



MIDWEST SECTION MEETING

March 12-15 • Madison, Wisconsin

2023

Updated 12/20/22

SCHEDULED SYMPOSIA BY DAY

MONDAY, MARCH 13, 2023: MORNING

Midwest Board Symposium: Microbiota enterotypes vary amongst pigs in the same population

- Dr. Samodha Fernando, University of Nebraska-Lincoln – Microbiomes from theory to application
- Dr. Christopher Anderson, USDA-ARS – Metagenomic detection and binning of plasmids for an improved understanding of the risk of antimicrobial resistance gene transfer events
- Dr. Todd Callaway, University of Georgia – Is the microbiome the answer to the ultimate question of life, the universe, and everything
- Dr. Adam Moeser, Michigan State University – Swine-centric presentation

MONDAY, MARCH 13, 2023: AFTERNOON

David Baker Symposium: Importance of energy and impact on amino acids in swine formulations

- Nicolas Hoiz, Smithfield – The global energy situation: Outlook for energy availability for fuel and feed
- Dr. Fransesc Molist, Schothorst – Nutritional consequences of formulating pig diets with low energy values using fibrous rich byproducts
- Dr. Mike Tokach, Kansas State University – Formulating US swine diets in a time of high energy costs
- Dr. Trey Kelner and Dr. Chad Pilcher, Cargill – How do producers and nutritionists determine which levers to pull to optimize feed cost and profitability under differing economic conditions?

Physiology Symposium: Effect of gut permeability in animal production

- Dr. Lautaro Cangiano, University of Guelph – In vitro vs. in vivo methods benefits and limitations
- Dr. Gregory Penner, University of Saskatchewan – Current knowledge in ruminants
- Dr. Nicholas Gabler, Iowa State University, Current knowledge in swine
- Dr. Dawn Koltes, Iowa State University – Measuring intestinal permeability when urine is not an option



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Ruminant Nutrition Symposium I: Lessons learned from feeding amino acids in beef and dairy cattle diets

- Dr. Felipe Cardoso, University of Illinois – Amino acid nutrition in dairy cattle: Beyond milk protein
- Dr. Chanhee Lee, The Ohio State University – Considerations when rumen protected amino acids are fed to dairy cows
- Dr. Evan Titgemeyer, Kansas State University – Predicting performance responses of growing cattle to amino acid supplementation
- Dr. Aimee Lutz, Devenish Animal Nutrition – Industry Perspective on the Value and Challenges of Amino Acid Feeding in Ruminants

Swine Translational Symposium: Execution on swine farms: Costs, hurdles and empowering success

- Dave Wade, The Hanor Company – Sow farm costs and hurdles to execution
- Dr. Noel Williams, Iowa Select Farms – Wean to market: Costs and hurdles to execution
- Jon Hoek, Summit SmartFarms – Making “scientific” work instructions not so scientific
- Dr. Chris Rademacher, Iowa State University – The speed of change—are the bugs or people changing more quickly? Implications of missed execution on health
- Aidan Connolly, Agritech Capital – Current state use of technology and the next 3 to 5 years

TUESDAY, MARCH 14, 2023: MORNING

Animal Behavior, Health and Well-Being Symposium: Back to the basics on animal welfare: How, what, and why are we measuring?

- Dr. Saskia Arndt, Utrecht University – DAWCon—the dynamic animal welfare concept: A guideline to assess, safeguard and promote animal welfare
- Dr. Nichole Anderson, Texas Tech University – Deep dive into animal welfare measurements in swine and implications
- Lyndsey Jones, JBS USA – After the publication: How is animal welfare research being used in the industry?
- Collette Kaster, CEO, American Meat Science Association (AMSA) – After the publication: Connecting research and live animal auditing



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Harlan Ritchie Symposium: Creating value for U.S. beef in a global market

- Brian Shultz, MPB Commodities – Global competition for calories (diversion of energy from food/feed to fuel)
- Dr. Ken Odde, Professor Emeritus, Kansas State University – Creating more value for heifers
- Dr. Wes Gentry, Midwest PMS and Dr. Zachary Smith, South Dakota State University – Creating a more efficient production system (feed efficiency in the real world)

Nonruminant Nutrition Symposium I: How to improve pigs weaned per sow per year under constant sow farm health challenges

- Dr. Trey Kellner, AMVC Management Services, LLC – The Ominous Storm: How to plan and execute a feeding and management program in poor health situations
- Dr. Eric Weaver, South Dakota State University – Developing mortality risk profiles to better feed and manage high-producing sows
- Dr. Mark Knauer, North Carolina State University – Dead sows don't rear piglets
- Dr. Kiah Berg, Pipestone – Nutrition practices in a high-producing sow herd
- Dr. Junmei Zhao, Cargill – Improving pig livability before, during, and after parturition
- Dr. Jorge Estrada, Carthage Vet Services – Integrating health and feeding management strategies during lactation: Focus on the sow

Ruminant Nutrition Symposium II: Sustainable methane mitigation feeding strategies that support local/regional economic and agronomic sectors in ruminants

- Dr. Jasmine Dillon, Colorado State University – Methane mitigation and sustainability of beef systems
- Dr. Hilario Mantovani, University of Wisconsin – Microbiome-derived bioactive molecules to reduce enteric methane emissions
- Dr. Steven C. Ricke, University of Wisconsin – Methanogen ecology in the ruminant hindgut
- Dr. Elizabeth (Lizzy) French, USDA-ARS – Methane mitigation in dairy animals begins before birth with opportunities to impact throughout life



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TUESDAY, MARCH 14, 2023: AFTERNOON

Genetics, Genomics and Bioinformatics Symposium: Functional Annotation of Animal Genomes (FAANG) Project

- Dr. Jessica L. Petersen, University of Nebraska-Lincoln – FAANG in the horse
- Dr. Yvonne Drechsler, Western University of Health Sciences – Functional annotation of an array of immune cells and various tissues in the chicken
- Dr. Huaijun Zhou, University of California-Davis – FAANG IN cattle
- Dr. Christopher K. Tuggle, Iowa State University – Building the Tools to Solve the Genome to Phenome Puzzle in Agriculture
- Dr. Luiz Lehmann Coutinho – Identification of regulatory mutations affecting complex traits

Nonruminant Nutrition Symposium II: How to minimize feed cost while enhancing production in a dynamic economic landscape

- Dr. Mariana Boscato Menegat, Holden Farms – Minimizing sow feeding cost while enhancing production
- Dr. John F. Patience, Professor Emeritus, Iowa State University – Do you have the energy to grind feed costs and maximize income in demanding economic times?
- Dr. Chad Paulk, Kansas State University – Feed cost and the influence of feed manufacturing
- Dr. Hans H. Stein, University of Illinois at Urbana-Champaign – Optimum ratios of calcium, phosphorus, and phytase to maximize feed conversion rates in growing pigs

WEDNESDAY, MARCH 15, 2023: MORNING

Growth, Development, Muscle Biology and Meat Science Symposium: Understanding the effects of heat stress on growth and production efficiencies of cattle and pigs

- Dr. Lance Baumgard, Iowa State University – Heat stress impacts on cattle production
- Dr. Jay S. Johnson, USDA-ARS – Bioenergetic consequences of pre- and postnatal heat stress on swine productivity
- Dr. Jongkyoo Kim, Michigan State University – Cellular response to heat exposure: influences on the growth potential of bovine skeletal muscle and adipose tissue