

2006 National Pork Board PRRS Initiative Funding Announcement



Since its discovery in 1991, Porcine Reproductive and Respiratory Syndrome virus (PRRSV) has proven itself as a significant pathogen of swine in nearly all production areas of the world. While a great deal has been learned about the virus and the disease it causes in the decade since its discovery, producers and veterinarians still find themselves challenged in finding predictably successful tools for managing or eliminating the virus from farms. In early 2003, members of National Pork Board's Swine Health Committee began discussions on how to develop a coordinated PRRSV research effort that could be embraced by the entire industry. Through conversations with pork producers, university researchers and extension personnel, biopharmaceutical companies, state and federal government agencies, and swine veterinarians, the NPB PRRS Initiative was developed. The Initiative summarized the research and education needs of pork producers and veterinarians in thirteen broad objectives. These objectives will lead to the accelerated development of tools and strategies for the successful management of PRRS with efficient use of both the intellectual and financial resources of the U.S. swine industry:

- Quantify the Cost of PRRS to the U.S. Pork Industry - **Completed**
- Publication and Distribution of the 2003 PRRS Compendiums - **Completed**
- Development of New and Improved PRRSV Vaccines – **In Progress**
- Understanding the Persistently Infected Pig – **In Progress**
- Immune Therapy
- Development of a PRRS Virus “Typing” System – **In Progress**
- PRRS Virus Genomic Sequencing and Creation of a National PRRS Database – **In Progress**
- National Epidemiologic Investigations and Risk Factor Analysis - **In Progress**
- Mechanisms of Between-Farm Viral Transmission – **In Progress**
- Regional PRRS Elimination Demonstration Projects – **In Progress**
- Engagement with the Work of International PRRS Researchers - **In Progress**
- Collaboration with Researchers of Related (non-Swine) Viruses - **In Progress**
- Development of a Real-Time PRRS Information/Education System - **In Progress**

Clearly, there is much work still to be done. The National Pork Board has made available \$1.9 million in Pork Checkoff funding to continue work on the PRRS Initiative in 2006. We are soliciting projects under two funding mechanisms, a Competitive Request for Proposals and a Leverage and Discovery Allocation.

Competitive Request for Proposals

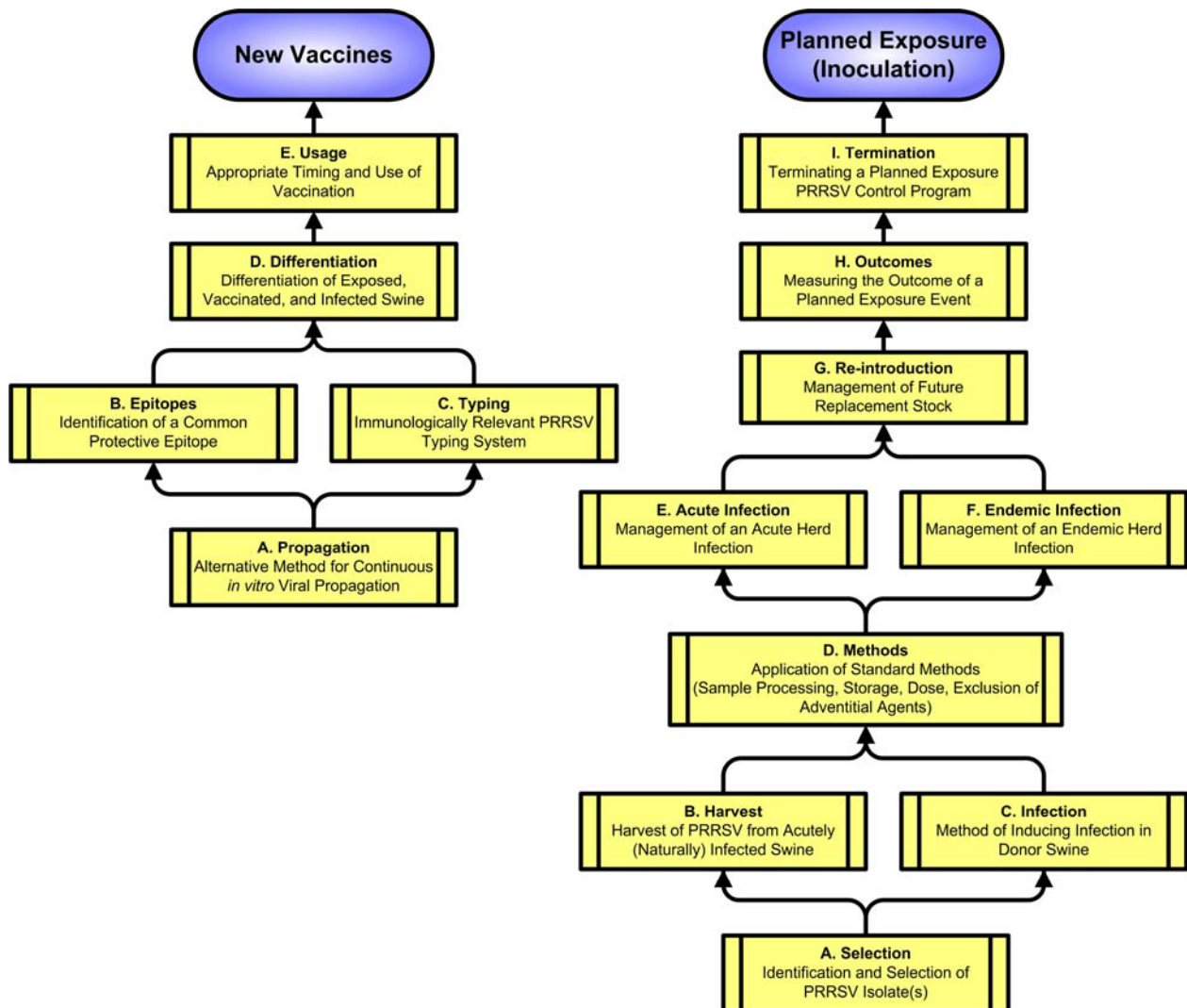
The list of priority research areas for this RFP is in a significantly different format than previous RFPs from National Pork Board. We are intent upon sponsoring research projects that are positioned to further the development of solutions to clearly stated objectives. Only projects that clearly demonstrate how they contribute to the overall mission of the PRRS Initiative will be considered for funding under this RFP. Three Research Objectives have been identified for 2006 funding; PRRSV Vaccination, PRRSV Persistent Infection, and PRRSV Elimination. For each of these Research Objectives, a rudimentary flow diagram of the steps necessary to achieve these objectives has been proposed. Researchers are encouraged to design specific experiments that can provide answers to a particular step in the flow diagram rather than attempting to modify existing research paths to fit into a particular step. Investigators

that demonstrate an ability to think logically, build on the strengths of themselves and others within their institution, reach out for collaboration with non-PRRSV researchers, provide foresight into how the information gained from their study can be used by other investigators working on the same objective, and have clearly defined objectives will be rewarded in the review process.

We have laid out what we believe to be a logical series of steps that, when completed, will lead to tangible solutions for managing PRRSV infections. It is a very focused approach that will reward creativity in solving each step of the puzzle while very clearly maintaining the path to the final objectives. These Research Objectives, their outcomes, and the research pathway will be reviewed annually to determine if changes are warranted.

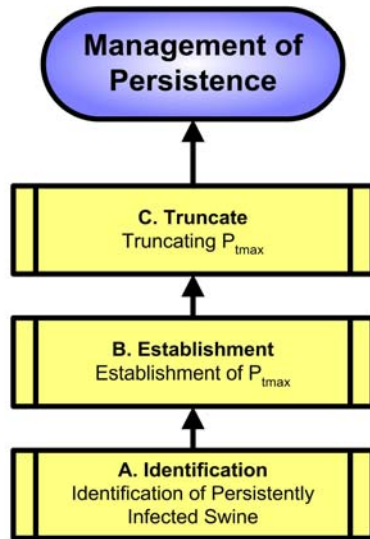
Research Objective One: PRRSV Vaccination

Two specific outcomes have been identified under PRRSV Vaccination; New Vaccines and Planned Exposure (Inoculation). The following flow diagram describes our perspective of the necessary steps to achieve the desired outcomes:



Research Objective Two: PRRSV Persistent Infection

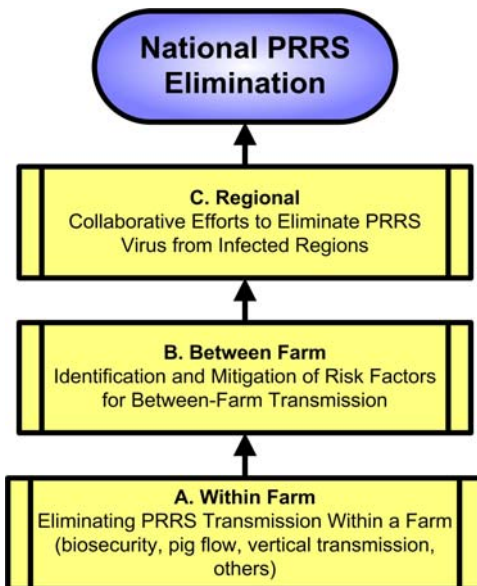
One specific outcome has been identified under PRRSV Persistent Infection; Management of Persistence. The following flow diagram describes our perspective of the necessary steps to achieve the desired outcome:



* The maximum period of time post-infection at least one pig in a given population can be expected to be harboring infectious PRRSV is abbreviated as P_{tmax} .

Research Objective Three: PRRS Virus Elimination

One specific outcome has been identified under PRRSV Virus Elimination; National PRRS Elimination. The following flow diagram describes our perspective of the necessary steps to achieve the desired outcome:



Proposals will be reviewed by both technical advisors and pork producers. Actual selection of projects will be completed by members of the NPB Swine Health Committee.

Leverage and Discovery Allocation

National Pork Board is interested in fostering collaboration between investigators and institutions as well as providing funding for novel PRRSV projects that may not have prior experimental justification for full project development or funding. The Leverage and Discovery Allocation has been designed specifically to fulfill these needs.

Leverage Opportunities

We have envisioned at least three funding areas that will be considered under Leverage Opportunities; Project Expansion, Collaboration, and Physical Resources. Project Expansion is designed as a mechanism to broaden the scope or to create additional objectives for currently funded projects. Collaboration can take numerous forms but may include facilitating inter-institutional projects, cross-training between laboratories, investigators, or graduate students, travel stipends, extra sample collection or storage, and others. Physical Resources will enable the purchase or lease of equipment and facilities necessary to complete important investigational objectives. It is imperative that investigators requesting Leverage Opportunity funding understand that the core principle we are trying to facilitate is the sharing of resources, both financial and intellectual. Successfully funded projects must clearly demonstrate how the project's outcome is greater than the sum of its parts.

Discovery Projects

This category is intended to provide funding for novel PRRSV research ideas that may not have prior experimental justification for full project development or funding. Discovery projects will often be considered "high-risk, high-payoff" and integrate ideas or techniques from other fields of study. These projects will be expected to have a sound scientific basis and clearly defined outcomes.

Timetable for 2006 Submissions

	<u>Deadlines for Submission</u>	<u>Funding Announced (approx)</u>	<u>Funds Distributed</u>
Competitive RFP	June 12, 2006 Fall RFP to be announced.	August 15, 2006 Fall RFP to be announced.	ASAP ASAP
Leverage and Discovery Allocation	Same as Above	Same as Above	ASAP

Submission Guidelines

Templates for submission to the Competitive RFP and the Leverage and Discovery Allocation are included with this announcement and are also available on the National Pork Board PRRS Website www.pork.org. Proposals will be limited to 8 pages, not including CVs and cover page.

Size of Grant Awards

Funds will be awarded for one year. Projects seeking second-year funding of a previously funded project requires submission of a fully-developed proposal that includes a demonstration of satisfactory progress on work proposed in the first-year. Newly submitted multi-year proposals should provide a clear overall vision and objectives for the entire project with a detailed plan of work and budget for the first year.

Awards made through the Leverage and Discovery Allocation will vary in size. This Allocation should be considered a rapid response mechanism to facilitate PRRSV research. Small requests (less than \$5000) will require a less extensive proposal than larger requests. Any requests related to the purchase or lease of equipment must describe how the equipment will benefit a larger community of PRRSV researchers than simply the individual submitting the request.

Staff Contact

Proposal submissions will be made through the NPB website, www.pork.org. Instructions for completing the submission can be found at the same site.

For specific information regarding the current solicitation, please contact:

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