

**2015 FUNDED by Category**

<u>Program Area</u>	<u>Project Title</u>	<u>#</u>	<u>Primary Contact</u>	<u>Organization Name</u>
ANIMAL SCIENCE\Animal Science	Trans-generational effects of in utero heat stress on reproduction in the gilt and sow	15-043	Safranski, Tim	University of Missouri - Columbia
ANIMAL SCIENCE\Animal Science	Practical evaluation of linoleic acid and antioxidant supplementation for lactating sows housed under high ambient temperatures	15-071	Van Heugten, Eric	North Carolina State University
ANIMAL SCIENCE\Animal Science	Development of New Barn Commissioning and Building Component Integrity Protocols for Swine Housing Systems	15-175	Hoff, Steven J.	Iowa State University
ANIMAL SCIENCE\Breeding & Genetics	Genome wide identification and annotation of functional regulatory regions in livestock species	15-139	Zhou, Huaijun	University of California - Davis
ANIMAL SCIENCE\Reproductive & Growth Physiology	Betaine Supplementation to Lactating Sows to Mitigate the Negative Impacts of Heat Stress	15-138	Stewart, Kara	Purdue University
ANIMAL SCIENCE\Reproductive & Growth Physiology	Advancing Investigations in Swine Reproduction Efficiency at Iowa State	15-179	Ross, Jason W.	Iowa State University
ANIMAL SCIENCE\Sow Lifetime Productivity	Optimal dietary protein for the development of gilts - Part 2	15-119	Vallet, Jeffrey	USDA, ARS, Northern Plains Area
ANIMAL SCIENCE\Sow Lifetime Productivity	Replacement gilt candidate feet, leg and reproductive trait evaluation using digital analysis and visual observation.	15-137	Stalder, Kenneth J.	Iowa State University
ANIMAL SCIENCE\Sow Lifetime Productivity	Capturing genetic potential for greater sow lifetime productivity. Main (Phase 2) Trial: Year 1	15-140	Foxcroft, George	University of Alberta
ANIMAL SCIENCE\Swine Nutrition	Novel feed processing methods of cold pelleting and fine ground corn segregation to maximize feed efficiency, nutrient utilization and economic return	15-052	Stark, Charles	Kansas State University
ANIMAL SCIENCE\Swine Nutrition	Evaluating nutritional strategies to mitigate the negative impact PRRS has on grow-finisher pig performance	15-099	Gabler, Nicholas	Iowa State University
ANIMAL SCIENCE\Swine Nutrition	Energy and nutrient digestibility in 11 sources of wheat middlings	15-114	Stein, Hans H.	University of Illinois
ANIMAL SCIENCE\Swine Nutrition	Correlation between physical characteristics of diets and absorption of energy by pigs	15-115	Stein, Hans H.	University of Illinois
ANIMAL SCIENCE\Swine Nutrition	Enhancing nutrient utilization of corn DDGS by feed enzymes in the pig intestine	15-118	Jha, Rajesh	University of Hawaii
ANIMAL SCIENCE\Swine Nutrition	Evaluation of dietary soybean meal replacement on grow-finisher pig performance when challenged with PRRS and Mycoplasma	15-148	Gabler, Nicholas	Iowa State University
ANIMAL WELFARE\Animal Welfare	A review of heavy weight market pigs: Status of knowledge and future needs assessment	15-203	DeRouchey, Joel	Kansas State University
ANIMAL WELFARE\Animal Welfare	Evaluating the welfare of piglets after weaning and transport during different seasons	15-003	Lay, Donald	USDA, ARS, Midwest Area
ANIMAL WELFARE\Animal Welfare	Dynamic space requirements for non-lame and lame sows determined by lying-standing-lying sequence profile	15-004	Calderon Diaz, Julia	Iowa State University
ANIMAL WELFARE\Animal Welfare	Evaluation of Analgesia Efficacy in Piglets Undergoing Castration and Tail Docking	15-023	Turner, Patricia	University of Guelph
ANIMAL WELFARE\Animal Welfare	Development of an interactive training app for timely and humane on-farm euthanasia in pre-weaned piglets	15-042	Pairis-Garcia, Monique	The Ohio State University
ANIMAL WELFARE\Animal Welfare	Effect of short term high tryptophan diet fed to sows on subsequent piglet behavior	15-066	Lay, Donald	USDA, ARS, Midwest Area
ANIMAL WELFARE\Animal Welfare	Using conveyor belt to load and unload pigs to promote self-movement of piglets	15-077	Lay, Donald	USDA, ARS, Midwest Area
ANIMAL WELFARE\Animal Welfare	Common Swine Industry Audit Data Aggregation and Sharing	15-182	Berquist, Melissa	Texas A&M University

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HUMAN NUTRITION\Human Nutrition	Effects of incorporating red meat into a Mediterranean-style dietary pattern on cardiometabolic and emotional well-being	15-080	Campbell, Wayne W.	Purdue University
HUMAN NUTRITION\Human Nutrition	Protein consumption from meat vs. dairy as complementary foods on infant growth, body composition and gut microbiome: a controlled feeding study	15-108	Krebs, Nancy	University of Colorado
HUMAN NUTRITION\Human Nutrition	Systematic review of red and processed meat consumption and cancer	15-149	Alexander, Dominik	EpidStat Institute
INTERNATIONAL TRADE\International Trade	Pork variety meat offal global safety and quality literature search and industry survey	15-200	Mikel, William Benjy	WPF Technical Services
INTERNATIONAL TRADE\International Trade	Pork offal bone literature review and industry survey	15-201	Mikel, William Benjy	WPF Technical Services
PORK QUALITY\Pork Quality	Prediction of Pork Quality using Raman Spectroscopy	15-078	Lonergan, Steven	Iowa State University
PORK QUALITY\Pork Quality	Prediction of pork quality using online computer vision system	15-084	Newman, David	North Dakota State University
PORK QUALITY\Pork Quality	Prediction of pork loin quality and tenderness with the VBG2000LED beef carcass grading camera.	15-103	Shackelford, Steven	USDA, ARS, Northern Plains Area
PORK QUALITY\Pork Quality	Consumer Valuation of Pork Chop Quality and Quality Information	15-198	Schroeder, Ted C.	Market Economics, LLC
PORK SAFETY\PS-Post-Harvest	An analysis of primary research and meta-analysis to investigate temporal changes in serotypes of Salmonella in US-based pigs and pork products.	15-070	O'Connor, Annette	Iowa State University
PORK SAFETY\PS-Pre-Harvest	Determination of seroprevalence to Toxoplasma gondii in the U.S. National swine herd	15-170	Hill, Dolores	USDA, ARS, Beltsville Area
PUBLIC HEALTH	Development and Validation of a Standardized Scientific Protocol Evaluating Antibiotic Alternatives in Growing Pigs	15-204	Gabler, Nicholas	Iowa State University
PUBLIC HEALTH\Antibiotic Use & Resistance	Do probiotics, an antibiotic alternative, mitigate or contribute to emergence and persistence of antimicrobial resistance in gut bacteria?	15-024	Nagaraja, T.G.	Kansas State University
PUBLIC HEALTH\Antibiotic Use & Resistance	Effects of antibiotics on intestinal and extra-intestinal multidrug-resistant and pan-susceptible Salmonella in swine	15-072	Norman, Keri	Texas A&M University
PUBLIC HEALTH\Antibiotic Use & Resistance	Assessment of alternatives for monitoring antimicrobial use in the swine industry and design and implementation of a pilot system	15-186	Davies, Peter	University of Minnesota
PUBLIC HEALTH\MRSA	Prevalence of zinc resistance encoded by the czrC gene in US swine-associated MRSA ST5 strains	15-145	Main, Rodger G.	Iowa State University
SUSTAINABILITY\Air	(VEBBER) Vegetative Environmental Buffer Builder and Economic Review: A Decision Support Tool for the Pork Industry	15-141	Tyndall, John	Iowa State University
SUSTAINABILITY\Manure Storage/Application	Recovery of phosphorus and fine particles as fertilizer from swine manure by electrocoagulation	15-037	Hu, Bo	University of Minnesota
SUSTAINABILITY\Manure Storage/Application	Influence of the Method and the Timing of Land Application on the Persistence and Retention of Multiple Manure Constituents in Soil	15-045	Li, Xu	University of Nebraska-Lincoln
SUSTAINABILITY\Manure Storage/Application	Swine Manure Nutrient Fate and Pathogen Reduction for Midwestern Corn Production with Cover Crop Utilization	15-095	Hayes, Morgan	University of Illinois
SUSTAINABILITY\Manure Storage/Application	Identifying the Mechanisms and Subsequent Remediation of Foaming in Swine Manure Management Systems - Year 3	15-136	Hoff, Steven J.	Iowa State University
SUSTAINABILITY\Other	Establishing Monarch Butterfly Breeding Habitat on Iowa Swine Production Sites	15-178	Hartzler, Robert	Iowa State University

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SWINE HEALTH\Foreign Animal Disease	African Swine Fever Virus: a bioinformatics resource to support comparative genomics for vaccine and virulence studies.	15-123	Upton, Chris	University of Victoria
SWINE HEALTH\Foreign Animal Disease	Rapid detection and epidemiological surveillance of African Swine Fever using oral fluid	15-125	Clavijo, Alfonso	Texas A&M University
SWINE HEALTH\Foreign Animal Disease	Development of recombinant vaccinia virus vectored African swine fever vaccines	15-126	Ma, Wenjun	Kansas State University
SWINE HEALTH\Foreign Animal Disease	Construct and Test Recombinant Adenoviruses Vectoring African Swine Fever Virus Genes in Inducing Immune Protection in Pigs	15-128	Zhu, James	USDA, ARS, South Atlantic Area
SWINE HEALTH\Foreign Animal Disease	Characterizing a U.S. swine movement network to enhance epidemiological modeling and response to transboundary animal disease	15-135	Boyer, Tim	University of Minnesota
SWINE HEALTH\Foreign Animal Disease	Working toward a CSFV oral fluid antibody ELISA: defining oral fluid antibody (IgA, IgG) kinetics against envelope glycoproteins (E2, Erns)	15-176	Panyasing, Yaowalak	Chulalongkorn University
SWINE HEALTH\Foreign Animal Disease	Development and validation of Singleplex and Multiplex Luminex Assays for Detection of antibodies to foot-and-mouth disease (FMD), swine vesicular disease (SVD), classical swine fever (CSF) and African swine fever (ASF) viruses in porcine oral fluids	15-177	Nfon, Charles	Nat'l Centres for Animal Disease
SWINE HEALTH\General Swine Disease	A candidate swine influenza virus vaccine: in vivo evaluation of novel chimeric hemagglutinins expressed by parainfluenza virus 5 (PIV5) vector	15-020	Huber, Victor	University of South Dakota
SWINE HEALTH\General Swine Disease	Does prevalence of influenza A virus at weaning influence disease transmission rates, clinical manifestation of disease, and production performance?	15-026	Torremorell, Montserrat	University of Minnesota
SWINE HEALTH\General Swine Disease	Generation of specimens of precisely known coronavirus infection status for the development and validation of highly-specific porcine coronavirus antibody assays	15-142	Gimenez-Lirola, Luis	Iowa State University
SWINE HEALTH\General Swine Disease	Pilot study to develop ante-mortem synovial fluid and synovium sample collection techniques in growing swine and to refine a Mycoplasma hyosynoviae (MHS) arthritis case definition	15-143	Karriker, Locke	Iowa State University
SWINE HEALTH\General Swine Disease	Determination of the importance of Porcine Parvovirus type 2 (PPV2) in Porcine Circovirus Associated Disease (PCVAD_ outbreaks by elimination of PPV2 through vaccination at weaning	15-144	Opriessnig, Tanja	Iowa State University
SWINE HEALTH\General Swine Disease	Utilization of Neutrophil Extracellular Trap DNA by Mycoplasma hyopneumoniae	15-147	Minion, F. Chris	Iowa State University
SWINE HEALTH\General Swine Disease	Development of swine influenza virus platform vector vaccines to control swine influenza virus and porcine epidemic diarrhea virus	15-013	Hause, Ben	Kansas State University
SWINE HEALTH\General Swine Disease	Development of a multivalent vector platform to control swine enteric coronavirus disease	15-034	Diel, Diego	South Dakota State University
SWINE HEALTH\General Swine Disease	Evaluating alternative chemical mitigants to prevent PEDv recontamination of swine feed and ingredients	15-062	Jones, Cassandra	Kansas State University
SWINE HEALTH\General Swine Disease	Evaluation of an accelerated hydrogen peroxide disinfectant and barn lime to inactivate porcine epidemic diarrhea virus in swine packing plant dock and unloading areas	15-121	Holtkamp, Derald	Iowa State University
SWINE HEALTH\General Swine Disease	Development of novel reovirus-based mucosal vaccine vectors for PEDV antigen production	15-146	Miller, Cathy	Iowa State University
SWINE HEALTH\General Swine Disease	An evaluation of a shipping model to investigate PEDV introduction in to the USA	15-180	Dee, Scott A.	Pipestone Veterinary Clinic
SWINE HEALTH\General Swine Disease	Assessing the effects of medium chain fatty acids and fat sources on PEDV by qRT-PCR and bioassay	15-207	Jones, Cassandra	Kansas State University

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SWINE HEALTH\General Swine Disease	Evaluating the effects of chemical treatments to reduce the likelihood of PEDv transmission by feed manufacturing equipment	15-208	Woodworth, Jason	Kansas State University
SWINE HEALTH\General Swine Disease	Assessing PEDv infectivity of samples collected from a PEDv contaminated feed mill	15-211	Gauger, Phil	Iowa State University
SWINE HEALTH\PRRS	Determination of the PRRSV minor glycoproteins contribution to antigenicity and protection	15-153	Hause, Ben	Kansas State University
SWINE HEALTH\PRRS	Temporal, spatial & phylogenetic analysis of PRRSV sequences	15-156	Perez, Andres	University of Minnesota
SWINE HEALTH\PRRS	Improving the performance of PRRSV oral fluid diagnostics	15-158	Gimenez-Lirola, Luis	Iowa State University
SWINE HEALTH\PRRS	Development of a live-attenuated PRRSV vaccine capable of eliciting a broad spectrum of heterologous protection	15-159	Vu, Hiep	University of Nebraska-Lincoln
SWINE HEALTH\PRRS	Characterization of high passages of an interferon-inducing PRRSV strain	15-160	Zhang, Yan-Jin	University of Maryland
SWINE HEALTH\PRRS	Role of the viral ovarian domain protease in PRRSV pathogenesis	15-172	Faaberg, Kay S.	USDA, ARS, Midwest Area
SWINE HEALTH\PRRS	Monitoring and updating the value of productivity losses due to porcine reproductive and respiratory syndrome virus	15-212	Holtkamp, Derald	Iowa State University