

**Board Research Initiative  
Request for Proposals**

## **Advancing Knowledge and Management of Infectious Coryza in Layers**

### **Background**

Infectious Coryza, caused by *Avibacterium paragallinarum* (AP), is an upper respiratory disease that can cause significant drops in egg production. The chronic carrier state established in infected flocks makes control and eradication particularly challenging in multi-age layer complexes, leading to substantial economic losses. These losses result not only from reduced production but also from heightened biosecurity measures and the cost and logistics of administering two doses of inactivated vaccines to incoming pullets. The current standard diagnostic method, real-time quantitative polymerase chain reaction, has shown a notable rate of false positives in naïve flocks with no prior exposure. Furthermore, a limited understanding of the pathogenicity and immunogenicity of AP contributes to diagnostic inaccuracies and complicates effective disease management.

### **Research Areas**

- Improving Diagnostics
  - Develop more accurate diagnostic tools to reduce false positives and improve early detection of AP in naïve and exposed flocks.
  - Investigate the pathogenicity and immunogenicity factors of AP that influence diagnostic outcomes.
- Vaccine Development and Optimization
  - Design and evaluate vaccine strategies that provide effective protection while minimizing costs and logistical challenges in multi-age layer complexes.
- Disease Control and Management
  - Study the dynamics of chronic carrier status in flocks to inform biosecurity measures and eradication strategies.
  - Assess management practices that reduce the persistence and spread of AP within and between layer complexes.

### **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 electronically at: <https://www.uspoultry.org/programs/research/>.

**DEADLINE FOR PRE-PROPOSAL SUBMISSION IS NOVEMBER 3, 2025.**

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](http://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.