

FUNDED RESEARCH - 2010

Category	Project Title	ID#	Investigator	Organization
Animal Science	Evaluation of two mycotoxin binders as a means to reduce the adverse effects of vomitoxin on the performance and health in growing/finishing pigs.	10-079	Patience, John	Iowa State University
Animal Science	Using high-fiber diets to limit energy intake in developing gilts: effects on puberty, reproduction, culling rates, lifetime productivity, and progeny health and growth	10-164	Johnson, Rodger	University of Nebraska-Lincoln
Animal Science	Assessment of Vitamin D levels in swine serum across different stages of production in Iowa	10-166	Madson, Darin	Iowa State University
Animal Science	Determinants of Profitability in Alternative Swine Production Systems	10-177	Apgar, Gary	Southern Illinois University-Carbondale
Animal Welfare	Regulating Feed Intake of Group Housed Replacement Gilts by Altering Dietary Cation/Anion Difference	10-042	Walker, Paul	Illinois State University
Animal Welfare	Determine and Validate the Optimal Requirements and Duration of Time to Achieve Unconsciousness and Euthanasia in Pigs from 3 Days of Age to 60 Pounds with a Novel Electrocution Device	10-077	Probst-Miller, Sarah	Carthage Veterinary Service, Ltd.
Animal Welfare	Evaluation of a novel means to euthanize swine	10-123	Berg, Eric P.	North Dakota State University
Animal Welfare	Innovative scientific techniques to evaluate alternatives to the use of carbon dioxide euthanasia procedures	10-141	Lay Jr., Donald	USDA, ARS, Midwest Area
Animal Welfare	Establishing Bedding and Boarding Requirements for Finisher Pigs Through Scientific Validation - Micro-study	10-175	Green, Angela	University of Illinois
Animal Welfare	Establishing Bedding and Boarding Requirements for Finisher Pigs Through Scientific Validation - Macro-study	10-176	McGlone, John J.	Texas Tech University
Antimicrobial Use & Resistance	Detection of tetracyclines and tetracycline resistant bacteria in soils under long-term swine effluent application	10-103	Popova, Inna	Oklahoma State University
Antimicrobial Use & Resistance	Occurrence and Movement of Antibiotic Resistant Bacteria and Resistance Genes in Tile-Drained Agricultural Fields Receiving Swine Manure Application	10-119	Soupir, Michelle	Iowa State University
Antimicrobial Use & Resistance	Towards controlling antimicrobial resistance in swine production systems: harnessing the paradoxical effects of micro-minerals and feed-grade antimicrobials on resistance in enteric bacteria	10-121	Scott, H. Morgan	Kansas State University
Antimicrobial Use & Resistance	Impact of ceftiofur use on the dissemination of resistant enteric bacteria in finishing swine and retail pork products	10-138	Wittum, Tom	Ohio State University
Environment/Odor	Quantification of Greenhouse Gas Emissions from a Production Scale Midwestern Breeding/Gestation/Farrowing Facility	10-066	Xin, Hongwei	Iowa State University
Environment/Odor	Evaluation and Analysis of NAEMS Pork Data	10-078	Heber, Albert J.	Purdue University
Environment/Odor	Meta-Analysis of Greenhouse Gas Emissions from Swine Operations	10-104	Liu, Zifei	Michigan State University
Environment/Odor	Critical Review of Life Cycle Greenhouse Gas Emissions Baseline Study for the U.S. Pork Industry	10-155	Apex, Robert P.	Iowa State University
Environment/Odor	Developing a Process-based Model for Estimating Air Emissions from Swine Operations	10-163	Salas, William	Applied Geosolutions, LLC
Environment/Odor	A 50-Year Comparison of the Carbon Footprint of the US Swine Herd: 1959 - 2009	10-174	Boyd, Garth	Camco International
Human Nutrition	The effects of protein quantity and source on postprandial satiety and plasma amino acid concentrations	10-170	Campbell, Wayne W.	Purdue University
Human Nutrition	The Daily Consumption of a Protein-rich Breakfast for Long-term Improvements in Appetite, Glucose Control, and Body Weight Management in Overweight & Obese 'Breakfast Skipping' Adolescents	10-173	Leidy, Heather J.	University of Missouri - Columbia
Nutritional Efficiency	Evaluation of lipid oxidation levels in DDGS sources and impact of feeding (with or without antioxidants) on swine health, performance, and metabolic oxidation	10-002	Shurson, Gerald	University of Minnesota
Nutritional Efficiency	Evaluating the contribution of ion pumps and protein turnover towards feed efficiency in finisher pigs selected for low and high residual feed intake	10-009	Gabler, Nicholas	Iowa State University
Nutritional Efficiency	Evaluation of lipid source and oxidation level on digestible and metabolizable energy concentration, and the impact of lipid oxidation on intestinal barrier function	10-013	Kerr, Brian	USDA, ARS, Midwest Area
Nutritional Efficiency	Predicting the iodine value of pork carcass fat from the iodine value of dietary fat supplied by different fat sources at different levels of inclusion in the diet	10-021	Patience, John	Iowa State University

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Nutritional Efficiency	Effects of exogenous phytase on apparent and standardized total tract digestibility of phosphorus in corn, DDGS, HP DDG, and corn germ	10-073	Stein, Hans H.	University of Illinois
Pork Safety/Post-Harvest	Risk informed management of Salmonella in deep tissue lymph nodes	10-130	Hurd, Scott	Iowa State University
Pork Safety/Post-Harvest	Evaluating the sources of Salmonella after carcass chilling	10-146	Dickson, James S.	Iowa State University
Pork Safety/Post-Harvest	Additional features to the Porcine 3D model to teach the sub-primal and retail cuts of the pork carcass.	10-165	Jones, Steven J.	University of Nebraska-Lincoln
Pork Safety/Pre-Harvest	Application of a novel inhibition mechanism to control E. coli O157:H7 and other non-O157:H7 pathogenic E. coli.	10-086	Sawant, Ashish	Washington State University
Pork Safety/Pre-Harvest	Epidemiology of STEC in Swine	10-128	Funk, Julie	Michigan State University
Swine Health	Characterization of Mycoplasma hyorhinis transmission and spread within endemically infected populations	10-004	Oliveira, Simone	University of Minnesota
Swine Health	Antigen-specific T cell responses associated with PCVAD pathogenesis	10-012	Wyatt, Carol	Kansas State University
Swine Health	The prevalence of PCV2 viremia in conventional piglets born to PCV2- vaccinated and non-vaccinated sows and effect of PCV2 viremia on pig performance	10-030	Opriessnig, Tanja	Iowa State University
Swine Health	Serological approach for diagnosis and surveillance of multiple agents in serum and oral fluid samples	10-033	Rowland, Raymond R.	Kansas State University
Swine Health	A modified-live prototype vaccine for PCV-2 in swine	10-047	Krakowka, Steven	Ohio State University
Swine Health	Enhanced Antimicrobial Susceptibility Testing and Molecular Diagnostic Methods for Brachyspira in Swine	10-050	Strait, Erin	Iowa State University
Swine Health	Effect of age, dose and antibiotic therapy on the development of neonatal Clostridium difficile disease	10-058	Madson, Darin	Iowa State University
Swine Health	Investigating the role of PB1-F2 in the pathogenicity of circulating strains of SIV-Year 2	10-161	Miller, Cathy	Iowa State University
Swine Health	Effect of PCV2 vaccination on chronic PCV2 infection and determination of infectivity of PCV2 present in chronically infected pigs	10-167	Opriessnig, Tanja	Iowa State University
Swine Health - PRRS	An evaluation of back-drafting of non-filtered air as a source of PRRSV infection to pigs housed in filtered facilities and whether selected intervention strategies can reduce this risk.	10-083	Dee, Scott A.	University of Minnesota
Swine Health - PRRS	Testing the Potential of PRRSV GP4 to Protect Swine From PRRS	10-099	Garmendia, Antonio	University of Connecticut
Swine Health - PRRS	Impact of pigs entering a region on feasibility of PRRSV eradication	10-114	Morrison, Robert B.	University of Minnesota
Swine Health - PRRS	Identification of conserved T-cell epitopes contained in the non-structural genes of PRRSV which contribute to broad protective immunity	10-115	Osorio, F. A.	University of Nebraska-Lincoln
Swine Health - PRRS	Mechanism of PRRSV inhibition of interferon-mediated antiviral response	10-118	Zhang, Yan-Jin	University of Maryland
Swine Health - PRRS	PRRSV Modulation of the Porcine Antibody Repertoire	10-139	Murtaugh, Michael P.	University of Minnesota
Swine Health - PRRS	PRRS Host Genetics Consortium: A proposal to continue consortium work to study the role of host genetics and resistance to PRRSV - year 3	10-156	Rowland, Raymond R.	Kansas State University
Swine Health - PRRS	An Economic Evaluation of PRRS Elimination in the United States Swine Herd	10-158	Holtkamp, Derald	Iowa State University