



Request For Research Proposals

SHIC 2025 Plan of Work Research Program

March 5, 2025

The mission of the Swine Health Information Center, launched in 2015 with Pork Checkoff funding, is to protect and enhance the health of the US swine herd by minimizing the impact of emerging disease threats through preparedness, coordinated communications, global disease monitoring, analysis of swine health data, and targeted research investments. Activities of the Swine Health Information Center are guided by its annual Plan of Work detailing projects and programs to address its five strategic priorities, including 1) improving swine health information, 2) monitoring and mitigating risks to swine health, 3) responding to emerging disease, 4) surveillance and discovery of emerging disease, and 5) swine disease matrices. The Plan of Work is developed through stakeholder feedback, approved by the SHIC Board of Directors, and guides SHIC's activities while remaining nimble and responsive to industry needs.

Research provides critical information and resources to help pork producers as they face emerging disease challenges in their swine herds. Research priorities and topics identified in the Plan of Work help SHIC fulfill its mission to generate new knowledge for preventing, preparing, and responding to emerging swine disease threats. Through the formal request described herein, SHIC is inviting qualified researchers to submit proposals that specifically address targeted research priorities and topics published in the 2025 Plan of Work across SHIC's five strategic areas. Proposals will undergo a competitive review process for value to the pork industry by a Review Task Force who will provide funding recommendations to the SHIC Board of Directors.

Specific research priorities included in this RFP are listed below with a full description available on the [2025 SHIC Plan of Work](#). The intent of the RFP is to encourage researchers to develop and submit proposals that specifically address these identified priorities, broaden awareness of funding opportunities to advance SHIC's 2025 Plan of Work, expand the scientific network of researchers and institutions conducting critical research on emerging swine diseases, and drive innovation to help protect the health of the US swine herd. Funding timely research is an essential component of SHIC providing novel project outcomes that drive action for producers and veterinarians to prevent, prepare, and mitigate emerging swine diseases.

Proposals are expected to address the SHIC 2025 Plan of Work priorities outlined below to improve US preparedness, prevent emerging disease entry, and enable rapid mitigation of pork production impacts. **Proposals should clearly state which of the targeted priorities will be addressed through the project.** Collaborative projects that include the pork industry, allied industry, academic institutions, and/or public/private partnerships are highly encouraged. Projects that demonstrate the most urgent and timeliness of completion, provide the greatest value to pork producers, and show efficient use of funds will be prioritized for funding. Projects are requested to be completed within a 12-month period with justification being required if the project duration extends beyond 12 months.

Funding available for the SHIC March 2025 Plan of Work Research Program RFP to address the outlined priorities is \$1.5M. **Individual awards are anticipated to be between \$50,000 to \$150,000.** Budgets exceeding this range require sufficient justification. Projects should strive to be unique, have a high impact, and industry-wide benefit.

The deadline for proposal submission is 5:00 PM CST on April 30, 2025. The proposal template and instructions for completion and submission can be found at www.swinehealth.org/call-for-research/. For questions, please contact Dr. Megan Niederwerder at mniederwerder@swinehealth.org or 785-452-8270 or Dr. Lisa Becton at lbecton@swinehealth.org or 515-724-9491.

Research Priorities for the SHIC March 2025 Plan of Work RFP:

A detailed description of each of the research priorities can be found within the SHIC 2025 Plan of Work found [here](#).

Improve Swine Health Information

- Domestic disease monitoring through veterinary diagnostic laboratory data collation
- Strategic summary of SHIC swine health and disease work-to-date
- Maintaining up-to-date swine disease fact sheets
- Ensure timely and valuable communications across all stakeholder audiences

Monitor and Mitigate Risks to Swine Health

- Real-time assessment of high-risk product importation and traveler entry at borders
- Global disease monitoring to identify and inform international swine disease risks
- Transport biosecurity through targeting a regional or production phase approach
- Designing effective cleaning and disinfection tools and practices for swine transport trailers
- Packing plant biocontainment to reduce risk of trailer contamination at the dock
- Packing plant tools for effective cleaning and disinfection of lairage for business continuity
- Personnel movement as a risk of disease spread between farms
- Enhancing biosecurity of mortality management practices to reduce disease transmission back to farm
- Novel ventilation technologies for cost-effective bioexclusion and biocontainment
- Cull sow and secondary market biosecurity and disease surveillance
- Multi-species livestock operations and backyard farms as a risk for emerging disease spillover
- Role of rendering in emerging disease transmission and response

Respond to Emerging Disease

- Emergency disease preparedness and response planning in coordination with state, federal and industry stakeholders
- Monitoring risk of African swine fever recombinant genotype I/II virus to US prevention and preparedness
- Rapid deployment of research funds for a newly emerging disease

- Investigating production and swine health impacts of porcine sapovirus as an emerging pathogen
- Hemorrhagic tracheitis syndrome (HTS) as a potential emerging disease in US swine
- Utilizing standardized outbreak investigations to identify high risk events for pathogen entry
- Identification of early disease outbreak warning signals from industry data

Surveillance and Discovery of Emerging Disease

- Wastewater sampling for emerging disease surveillance
- Tongue tip fluids as a diagnostic sample to target risk-based mortality populations
- Genome-based diagnostic technologies for emerging disease detection and forensic analysis
- Diagnostic fee support to assist in early detection of emerging disease
- Population and environmental surveillance technologies to improve and automate diagnostic testing
- Increasing utility of VDL submissions as an effective surveillance stream for detection of emerging disease
- Investigate the clinical relevance and epidemiology of newly identified agents in VDL submissions associated with swine disease

Swine Disease Matrix

- Updating bacterial and viral swine disease matrices to prioritize swine pathogens
- Using the swine bacterial and viral disease matrices as guidelines for research to enhance swine disease diagnostic capabilities