

**2016 FUNDED by Category**

<b>Fund/Program</b>	<b>Project Title</b>	<b>#</b>	<b>Primary Contact</b>	<b>Name</b>
ANIMAL SCIENCE / Animal Science	Modeling conductive heat transfer through and around grow-finish pigs	16-056	Cortus, Dr Erin	South Dakota State University
ANIMAL SCIENCE / Animal Science	Mitigation of seasonality of sow reproductive performance via genomic selection.	16-103	Maltecca, Dr. Christian, PhD.	North Carolina State University
ANIMAL SCIENCE / Animal Science	Mitigation of summertime boar infertility by evaporative and conductive cooling	16-165	Safranski, Dr. Tim, Ph.D.	University of Missouri - Columbia
ANIMAL SCIENCE / Reproductive & Growth Physiology	Advancing Investigations in Swine Reproduction Efficiency at Iowa State - Part2	16-265	Keating, Dr. Aileen, Ph.D.	Iowa State University
ANIMAL SCIENCE / Sow Lifetime Productivity	Capturing genetic potential for greater sow lifetime productivity. Main (Phase 2) Trial: Year 2 (15-140 Yr2)	16-148	Callan, Linda	University of Alberta
ANIMAL SCIENCE / Swine Nutrition	Improving the economic efficiency of fat utilization in pig diets by better quantifying the energy value of fat sources based on their chemical composition	16-010	Patience, Dr. John, Ph.D.	Iowa State University
ANIMAL SCIENCE / Swine Nutrition	Impact of dietary fiber on nutrient utilization by the pig and on the efficacy of the phytase enzyme	16-016	Patience, Dr. John, Ph.D.	Iowa State University
ANIMAL SCIENCE / Swine Nutrition	Re-defining growth efficiency accounting for the interaction between host genome and commensal gut bacteria.	16-020	Maltecca, Dr. Christian, PhD.	North Carolina State University
ANIMAL SCIENCE / Swine Nutrition	Determining the optimal dietary lysine:energy ratios for health challenged grow-finish pigs	16-062	Gabler, Dr. Nicholas, Ph.D.	Iowa State University
ANIMAL WELFARE / Animal Welfare	Evaluating the effects of mitigation strategies on piglet welfare and future productivity after transport during different seasons	16-065	Johnson, Dr. Jay	USDA, ARS, Midwest Area
ANIMAL WELFARE / Animal Welfare	Building a handling course to document sow locomotion when sows are afflicted with different naturally occurring lameness	16-075	Azarajouh, Dr. Samaneh, Ph.D.	Iowa State University
ANIMAL WELFARE / Animal Welfare	The plasma and tissue pharmacokinetics and pharmacodynamics of nonsteroidal anti-inflammatory drugs in neonatal piglets.	16-091	Messenger, Dr. Kristen	North Carolina State University
ANIMAL WELFARE / Animal Welfare	Evaluation of the Transmammary Delivery of Firocoxib in Sows to Alleviate Pain Associated with Piglet Castration, Teeth Clipping, & Tail Docking	16-118	Coetzee, Dr. Johann, PhD	Iowa State University
ANIMAL WELFARE / Animal Welfare	Evaluation of the Kinect v2 motion-sensing camera to develop a rapid and effective tool for identifying compromised pigs	16-122	Arent, Ms. Deb	University of Nebraska-Lincoln
HUMAN NUTRITION / Human Nutrition	Effect of pork ingestion on postprandial mitochondrial protein synthesis and inflammation in healthy weight, overweight, and obese adults	16-012	Burd, Dr. Nicholas	University of Illinois
HUMAN NUTRITION / Human Nutrition	Effects of a lean pork-containing, high-protein breakfast on indices of satiety and metabolic health in men and women with pre-diabetes	16-104	Maki, Dr. Kevin	Provident Clinical Research & Consulting
HUMAN NUTRITION / Human Nutrition	Does Meal-based Enhancement of Protein Intake Augment Long-term Responses to Sarcopenic Obesity Reduction?	16-144	Bales, Dr. Connie	Duke University Medical School

**2016 FUNDED by Category**

<b>Fund/Program</b>	<b>Project Title</b>	<b>#</b>	<b>Primary Contact</b>	<b>Name</b>
INTERNATIONAL TRADE / International Trade	Survey of Microbiological Status of Offal Products from Pork Processing Facilities in the United States	16-162	Erickson, Dr. Alan	South Dakota State University
PORK QUALITY / Pork Quality	Pork Supply Chain Audit	16-115	Boler, Dr. Dustin	University of Illinois
PORK QUALITY / Pork Quality	Revision of the Porcine Myology Website	16-155	Jones, Dr. Steven J., Ph.D.	University of Nebraska-Lincoln
PORK QUALITY / Pork Quality	Effect of different fat sources and vitamin E status on antioxidant status, carcass characteristics, and meat quality of pigs grown to heavy slaughter weight	16-208	Lindemann, Dr. Merlin D., B.S., Ph.D.	University of Kentucky
PORK QUALITY / Pork Quality	Characterizing the relationship between early postmortem loin quality attributes with 14 day aged loin quality attributes and sensory characteristics	16-220	Boler, Dr. Dustin	University of Illinois
PORK QUALITY / Pork Quality	Determining relationship between early postmortem loin quality attributes and aged loin quality attributes using meta-analysis techniques	16-221	Dilger, Dr. Anna, Ph.D.	University of Illinois
PORK SAFETY / PS-Post-Harvest	National Survey of Salmonella Prevalence, Serotypes, and Antimicrobial Resistance in Porcine Lymph Nodes	16-059	Arnold, Dr. Ashley	Texas A&M University
PORK SAFETY / PS-Post-Harvest	Determination of the Salmonella enterica prevalence in lymph nodes from market hogs and sows.	16-074	Scaria, Dr. Joy	South Dakota State University
PORK SAFETY / PS-Post-Harvest	Estimating the National prevalence of Salmonella spp. In lymph nodes from market hogs and sows	16-120	Cavanaugh, Tracy	Pennsylvania State University
PORK SAFETY / PS-Post-Harvest	From feed to meat: investigation of the prevalence and distribution of Salmonella enterica serotype I 4,[5], 12:i: - a pathogen of interest in pork	16-192	Trinetta, Dr. Valentina	Kansas State University
PORK SAFETY / PS-Post-Harvest	Investigation of pathogenicity, competitive fitness, and novel methods for rapid diagnosis of Salmonella I 4,[5],12:i: - in swine	16-215	Kreuder, Dr. Amanda	Iowa State University
PUBLIC HEALTH / Antibiotics & Resistance	Effect of Manure Application Timing and Management on the Persistence and Transport of Antibiotics and Antibiotic-Resistant Bacteria in Corn and Soybean Production Systems	16-039	Soupir, Dr. Michelle, Ph.D.	Iowa State University
PUBLIC HEALTH / Antibiotics & Resistance	Influence of antibiotic administration routes on the development of antimicrobial resistance in gut and nasal bacteria of swine	16-053	Nagaraja, Dr. T.G.	Kansas State University
PUBLIC HEALTH / Antibiotics & Resistance	Setback Distance Requirements for Removal of Swine Slurry Constituents in Runoff	16-072	Li, Dr. Xu	University of Nebraska-Lincoln
PUBLIC HEALTH / Antibiotics & Resistance	Alternative antibiotic technologies for weaned pigs.	16-085	Beier, Dr. Ross	USDA, ARS, Southern Plains Area
PUBLIC HEALTH / Antibiotics & Resistance	Salmonella DIVA vaccine for cross-protection against Salmonella serovar I 4,[5],12:i:--: minimizing antibiotic usage and protecting swine and public health	16-113	Bearson, Dr. Bradley	USDA, ARS, Midwest Area
PUBLIC HEALTH / Antibiotics & Resistance	Assessing the unintended effects that therapeutic antibiotic treatment has on multidrug-resistant Salmonella in swine: implications for swine health and food safety	16-123	Brunelle, Dr. Brian, Ph.D.	USDA, ARS, Midwest Area

**2016 FUNDED by Category**

<b>Fund/Program</b>	<b>Project Title</b>	<b>#</b>	<b>Primary Contact</b>	<b>Name</b>
PUBLIC HEALTH / Antibiotics & Resistance	Summary of Antibiotic Resistance Research	16-268	Eblen, Mr. Brian Shawn	Exponent, Inc.
PUBLIC HEALTH / Antibiotics & Resistance	Development and Validation of a Standardized Scientific Protocol Evaluating Antibiotic Alternatives in Growing Pigs - Phase II (yr2)	16-276	Gabler, Dr. Nicholas, Ph.D.	Iowa State University
PUBLIC HEALTH / Influenza	Evaluation of influenza dynamics in exhibition swine at jackpot shows	16-082	Bowman, Dr. Andrew	The Ohio State University
PUBLIC HEALTH / Influenza	Adaptation of a human seasonal H3 influenza A virus to efficiently infect and replicate in the swine host	16-129	Vincent, Dr. Amy, DVM, Ph.D.	USDA, ARS, Midwest Area
PUBLIC HEALTH / MRSA	Characterization of Staphylococcus aureus Bacteriophages in Swine Production Environments	16-143	Gill, Dr. Jason	Texas A&M University
SUSTAINABILITY / Environmental Footprint	retrospective Analysis of US pork production from 1960 to 2015 using LCA	16-214	Thoma, Dr. Gregory J., Phd	University of Arkansas
SUSTAINABILITY / Manure Storage/Application	Drainage Water Quality Impacts of Agricultural Management Practices: Timing of Manure Application and Use of a Winter Cereal Rye Cover Crop Project - year 1	16-001	Helmets, Dr. Matthew J., PhD	Iowa State University
SUSTAINABILITY / Manure Storage/Application	Distribution of Discharge from Liquid Manure Applicator Manifolds	16-067	Arora, Dr. Kapil	Iowa State University
SUSTAINABILITY / Manure Storage/Application	Sustainability Evaluation of a Solid-Liquid Manure Separation Operation	16-094	Lim, Dr. Teng Teeh, Ph.D.	University of Missouri - Columbia
SUSTAINABILITY / Other	A Comparative Life Cycle Assessment of Production of Pork in the European Union and the United States	16-076	Thoma, Dr. Gregory J., Phd	University of Arkansas
SUSTAINABILITY / Other	A Comparative Life Cycle Assessment Nutritionally Equivalent Meals with and without Pork	16-124	Thoma, Dr. Gregory J., Phd	University of Arkansas
SWINE HEALTH / Foreign Animal Disease	Protective Efficacy of an Adenovirus-vectored ASFV Multi-antigen Cocktail	16-007	Mwangi, Dr. Waithaka	Texas A&M University
SWINE HEALTH / Foreign Animal Disease	Improving African swine fever diagnostics through the use of Multi Antigen Print Immunoassay (MAPIA) technology.	16-021	Clavijo, Dr. Alfonso, DVM, PhD	Kansas State University
SWINE HEALTH / Foreign Animal Disease	Evaluation of meat juice as a diagnostic sample for the detection of African swine fever	16-022	Clavijo, Dr. Alfonso, DVM, PhD	Kansas State University
SWINE HEALTH / Foreign Animal Disease	Development of Porcine Cytomegalovirus as a Conventional and Disseminating Vaccine for Classical Swine Fever - A Pilot Study	16-177	Jarvis, Dr. Michael	University of Plymouth
SWINE HEALTH / Foreign Animal Disease	Determination of the role of L83L, an uncharacterized ASFV protein that binds IL-1 $\beta$ during ASFV infection	16-184	Gladue, Dr. Douglas	USDA, ARS, North East Area
SWINE HEALTH / General Swine Disease	Efficacy of a novel intramammary vaccine delivery system for PEDV to decrease pre-weaning mortality and enhance mechanisms of immunity	16-036	Arruda, Dr. Bailey	Iowa State University
SWINE HEALTH / General Swine Disease	Broadly protective nasal mucosal vaccine for influenza A virus of swine	16-060	Vu, Dr. Hiep, Ph.D.	University of Nebraska-Lincoln
SWINE HEALTH / General Swine Disease	Mucosal Delivery of HA-Stalk Focused Vaccine Using Lactobacillus to Induce Broadly Cross Protection Against Swine Influenza Infections	16-106	Xiang, Dr. Shi-hua	University of Nebraska-Lincoln

**2016 FUNDED by Category**

<b>Fund/Program</b>	<b>Project Title</b>	<b>#</b>	<b>Primary Contact</b>	<b>Name</b>
SWINE HEALTH / General Swine Disease	Development and Validation of Novel Diagnostic Assays and Investigation of Disease Pathogenesis for Infectious Arthritis in Growing Pigs	16-107	Arruda, Dr. Bailey	Iowa State University
SWINE HEALTH / General Swine Disease	Heterologous prime-boost vaccination protocols using whole inactivated influenza A virus vaccines to drive improved heterologous cross-protection	16-111	Vincent, Dr. Amy, DVM, Ph.D.	USDA, ARS, Midwest Area
SWINE HEALTH / General Swine Disease	Case-control study of PED/PDCoV outbreaks between the fall of 2015 and spring of 2016 in swine herds in the upper Midwest	16-156	Tousignant, Dr. Steve, DVM	Swine Vet Center, P.A.
SWINE HEALTH / General Swine Disease	PEDV and PDCoV Literature Review	16-266	Niederwerder, Dr. Megan	Kansas State University
SWINE HEALTH / PRRS	Genetic modifications in CD163 that confer complete resistance of pigs to infection with PRRSV	16-181	Rowland, Dr. Raymond R., Ph.D.	Kansas State University
SWINE HEALTH / PRRS	Detection and differentiation of field strains and commonly used vaccine strains of Type 2 PRRS virus in the US	16-196	Bai, Dr. Jianfa, Ph.D.	Kansas State University
SWINE HEALTH / PRRS	Demonstration of Airborne PRRSV Inactivation by a Non-Thermal Plasma	16-198	Clack, Dr. Herek	University of Michigan
SWINE HEALTH / PRRS	Use of Mobile Nanopore Sequencing to Detect and Genotype Porcine Reproductive and Respiratory Syndrome Virus	16-205	Lahmers, Dr. Kevin	Virginia Polytechnic Institute and State University
SWINE HEALTH / PRRS	United States Swine Pathogen Database	16-222	Faaberg, Dr. Kay S., Ph.D.	USDA, ARS, Midwest Area