

## Board Research Initiative Request for Proposals

Released – September 20, 2018

### Broiler Growth Rate

#### Background

Animal welfare groups and some retailers have promoted the idea that “fast growth” rates for broilers are harmful to the welfare of the birds. However, these groups usually provide no specific definition of growth rate and there is no scientific basis for linking growth rate to broiler welfare. Additionally, practical measurements of broiler welfare are needed so that broilers developing at different growth rates can be objectively assessed by poultry auditors, poultry farmers, and poultry veterinarians. There is a need to document the interaction of broiler growth rate with objective measures of welfare and with management methods that can interact with growth rate and welfare outcomes.

#### Research Questions

- What parameters should be used to evaluate broiler welfare?
- What objective measures could be used to assess these parameters?
  - How do these help define the interaction of broiler growth rate and broiler welfare?
  - What automated measurements can be used to assess these broiler welfare parameters?
- Can objective measures be used to measure the impact on broiler welfare by various growth rates in broilers?
- How do management methods (lighting (duration; type; intensity); density (birds/area or lbs/area)) interact with growth rate and broiler welfare outcomes?
- Are there other ways of evaluating growth rate that would be more objective and impartial? (Ex: instead of ADG, evaluate the % of body weight change each week or over specific time periods.)

#### Areas of Focus

- Objective measures to evaluate the impact on broiler welfare by growth rate throughout the life of the broiler. These objective measures can be behavioral (gait, activity level, etc.) or physical parameters (development of the cardiovascular, skeletal, or muscular systems).
- Comparisons of objective measures of welfare in broilers of the same breed (standard, alternative, slower-growing) grown at different growth rates.

#### 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 Geraldine Dew at [gdew@uspoultry.org](mailto:gdew@uspoultry.org).

**DEADLINE FOR PRE-PROPOSAL SUBMISSION IS NOVEMBER 1, 2018.**

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.