



REQUEST FOR PRE-PROPOSALS

Please Copy and Distribute to All Interested Parties

The USDA-NIFA Southern Regional Aquaculture Center solicits response from qualified multi-state teams interested in participating in the regional project:

Disease Management Strategies for Streptococcosis in Catfish Aquaculture

SRAC's Board of Directors has authorized up to \$400,000 for a 3-year project on developing complimentary approaches for management of streptococcosis in catfish. This project will be developed using the "comprehensive method" where a team of multi-state scientists having demonstrated records of expertise in the subject complete a single pre-proposal that addresses all project objectives. One proposal will be selected for funding based on review by a committee of scientists not involved in any of the proposals that are submitted.

Background

Streptococcus dysgalactiae is an emerging freshwater pathogen in the southeastern United States. Most recently, it has been linked to substantial losses in channel catfish broodfish, encroaching on an industry historically unaffected by *Streptococcus*. In addition to direct losses from acute or chronic outbreaks, broodstock infections are associated with poor egg quality, reduced hatching rates, and concerns for vertical transmission. There is also potential for expansion to other finfish industries.

Objectives

- 1) Develop and test vaccine candidates to protect catfish against regional strains of *S. dysgalactiae*.
- 2) Investigate the safety and efficacy of injectable and oral antibiotic treatments for managing broodstock infections and vertical transmission of *S. dysgalactiae*.
- 3) Determine appropriate disinfection protocols to eliminate *S. dysgalactiae* from fish eggs and relevant abiotic surfaces.

Experimental Approach

To develop robust strategies to mitigate streptococcosis in catfish aquaculture, experiments should include isolates of *S. dysgalactiae* collected from different production facilities to account for circulating strain diversity. Farm-specific autogenous vaccines should accordingly be evaluated, and the use of adjuvants or immunostimulants should be explored to optimize vaccine design. Managing streptococcosis in broodstock requires additional considerations to ensure interventions do not negatively affect hatchery success. The consequences of both streptococcal infections and antibiotic treatments on hatch metrics and fry health should be examined. Disinfectants should be tested for their ability to eliminate *S. dysgalactiae* from water, equipment, and fish eggs, and for their effect on egg viability and hatch rates.

How to Respond

Pre-proposals must address all objectives. Preference will be given to pre-proposals that show a high degree of collaboration and coordination among participants. To meet the criterion for a regional project, the pre-proposal must include collaboration from scientists in two or more states or territories in the

Southern Region (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, U.S. Virgin Islands, and Virginia).

The pre-proposal must include a one-page vita for each participant and a proposed budget for each participating institution or organization. Pre-proposals, vitae, and budgets that are not in the proper format will not be considered. (See “RFP Format Comprehensive” file attached or contact Kristen Walters with the SRAC office at 662-686-3269.)

Send an electronic copy of the pre-proposal in Word format to Jimmy Avery, SRAC Director as an email attachment (jimmy.avery@msstate.edu) by **June 1, 2026**. Proposals received after that date will not be considered.