - Dr. Mark Lyte, Texas Tech University – Microbial Endocrinology: The Intersection of microbiology and neurobiology to examine micro biome-behavior relationships including selectively bred taste phenotype

Morning

- **Companion Animal Symposium: Pet Nutrition in Canada**
  - Dr. Anna Kate Shoveller, University of Guelph – Indirect calorimetry to answer complex questions regarding feline metabolism in a non-invasive and robust manner
  - Dr. Ruurd Zijlstra, University of Alberta – Creating Kibbles with unique starch, fiber, and protein profiles using Canadian ingredients
  - Dr. Tsegaw Belay, Simmons Pet Food – Vitamin Stability in wet pet food formulation and production perspectives
  - Dr. Clayton MacKay, MacKay Veterinary Consulting – History of the Canadian Pet Food industry
- **Meat Science and Muscle Biology Symposium: Prediction technologies for meat characteristics**
  - Dr. Rex Sun, North Dakota State University – Prediction of Pork Loin Color and Marbling Attributes using Computer Vision System
  - Dr. Al Schaefer, University of Alberta – The automated and real time use of infrared thermography in the detection and correction of DFD and fevers in cattle
  - Dr. Chris Calkins, University of Nebraska – Challenges and Technologies for Postmortem Prediction of Beef Tenderness



# 2018 ASAS-CSAS Annual Meeting & Trade Show



- **Physiology Symposium: Postnatal consequences of heat stress during fetal development**
  - Dr. Bjorn Kuhla, Institute of Nutritional Physiology, Leibniz Institute for Farm Animal Biology – Metabolic ramifications of heat stress during late pregnancy and early gestation in dairy cows
  - Dr. Sha Tao, University of Georgia – Effects of heat stress during late lactation on the dam and its calf
  - Dr. Jay S. Johnson, USDA-ARS – Pre- and postnatal consequences of heat stress on piglet welfare
  - Dr. Isabel C. Boleli, São Paulo State University – Incubation temperature during fetal development and postnatal outcomes in the chicken
- **Animal Behavior and Well-Being Symposium: Farm animal welfare management practices and consumer perceptions: Finding a common balance without jeopardizing productivity - Sponsored by CSAS**
  - Dr. Dan Weary, University of British Columbia – Understanding and responding to public concerns regarding farm animal welfare
  - Dr. Laura Solano, Farm Animal Care Associates, Calgary – Lameness, foot lesions and injuries: impact on the cow, farmer and consumer
  - Dr. Karen Schwartzkopf-Genswein, Agriculture and Agri-Food Canada, Lethbridge – Can we mitigate castration pain in beef cattle? – What it means for animal comfort, productivity and consumer perception
  - Dr. Luigi Faucitano, Agriculture and Agri-Food Canada, Sherbrooke – Validation of stress indicators for the assessment of animal welfare preslaughter and prediction of meat quality variation
  - Dr. Joao Costa, University of Kentucky – Dairy calf and heifer management: nutrition, socialization and housing effects on welfare and the public perception
- **Pastures and Forages Symposium: Systems Research – Discipline Based Perspectives: Challenges, successes, and vision for near-and long-term improvement of livestock production with forages**
  - Dr. Doug Boyer, West Virginia University – A Systems perspective on the hydrological aspects of sustainable livestock production
  - Dr. Maria Lucia Silveira, University of Florida – Managing grazing land ecosystems for multiple ecosystems services
  - Dr. Jim Muir, Texas A&M University – Livestock systems forage research: agronomy in and beyond the paddock
  - Dr. Jim Neel, USDA-ARS – Increased availability of livestock products through forage systems research



Afternoon

- **Breeding and Genetics Symposium: New breeding goals in animal breeding**
  - Dr. Steve Miller, Angus USA – New breeding goals in beef cattle breeding
  - Dr. Gertje Petersen, AbacusBio – Molecular breeding tools in honey bee populations
  - Dr. William Davidson, Simon Fraser University – Genomic breeding programs in salmonid fishes
  - Dr. Daniela Lourenco, University of Georgia – Selection to mitigate heat stress in pigs
  - Dr. Ben Wood, Hybrid Turkeys – Changing breeding objectives for turkey production – yesterday, today, and tomorrow
  - Dr. Caeli Richardson, University of Guelph – Breeding for Efficiency: investigating dairy cattle efficiency traits and future implementation strategies
- **Graduate Student Symposium**
  - Dr. Meghan Wolster-Radcliffe, American Society of Animal Science –
  - Dr. Shane Gadberry, University of Arkansas – Communicating Animal Science through Extension Publications
  - Dr. Deb Hamernik, University of Nebraska – Communicating Animal Science: Communicating Policy

Wednesday, July 11, 2018

Afternoon

- **Companion Animal Symposium: Considerations for exotic or wild animals: Marine Animal Focus**
  - Dr. Marshall McCue, St. Marys University – Stable isotopes and breath validation
  - Dr. David Rosen, University of British Columbia Institute for the Oceans and Fisheries – The bioenergetics of marine mammals; insights from laboratory and wild studies
  - Dr. Heidi Bissel, Seaworld – Killer whale nutrition at SeaWorld and beyond
  - Dr. Lisa Hoopes, Georgia Aquarium – Nutrition and Feeding Ecology Across Aquatic Taxa: Integrating Research into the Feeding of Aquarium Collections





- **Meat Science and Muscle Biology Symposium: The Impact of Inflammation and Infection on Muscle Growth, Efficiency and Meat Quality**
  - Dr. Sarah Reed, University of Connecticut
  - Dr. Anna Dilger, University of Illinois – Implications of maternal infection and inflammation for offspring muscle development
  - Dr. Nick Gabler, Iowa State University – Immunometabolism responses to disease in pigs and its impact on feed efficiency
  - Dr. Casey Maxwell, Elanco – The effects of disease on growth efficiency and carcass composition of beef cattle
- **Pastures and Forages Symposium: Water- use efficiency at the forage-animal interface**
  - Dr. Chuck West, Texas Tech University – Water footprint of stocker beef production
  - Dr. Michael Lee, Rothamsted Research – Steps to Sustainable Ruminant Livestock Production – the role of instrumented farms and networks
  - Dr. Debbie Cherney, Cornell College of Agriculture and Life Science – Forage management and nutrient capture
  - Dr. Dirk Philipp, University of Arkansas – Life cycle assessment of forage-based livestock production systems
- **Physiology Symposium: Regulation of the growing follicle pool - basic and applied aspects**
  - Dr. Danielle Monniaux, Institut National de la Recherche Agronomique – Regulation of initiation of follicle growth in the sheep
  - Dr. Jim Ireland, Michigan State University – Size of the ovarian reserve, AMH, and fertility in cattle
  - Dr. Holly LaVioe, University of South Carolina – Physiological regulation of follicular growth in the pig
  - Dr. Robert V. Knox, University of Illinois – Management strategies to regulate follicular growth and timing of ovulation in pigs



Thursday, July 12, 2018

All Day

- **Triennial Growth Symposium: The nutrition of muscle growth**
  - Dr. Carolyn Fitzsimmons, University of Alberta – Signatures of pre-natal nutrition in cattle: adaptations in DNA methylation, gene expression, and post-natal growth
  - Dr. Kara Thornton-Kurth, Utah State University – Impacts of nutrition and other environmental factors on the differentiation and proliferation of satellite cells
  - Dr. Rodrigo Manjarin, California Polytechnic State University – Linking our understanding of muscle metabolism to amino acid nutrition in the neonate
  - Dr. Eric England, The Ohio State University – Factors affecting the transformation of muscle to meat
  - Dr. Elisabeth Lonergan, Iowa State University – Nutritional Impacts on muscle growth, animal performance, and ultimate impacts on meat quality
  - Mr. Samar El-Kardi, Virginia Tech

Morning

- **Animal Behavior and Well-Being Symposium: Incorporating natural behavior and ethological knowledge into intensive livestock farming**
  - Dr. Gosia Zobel, Ag Research NZ – Improving dairy goat management systems: We need to start with natural behavior
  - Dr. Joao HC Costa, University of Kentucky – Are we raising “normal” cows? Effects of early life diet, feeding plan, and housing on the natural behavior of cattle
  - Dr. Peter Krawczel, University of Tennessee – Maternal isolation behavior in cattle: Effect of management
  - Dr. Nicholas Devillers, Agriculture and Agri-Food Canada – Incorporating natural behaviour in housing design and management of lactating sows
  - Ms. Amanda Mathias, Texas A&M University – Easing the transition: Using feedlot cattle behavior as a management tool

# 2018 ASAS-CSAS Annual Meeting & Trade Show



- **Horse Species Symposium: Science Based Approaches to Managing Wild Horses in North America**
  - Dr. Bruce Stover, University of Calgary – Strategies to control feral horse populations in Alberta
  - Dr. Jason Ransom, Colorado State University – Management of Wild or Feral Equines in the United States: The Science Behind the Issue
- **Roles of Biosynthesizable Amino Acids Symposium**
  - Dr. Derek Brake, South Dakota State University – The nutrition of glutamate, glutamine, glycine, proline and arginine ruminants
  - Dr. John Brosnan, St. John's – Roles of amino acids in one-carbon metabolism and nutrition
  - Dr. Yongqing Hou, Wuhan Polytechnic University – Amino acids in intestinal growth and health
  - Dr. Francois Blachier, National Institute of Agronomic Research – Glutamate, glutamine, glycine, and proline utilization in developing pigs beyond protein synthesis and consequences
  - Dr. Guoyao Wu, Texas A&M – Endogenous synthesis of amino acids is insufficient for animal lactation, reproduction and growth
- **The 3rd International Animal Sciences and Biotechnology Forum: 2018 THEME: International multidisciplinary approach to enhance animal production and health**
  - Dr. Sang-gun Roh, Tohoku University – The control of homeostasis in rumen epithelium of Japanese Black Cattle
  - Dr. Sung Woo Kim, North Carolina State University – Evaluation of intestinal health in nursery pigs
  - Dr. Jingdong Yin, China Agricultural University – Increased dietary isoleucine enhances lipogenesis and fat accumulation in skeletal muscle through depressing AMPK phosphorylation in pigs
  - Dr. Jong-Su Eun, Biotechnology Research Institute, CJ CheilJedang – Exploring use of supplemental amino acids in swine and poultry: Beyond the most limiting amino acids
  - Dr. Cheol-Heui Yun, Seoul National University – Strategic approaches to improve immune response against stresses in farm animals
  - Dr. Todd See, North Carolina State University – International collaboration: Are the challenges worth the benefits?
  - Dr. Xiangshu Piao, China Agricultural University – Alternative feedstuffs for pigs in China
  - Dr. Byung-Chul Park, Seoul National University – International regulatory issues on animal feed additives: impacts on consumer safety and related industry

# 2018 ASAS-CSAS Annual Meeting & Trade Show



- **Nutrition/Physiology/Animal Health Symposium: Gut physiology and microbiota influences on animal health and production - Sponsored by CSAS**
  - Dr. Sergio Burgos, McGill University – Metabolic control of nutrient metabolism and milk synthesis in bovine mammary epithelial cells
  - Dr. Greg Penner, University of Saskatoon – Recovery of the gastrointestinal tract in response to nutritional challenges
  - Dr. Trevor Alexander, Agriculture and Agri-Food Canada, Lehtbridge – The role of the bovine respiratory microbiota in health and disease
  - Dr. Ben Willing, University of Alberta – Early life microbial exposures and disruptions shape subsequent animal health
  - Dr. Ehsan Khafipour, University of Manitoba – The inter-related physiology of the gastrointestinal tract, the mammary gland and the reproductive system in dairy cattle and swine
  - Dr. Tim Hackmann, University of Florida – Maximizing productivity of cattle by improving the efficiency of the rumen microbiota