K-State Applied Swine Nutrition Team focuses on feed efficiency, producer profitability and student development

The Situation –
Our K-State Applied Swine Nutrition Team focuses on being the world’s leader in applied swine nutrition research and producer-focused service. In 2017, we focused research and extension activities on improving nutritional efficiency and maximizing profitability while training future leaders for the swine industry.

Accomplishments for 2017:
- Published 18 journal articles and 40 abstracts.
- Secured $2.62 million in grants for swine nutrition and production research and outreach.
- Presented keynotes at conferences in U.S., Brazil, Cambodia, Canada, Columbia, Ireland, and Spain.
- Published Swine Industry Day Report with 54 papers from 56 experiments using 39,277 pigs.
- Contributed 16 articles to national and international swine industry magazines
- Provided coordination and leadership to commercial research facilities in Iowa, Minnesota, Nebraska, and Ohio.
- Developed an intensive collaboration with the K-State Dept. of Statistics faculty to expand data analysis and graduate student training.
- Our graduate students performed research trials in 7 US swine production systems.
- Our students won numerous awards at premier swine science conferences:
  ✓ Midwest ASAS meetings – 1st place PhD oral, 1st place PhD poster, 2nd place MS oral.
  ✓ 3 Australasian Pig Science Travel Awards
  ✓ Numerous scholarships and fellowships.
- We had 13 graduate students in 2017 (2 MS, 10 PhD, 1 concurrent DVM/PhD) and serve on committees of many students in other programs.
- Hosted visiting scholars from Japan and Brazil.
- Continued industry leading role in determining how medium chain fatty acids can decrease feed viral concentrations in swine feed.
- Our research identified that late finishing pigs need a minimum level of 13% crude protein.
- Determined the National Research Council (2012) requirements for digestible phosphorus were too low and are ~130% of stated levels for nursery and grow-finish pigs.
- Developed an industry decision tool to determine the optimum dietary energy level and late finishing fiber level for finishing pigs.
- Served as advisors for swine production and feed companies in the U.S., Brazil, Canada, Chile, China, Colombia, Ecuador, Germany, Japan, Mexico, Russia, and Spain.
- Celebrated the 50th annual Swine Day in 2017.
- Swine Day papers downloaded over 12,000 times in 123 different countries in last 2 years.

2017 Graduate Students

Comments Received from Producers:
- “Thanks for all you are doing. You have built a nationally/internationally recognized swine research group”
- “We make better decisions on our farm because I can get help from K-State. They review the science and do a good job of sharing their knowledge and bringing it to a practical level for those of us in the field.”

Contact
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