Board Research Initiative Request for Proposals

Refining Avian Metapneumovirus Vaccination Strategies for Improved Disease Management

Background

Research is needed to support the development of vaccination strategies to rapidly respond to an emerging poultry disease challenge, Avian Metapneumovirus (aMPV). aMPV, also known as Turkey Rhinotracheitis, Avian Pneumovirus, Avian Rhinotracheitis and Swollen Head Syndrome, is an acute respiratory tract infection of poultry. It is associated with swollen head syndrome, as well as reproductive disorders, which can cause a drastic decrease in egg production for poultry breeders. Infection with aMPV can be complicated by secondary bacterial or viral infections due to significant immunosuppression from aMPV, resulting in significant mortality. The U.S. Department of Agriculture's Center for Veterinary Biologics approved the importation of five commercial modified live vaccines and two commercial killed vaccines that are licensed and approved in Europe and have shown great results in protecting flock health against aMPV by stimulating the immune system of birds and providing long-term immunity. Currently, the viral load of aMPV in the environment is significant, and the U.S. poultry industry is deploying these commercial aMPV vaccines for the first time. Therefore, there is a need for studies supporting the advancement of vaccine strategies that are adaptable to address the disease challenge.

Research Question

• How can vaccination strategies for commercial poultry be optimized to reduce the impact of avian metapneumovirus (aMPV)?

Research Areas

• Develop and evaluate vaccine protocols that provide the most effective protection against aMPV.

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.