Board Research Initiative Request for Proposals

Improved Measures for Controlling Blackhead Disease in Turkeys and Chickens

Background

Blackhead disease is a significant concern in the commercial turkey and chicken industries. Poultry typically acquires the disease through ingestion of the eggs of the cecal worm *Heterakis gallinarum*, which can be transmitted via contact with infected birds or contaminated litter. This worm serves as the intermediate host for the protozoan parasite *Histomonas meleagridis*, the causative agent of blackhead disease. Currently, no chemotherapeutic agents are available to prevent or treat the disease, as previous drugs have been withdrawn from the market, and effective vaccines have not yet been developed.

Research Question

1. What innovative approaches can be developed to prevent or treat blackhead disease in turkeys and chickens?

Research Areas

- 1. Development of vaccines and vaccination strategies to prevent blackhead disease in turkeys and chickens.
- 2. Identification and evaluation of alternative chemotherapeutic agents for controlling blackhead disease in turkeys and chickens.

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. 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.