

ANIMAL WELFARE

The Pork Checkoff Animal Welfare Committee is requesting proposals on the specific research areas of interest listed below. All proposals submitted **must** address at least one of the specific research subtopics of interest described below.

1. Pain Management in Piglets

All submitted projects should be multidisciplinary in their approach and should include neuroscience, performance, physiology, and behavior when applicable. Experimental designs must have all the appropriate controls to be considered for funding. Proposed methodologies need to be described in detail including a detailed ethogram for behavioral measures and how blinding and randomization will occur. Behavioral methods and physiological assays used in the study need to be validated. Proposals need to include power calculations to validate the proposed sample size. Projects that have cooperative arrangements with industry are strongly encouraged. All approved projects using animals in research for any purpose must be reviewed by an Animal Care and Use Committee (ACUC) or equivalent. An ACUC approval is not only required for future publication of results in a peer reviewed journal, it also ensures a high standard of care of animals used in research in accordance with federal regulations and policies and meets current ethical standards.

The Animal Welfare Committee has \$200,000 to fund swine welfare related research specifically focused on mitigating pain associated with castration and tail docking of piglets. There is no exact funding limit for submitted proposals but the budget request should be appropriate and justified for the work that is being proposed. Researchers are encouraged to find matching funds or in-kind contributions to the project.

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 outline for each of the proposed years. If proposed projects are seeking second-year funding of a previously funded project, the proposal must include a discussion of progress and accomplishments realized from the research efforts to date toward success of the overall research effort. This may be accomplished by including copies of interim or final reports from previously funded research efforts as appendices to the proposal submitted.

Proposals must be submitted in the attached format to be considered. All eligible proposals will be reviewed by a panel of peers for scientific validity. Final funding decisions will be made by the National Pork Board. Further inquiries regarding this solicitation can be directed to Sherrie Niekamp by email sniekamp@pork.org or by phone: 515/223-3533.

Submitted proposals should address at least one of the following priorities:

- Identify and validate physiological and behavioral indicators of pain in piglets 0 to 10 days of age.
- Quantify the pharmacokinetic properties of different types of analgesics and local anesthetics for piglets 0 to 10 days of age.
- Evaluate the effectiveness of different classes of analgesics (e.g. NSAIDs, local anesthetics, etc.) to reduce the pain associated with castration and/or tail docking.
- Develop and evaluate potential alternatives or modifications of castration or tail docking procedures that provide for the well-being of the pig.

2. Shoulder Lesions in Sows

The Animal Welfare Committee is seeking proposals for a comprehensive, systematic literature review focusing on the development, treatment and prevention of shoulder sores in sows. The objective for the review is to identify and summarize:

- the causes of shoulder sores in sows,
- effective treatment options,
- effective methods for prevention, and
- any needs for future research in this area

All submitted proposals should address three outcomes:

- 1) A review of the literature written according to current Journal of Animal Science formatting guidelines.
- 2) A fact sheet summarizing the results of the literature developed for producer audiences. This fact sheet will be used by the National Pork Board in their education outreach to producers.
- 3) A future research needs assessment document must be created and should outline specific areas where additional research is needed along with justification as to why. This needs assessment will be used as a road map for future research calls in this area.

The proposal should have a clear and detailed description of the plan to identify resources to be used in the literature review (e.g. MEDLINE, AGRICOLA, CAB International, BIOSIS, etc.). Each database includes some unique journal sources, so it is recommended that multiple databases be used. The literature review should include both domestic and international sources. Please include a description of how non-peer reviewed literature (abstracts, case studies, trade magazine articles, etc.) will be included in the review. This entire section will be used to evaluate the depth and breadth of the proposed literature search. There is no exact funding limit for submitted proposals but the budget request should be appropriate and justified for the work that is being proposed.

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