Updated 12/18/25

CURRENT SYMPOSIA

David Baker Symposium: Challenges in refining the amino acid values in key protein sources for pigs. *Sponsored by David H. Baker Appreciation Club*

Recent years, significant genetic improvement have led to enhanced lean gain of pigs. Modern genotypes have increased ability of efficient utilization of protein from feed ingredients. Pig diets include various protein sources from traditional and conventional feed ingredients but also from novel feed ingredients that are economical, sustainable, or possessing functional roles. There have been great research efforts evaluating nutritional values and functional roles of these novel protein sources fed to pigs. Understanding pigs' ability of retaining nitrogen and amino acids is critically important especially with significant genetic improvement. This would affect nutritional and functional values of protein in traditional and novel protein sources. The goal in the 2026 Baker Symposium is to provide research updates on (1) nitrogen retention of modern genotypes, (2) nutritional and functional values of proteins in novel protein sources, and (3) experience of feeding novel protein sources by weaning age and growth stages.

- Jiyao Guo, Genus PIC – Genetic trends of protein deposition and amino acid needs of pigs.
- Dr. Hans H. Stein, University of Illinois Urbana-Champaign – Implications of increased nitrogen retention in modern pigs.
- Courtney Pohlen, South Dakota State University – Growth Performance Effects of Dietary Intact Protein or Synthetic Amino Acids on Early Grower Pigs.
- Dr. Marko Rudar, Auburn University – TBD
- Dr. Sung Woo Kim, North Carolina State University – Nutritional needs of non-essential amino acids for intestinal health and growth performance of nursery pigs fed diets without soybean meal.
- Dr. Laura Greiner, Iowa State University – Redefining the amino acid paradigm for modern sows.

Harlan Ritchie Symposium: Building Tomorrow's Beef Industry: Workforce solutions and innovations. *Sponsored by Harlan D. Ritchie Appreciation Club*

- Dr. Tom Field, University of Nebraska-Lincoln Engler Agribusiness - Are university graduates prepared to meet the expectations of industry and society?
- Dr. Marty Ropp, New Acres – The current workforce labor shortage and how it is affecting the industry.
- Dr. Jamie Brenen, South Dakota State University – Artificial Intelligence (AI) and the Three-part Mission of Land Grant Universities.
- Dr. David Lust, West Texas A&M University – Texas Cattle Feeders Association Junior Fed Beef Career and Leadership Program.
- Karol Fike, Kansas State University – Building tomorrow's beef industry: Kansas State University Feedlot Boot Camp Program.

- Jim MacDonald, University of Nebraska-Lincoln – Overview of the Timmerman Feedyard Management Internship.
- Kendall Samuelson, West Texas A&M University – Feedlot Nutritionist Boot Camp: Immersive Training for Graduate-level Students in Beef Cattle Nutrition.
- Mark McCully, American Angus Association – Developing the young professional through educational programs.
- Dr. Todd See, NC State University – Workforce solutions and innovations: What is the pork industry doing?
- Magdiel Lopez Soriano, University of Missouri – Strategies for managing trade NAFTA (TN) Visa vorkers in the U.S. swine industry: Data-driven and experience-based approach.

Billy Day Symposium: Impact of heat stress. *Sponsored by Billy Day Appreciation Club*

- Amanda Minton, Acuity Swine – Production-level impacts of heat stress on swine reproduction.
- Dr. Matt Lucy, University of Missouri – Long-term and multigenerational effects.
- Jay Johnson, University of Missouri – Environmental, nutritional, and genetic mitigation strategies.
- Dr. Jeremy Cottrell, University of Melbourne – Industry-research collaboration and technology adoption; an international perspective.
- Dr. Luiz F. Brito, Purdue University – Dairy/poultry/swine parallels

Animal Behavior and Well-Being Symposium: Beef on dairy: What are the risk factors for health and productivity issues for the grower, feedlot, and processor?

In this symposium, explore what we currently know about the over valued beef on dairy calf system, and implications of management for their health, productivity, and welfare.

- Dr. Melissa Cantor, Penn State University – Health effects and behavioral variability in the valuable crossbred.
- Dr. Jerad Jaborek, Michigan State University – Impact of fiber inclusion in the finishing diet on the behavior and health of beef x dairy steers.
- Dr. Vinicius Machado, Texas Tech University – Differences in health, feed intake, and growth between Holstein and Beef-on-Dairy calves.
- Maddie Pinkerton, Purdue University – Behavior and welfare considerations for crossbreed calves.

Beef/Small Ruminant Translational Symposium: Precision and innovation in livestock systems.

This symposium showcases new technologies and genetic insights—from AI and computer vision to virtual fencing and trait discovery—that enhance efficiency, sustainability, and productivity in beef and sheep production.

- Dr. Juliana Ranches, Oregon State University – Evaluating virtual fence technology to improve grazing management and cattle welfare on western rangelands.
- Dr. Derek Brake, University of Missouri – Using body size measures from computer vision and ai to evaluate influences of heifer development on cow efficiency.
- Dr. Matthew Spangler, University of Nebraska-Lincoln – Balancing maternal and terminal traits in cow-calf operations using decision support platforms.

- Dr. Melinda Ellison, University of Idaho – Characterizing willow browse by cattle and large ungulates for better riparian management or restoration.
- Dr. Robert Cushman, USDA, U.S. Meat Animal Research Center – Benefits of precision management of calving day in beef heifers.
- Dr. Andrew Foote, Oklahoma State University – Discovery of novel traits to improve efficiency and sustainability of beef cattle production.
- Dr. Andrew Hess, University of Nevada, Reno – Using multi-sensor phenotypes to support management and genetic selection in extensive rangeland systems.

Growth, Development, Muscle Biology and Meat Sciences Symposium: Processed meats play a critical role across all species.
This symposium will provide animal and meat science professionals with a comprehensive view of processed meats: how they are defined and evaluated, how production factors influence meat ingredients, how processing techniques impact product outcomes, and what educational resources exist to support science-based decision-making in research, industry, and policy conversations.

Nonruminant Nutrition Symposium: The Science and Commercial Application of Soybean Meal in Today's Pig Diets – *Sponsored by U.S. Soy*
This symposium is the culmination of three years of work by scientists to bring forward new information regarding the use of soybean meal in swine nutrition and health applications. This effort has driven substantial research funding to university and commercial scientists. Seminal achievements include the means to resolve costly summer carcass weight dip in growing-finishing pigs and the introduction of a new decision-making financial modeling tool for the industry to guide toward that outcome. A booklet containing a series of 10 research articles of largely new information will be provided.

- Dr. Robert Easter, University of Illinois Urbana-Champaign – History of the corn-soy diet.
- Dr. R. Dean Boyd, Animal Nutrition Research – Four pillars of soybean meal's unique value to swine nutrition and health.
- Dr. Aaron Gaines, Ani-Tek – New knowledge on soybean meal and practical implications to feed formulation.
- Dr. David Rosero, Iowa State University and Dr. Bart Borg, United Soybean Board – Modeling the economic value of soybean meal in swine diets: Development of a digital calculator for dynamic market conditions.
- Dr. Gonzalo Mateos González, University of Madrid – Main factors affecting the nutritional value of soybean meals. Importance of quality control and country of origin of the soybeans.
- Dr. Katelyn Gaffield, Kansas State University – Evaluation of U.S. soybean meal quality and consistency and determination of best analytical practices.
- Dr. Hans H. Stein, University of Illinois Urbana-Champaign – Why a new net energy value for soybean meal fed to pigs is needed.
- Dr. Nathan Augspurger, United Soybean Board – Future research opportunities for soybean meal in swine production.

Physiology Symposium: Recent progress in stress and immunity research, from basis to applied concepts.

- Dr. Luiz F. Brito, Purdue University – Genomic strategies for improving thermotolerance in pigs and dairy cattle: progress and prospects.
- Dr. Sami Dridi, University of Arkansas – Impact of heat stress on gut and systemic health in animal production: novel molecular pathways
- Dr. Agustin Rius, University of Tennessee – The impact of inflammation in heat-stressed dairy cattle.
- Dr. Jay S. Johnson, University of Missouri – Integrating physiology and genomics to define heat stress resilience in pigs.
- Dr. Sarah Pearce, USDA-ARS – Heat stress and gut integrity in monogastrics: Past lessons, present challenges, and future directions.

Ruminant Nutrition Symposium: Current state of the science on soy (or oilseed) use in cattle diets (growing, finishing, and cow diets).

- Dr. Monty Kerley, Profectus Livestock Solutions – Use of soy protein in beef diets to meet amino acid requirements.
- Dr. Warren Rusche and Dr. Zachary Smith, South Dakota State University – Growing and finishing cattle.
- Dr. Ana Clara Menezes, South Dakota State University – Soybean byproducts on beef cow nutrition: Potential impacts on metabolic and physiological parameters.
- Dr. Kendall Swanson, North Dakota State University – Impacts on digestive physiology and tying it all together.

Swine Translational Symposium: Advancing precision feeding strategies.

This symposium will discuss recent research as we advance precision feeding in US swine production, emphasizing practical applications and economic implications across production stages. The session aims to bridge science and practice, helping producers and allied industry professionals evaluate how precision nutrition can drive both performance and profitability.

- Aline Remus, AgriFood Canada – Precision Feeding: Principles and practice—lessons learned from growing–finishing pigs.
- Thomas Sønderby Bruun, SEGES Innovation – Precision Feeding gilts for lifetime performance.
- Mikayla Spinler, Kansas State University – Progress in precision nutrition for sows: Current understanding and future direction.
- Devin Goehring, United Animal Health – Lessons learned for precision feeding in commercial finishing barns.
- Dr. Hyatt Frobose, Jyga Technologies – Precision feeding: From idea to practice.
- Dr. Lee Johnston, University of Minnesota – Economics of precision nutrition: Investment, profitability, and ROI.