

Board Research Initiative Request for Proposals

Infectious Coryza Disease in the Commercial Layer Industry

Background

Infectious Coryza caused by *Avibacterium paragallinarum* (AP) is an upper respiratory disease leading to drastic drops in egg production. This disease has been traditionally viewed as a warm weather disease with limited geographical areas primarily in the US South and California. However, over the past 5 years this disease has emerged in several geographic locations, seriously challenging the layer industry. The chronic carrier status that AP produces in infected flocks makes it very challenging to control and eradicate the disease in multiage layer complexes which leads to major economic losses. Currently available real-time quantitative polymerase chain reaction (qPCR), which is the main confirmatory diagnostic test for this disease, has shown a large percentage of false positives in normal naïve flocks that have no history of previous exposure. Additionally, very little is known about pathogenicity and immunogenicity factors of this disease which leads to inaccurate diagnoses.

Research Areas/Questions

1. Develop and validate new diagnostic tools which will accurately detect infection.
2. Conduct research to understand the pathogenicity of AP.
3. Develop better treatment and vaccination tools for combating this disease.

Proposal Submission

Researchers should submit only a maximum two-page pre-proposal summary that describes the parts of the objectives they wish to address and what they propose to do. A title, the researcher's name, affiliation, and email address should be included in the pre-proposal. Details of procedures or specifics of the budget should not be included in the pre-proposal submission. Pre-proposals should be submitted in Microsoft Word format to research@uspoultry.org.

DEADLINE FOR PRE-PROPOSAL SUBMISSION IS NOVEMBER 1, 2023.

The outcome of the pre-proposal review will be one of three responses from USPOULTRY:

- Send a full research proposal for consideration.
- Please make specific modifications in what you are proposing and send a full proposal.
- Do not send a full research proposal.

Full proposals will follow established USPOULTRY guidelines as seen at www.uspoultry.org. Funds can be used for graduate students, technicians, research supplies, and work and meeting travel. Funds cannot be used for professional (faculty or postdoc) salaries or equipment purchase. Up to 15% overhead is allowed. No budget, including overhead, may exceed \$125,000.