

FUNDED RESEARCH - 2004

Category	Project Title	ID#	Investigator	Organization
Animal Welfare	Core body temperature, stress hormone level, and pork quality differences of market weight pigs relative to seasonal environment, on-farm handling intensity, transport stocking density, and time in lairage	04-022	Berg, Eric P.	University of Missouri - Columbia
Animal Welfare	The impact of routine piglet processing on well-being	04-043	Lay Jr., Donald	USDA, ARS, Midwest Area
Animal Welfare	Floor Space Requirements for Grow/Finish Pigs in Large Groups	04-086	Gonyou, Harold W.	Prairie Swine Centre, Inc.
Animal Welfare	Effect of stocking density on the welfare and performance of grow-finish pigs	04-093	Deen, John	Regents of the University of Minnesota
Animal Welfare	Gestation-Crate Design and Sow Oral Disease: Effects on Longevity, Productivity and State-of-Being	04-096	Curtis, Stanley E.	University of Illinois
Animal Welfare	Influence of Animal Handling and Transportation Factors on the Welfare of Slaughter Pigs During Transport and Incidences of Deads and Downers	04-106	Ellis, Michael	University of Illinois
Animal Welfare	Evaluation of sows at harvest to determine the incidence of abnormalities that could lead to culling of breeding herd females.	04-127	Stalder, Kenneth J.	Iowa State University
Animal Welfare	Effects of trailer design, season and distance moved during loading on the welfare of market weight pigs at the packing plant	04-131	Ellis, Michael	University of Illinois
Animal Welfare	Transport lairage effects on well-being of 18 kg pigs using a multi-disciplinary approach	04-134	Eicher, Susan	USDA, ARS, Midwest Area
Animal Welfare	Economic Analysis of Pig Space: Comparison of Production System Impacts	04-177	Kliebenstein, James B.	Iowa State University
Animal Welfare	Assessment of inter-observer agreement in swine welfare assurance program	04-209	Deen, John	Regents of the University of Minnesota
Environment/Odor	Evaluation of the effects of diet formulation method and inclusion of DDGS and phytase on manure phosphorus excretion of grow-finish pigs and on the concentration and forms of P in manure amended soil	04-031	Shurson, Gerald	Regents of the University of Minnesota
Environment/Odor	Evaluation of Design Specifications for a Vertical Bed Biofilter	04-039	Nicolai, Richard	South Dakota State University
Environment/Odor	Quantification of gas and odor emissions from swine wean-finish facilities	04-046	Sutton, Alan L.	Purdue University
Environment/Odor	Disposal of Swine Lagoon Sludge with Nutrient Recovery	04-064	See, Miles Todd	North Carolina State University
Environment/Odor	Pathogenic and Indicator Bacteria in Agricultural Watersheds	04-070	Moorman, Thomas	USDA, ARS, Midwest Area
Environment/Odor	Utilization of crystalline amino acids by the gut in growing pigs	04-101	Trottier, Nathalie L.	Michigan State University
Environment/Odor	Air Emissions Monitoring Protocol	04-126	Hoff, Steven J.	Iowa State University
Environment/Odor	Evaluation of Boric Acid to Reduce Ammonia and Hydrogen Sulfide Emissions from Swine Facilities	04-147	Yokoyama, Melvin T.	Michigan State University
Environment/Odor	On-farm Evaluation of the Good Neighbor System for Manure Treatment for Reducing Emissions from Swine Facilities	04-164	Ellis, Michael	University of Illinois
Environment/Odor	Development of a user-friendly database and decision tree for selecting air quality BMPs	04-169	Stalder, Kenneth J.	Iowa State University

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Environment/Public Health	Relationship between Antibiotics in Water and Rates of Antimicrobial Resistance Gene Transfer as Measured by Quantitative Real-Time PCR	04-159	Singer, Randall	Regents of the University of Minnesota
Environment/Public Health	Special Call for Review of the Critical Literature: Fate and transport of antibiotic resistance genetic determinants during manure storage, treatment, and land application	04-161	Mackie, Roderick	University of Illinois
Environment/Public Health	Development of methods for determining the estrogen content of swine waste	04-204	Whisnant, Charles	North Carolina State University
Environment/Public Health	Screening and Fate of Estrogens in Pig Excreta and Manure Samples	04-205	Singh, Ashok	Regents of the University of Minnesota
NAPES lit review	Critical review on botanical extracts as alternative production enhancers in swine production systems	04-137	Baidoo, Samuel K.	Regents of the University of Minnesota
NAPES lit review	Functional Animal Proteins	04-142	Pettigrew, James E.	University of Illinois
NAPES lit review	Carbohydrate and Bacterial Non-antibiotic production enhancers	04-143	Patterson, John A.	Purdue University
Pork Quality	National Pork Quality Survey	04-210	Berg, Eric P.	University of Missouri - Columbia
Pork Safety/Pre-Harvest	Comparison of Cereal Grains in Diets for Nursery Pigs: Microbiology, Health and Performance	04-021	Pettigrew, James E.	University of Illinois
Pork Safety/Pre-Harvest	Control of Salmonella by segregated early weaning, topical disinfection and administration of sodium chlorate.	04-030	Bahnson, Peter B.	University of Wisconsin-Madison
Pork Safety/Pre-Harvest	Development of Molecular Tools to Assess the Impact of Growth Promotants on Intestinal Microflora and Public Health	04-078	Isaacson, Richard E.	Regents of the University of Minnesota
Pork Safety/Pre-Harvest	A comparison of administration routes of direct fed microbials to nursery pigs, and the effects on growth performance and gut health	04-097	Radcliffe, John Scott	Purdue University
Pork Safety/Pre-Harvest	Salmonella prevalence during the finishing production stage	04-100	Hurd, Scott	Iowa State University
Pork Safety/Pre-Harvest	Serological Analysis of Toxoplasma gondii, Trichinella spiralis and Salmonella enterica among niche market antimicrobial-free and conventionally reared pigs	04-108	Gebreyes, Wondwossen A.	North Carolina State University
Pork Safety/Pre-Harvest	Validation of a serological assay using an 18kd oocyst-specific protein from Toxoplasma gondii for differentiation of oocyst versus tissue cyst induced human infection.	04-136	Hill, Dolores	USDA, ARS, Beltsville Area
Pork Safety/Pre-Harvest	Determination of Salmonella Classification Levels for Selected Midwestern Swine Herds Utilizing Abattoir-based Samples and Comparison of Danish Herd Classification Stability Overtime	04-201	McKean, James D.	Iowa State University
Pork Safety/Pre-Harvest	Pork Safety and Antibiotic Resistance Study Tour - Denmark	04-202	McKean, James D.	Iowa State University
Pork Safety/Pre-Harvest	Lit Review on the Fate and Transport of Zoonotic Bacterial, Viral and Protozoan Pathogens during Swine Manure Storage, Treatment, and Land Application	04-203	Beitz, Don	Council for Agricultural Science & Technology
Pork Safety/Pre-Harvest	Food Safety Research Response Network Web Site and Training Program	04-211	Levine, Jay	North Carolina State University
Swine Health	Bacteriocins as potential alternative therapeutic agents for the control and prevention of Streptococcus suis infections in pigs	04-005	Grenier, Daniel	Universite Laval

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Swine Health	Development of a Vaccine for F18+ Enterotoxigenic E. coli in Weaned Pigs	04-026	Francis, David	South Dakota State University
Swine Health	Determination of serum concentrations resulting from administration of high and low dose orally administered acetylsalicylic acid and sodium salicylate in swine through water medication systems.	04-034	Karriker, Locke	Iowa State University
Swine Health	Evaluation of live vaccine strains of Actinobacillus pleuropneumoniae	04-058	West, Susan E.H.	University of Wisconsin-Madison
Swine Health	Attempt to transmit swine hepatitis E virus (HEV) by consumption of fresh and frozen pork loin or liver	04-087	Halbur, Patrick G.	Iowa State University
Swine Health	Pilot surveillance system for emerging diseases in swine	04-208	Davies, Peter	Regents of the University of Minnesota
Swine Health - PRRS	Porcine adenovirus 3 based vaccine for porcine respiratory and reproductive syndrome (PRRS)	04-110	Tikoo, Suresh	University of Saskatchewan
Swine Health - PRRS	Sampling of adult boars during early infection using a new serum collection technique for PRRS PCR testing prior to semen collection	04-111	Reicks, Darwin	Swine Vet Center, P.A.
Swine Health - PRRS	Rational Design of a New Generation of PRRSV Differential (Marker) Vaccines	04-112	Osorio, F. A.	University of Nebraska-Lincoln
Swine Health - PRRS	Macrophage cell-lines for in vitro propagation of porcine reproductive and respiratory syndrome virus	04-113	Srikumaran, Subramaniam	Washington State University
Swine Health - PRRS	A pilot project to determine the feasibility of controlling PRRS within a selected region	04-115	Morrison, Robert B.	Regents of the University of Minnesota
Swine Health - PRRS	Implementation of a PRRSV Strain Database	04-118	Faaberg, Kay S.	Regents of the University of Minnesota
Swine Health - PRRS	Development of a Killed Subunit Vaccine	04-121	Harris, D.L. Hank	Iowa State University
Swine Health - PRRS	Direct Physical Characterization of the PRRSV Virion	04-122	Murtaugh, Michael P.	Regents of the University of Minnesota
Swine Health - PRRS	Serum Markers of PRRSV Infection	04-123	Murtaugh, Michael P.	Regents of the University of Minnesota
Swine Health - PRRS	Proof-of-Concept -Anti-Idiotypic Induces Anti-PRRSV Neutralizing Antibodies in Swine	04-170	Zhou, En-Min	Iowa State University
Swine Health - PRRS	Development of Edible Vaccines against PRRSV: A Proof of Concept Study	04-171	Zhang, Chenming (Mike)	Virginia Polytechnic Institute and State University
Swine Health - PRRS	Sub-typing of PRRSV isolates by means of measurement of cross-neutralization reactions	04-174	Osorio, F. A.	University of Nebraska-Lincoln
Swine Health - PRRS	A novel herpes virus vector-based approach for PRRSV vaccines	04-175	Wang, Xiuqing	South Dakota State University
Swine Health - PRRS	Developing a Broadly Protective PRRS vaccine	04-181	Tobin, Gregory	Biological Mimetics, Inc.
Swine Health - PRRS	An assessment of 3 sanitation protocols for PRRSV-positive transport vehicles	04-182	Dee, Scott A.	Regents of the University of Minnesota
Swine Health - PRRS	Use of tonsillar crypt exudate to evaluate PRRSV shedding and transmission following a MLV PRRS vaccine or a live PRRS virus inoculation	04-183	Fangman, Thomas J.	University of Missouri - Columbia
Swine Health - PRRS	A Field-Deployable Fluorescence-Based Sensor Excited by an Organic Light Emitting Device for PRRSV Detection	04-185	Tabatabai, Louisa B.	USDA, ARS, Midwest Area
Swine Health - PRRS	Emerging European-like PRRSV in the U.S.: Implications for diagnostic and control strategies	04-186	Nelson, Eric A.	South Dakota State University

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Swine Health - PRRS	Investigation of factors impacting the rate of PRRSV transmission in nursery and finisher pig flows and assessment of transmission rate and timing on economic performance	04-187	Karriker, Locke	Iowa State University
Swine Health - PRRS	Analysis of prevalent winds in areas with suspicious cases of PRRSV's lateral transmission between pig farms	04-190	Morrison, Robert B.	Regents of the University of Minnesota
Swine Health - PRRS	Incidence of PRRS transmission during gestation in sow herds chronically infected with PRRS virus	04-191	Morrison, Robert B.	Regents of the University of Minnesota
Swine Health - PRRS	Modeling PRRS virus aerosol transmission within and between farms	04-192	Zimmerman, Jeffrey	Iowa State University
Swine Health - PRRS	Analyzing PRRS status of piglets on multiple farms after serum exposure to validate production of negative piglets	04-194	Feder, Jeff	Swine Vet Center, P.A.
Swine Health - PRRS	Interaction of PRRSV and porcine dendritic cells: potential role in viral persistence	04-196	Sacco, Randy	USDA, ARS, Midwest Area
Swine Health - PRRS	Evaluation of sampling and testing strategies for monitoring of PRRS virus infection in boar studs	04-197	Munoz-Zanzi, Claudia	Regents of the University of Minnesota
Swine Health - PRRS	PCR-on-a-Chip for the Identification and Control of Porcine Reproductive and Respiratory Syndrome Virus	04-198	Grant, Sheila	University of Missouri - Columbia
Swine Health - PRRS	Using Direct Virus Exposure in Conjunction with Modified Herd Closure for a PRRS Eradication	04-200	Yeske, Paul	Swine Vet Center, P.A.
Swine Health - PRRS	Dynamic Aerosol Toroid Chambers	04-206	Zimmerman, Jeffrey	Iowa State University
Swine Health - PRRS	Purified PRRS Viral Proteins	04-207	Kakach, Laura	ATG Laboratories, Inc.
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Animal Science	Effects of Nutrition During Gilt Development on Sow Lifetime Productivity of Two Prolific Maternal Lines	04-178	Johnson, Rodger	University of Nebraska-Lincoln
Animal Welfare	Effect of feeding system failures on grow-finish performance and welfare	04-179	Brumm, Michael C.	University of Nebraska-Lincoln
Environment/Odor	Laying the Groundwork for Odor Control and Setback Estimation in Nebraska	04-180	Stowell, Richard R.	University of Nebraska-Lincoln
Swine Health	Comparison of the virulence of PCV2 isolates from field cases with and without hallmark lesions of lymphoid depletion	04-125	Halbur, Patrick G.	Iowa State University