

PhD Research Assistantship in Animal Stress and Nutritional Physiology

USDA-ARS Livestock Behavior Research Unit & Purdue University

Beginning in Fall 2021/Winter 2022, a 3-year USDA-NIFA funded PhD research assistantship is available with Dr. Jay S. Johnson in the USDA-ARS Livestock Behavior Research Unit in collaboration with Dr. Luiz Brito in the Purdue University Department of Animal Sciences. Coursework and awarding of the degree will be through Purdue University.

The successful candidate will be involved in the development of research protocols, data collection, and analysis of data to integrate functional genomics, physiological, and behavioral measures to mitigate the cumulative effects of *in utero* heat stress on swine health, performance, and welfare. Specifically, the research focus will be to develop a functional genomics approach to identify genomic and epigenomic biomarkers and enable selective breeding of sows that are at a minimal risk of producing offspring that display negative postnatal *in utero* heat stress phenotypes

The graduate student will be expected to coordinate undergraduate students assisting with the research project and assist other graduate students as needed. The candidate will have the opportunity to present results at national and international meetings. In conjunction with primary research responsibilities, the candidate will be able to participate in Department of Animal Science activities including: assistance with teaching of undergraduate courses and outreach activities, seminars and journal clubs, development of additional research questions related to the main project, and preparation and submission of grants. Professional development opportunities are also available.

Qualifications: Applicants must have completed a M.S. degree in Animal Science, Biology or closely related field by the start of the position. The ideal candidate should have a background in animal physiology, thermal biology, nutritional physiology, or genetics with an understanding of scientific methodology, and should be comfortable and interested in working with pigs and other livestock species. The candidate should have strong written and oral communication skills in addition to experience with scientific research techniques in the lab and field. Demonstrated ability to use various types of technology and data processing software is preferred. Candidates should enjoy working individually and as a team in a dynamic, multi-disciplinary research environment. This position includes a graduate stipend, tuition waiver and health insurance benefits.

Information about the USDA unit is available at: <http://www.ars.usda.gov/mwa/lafayette/lbru>. Information regarding requirements to enter graduate school at Purdue University is available at: <http://www.ag.purdue.edu/ansc/Pages/GradProgram.aspx>. Questions about the position can be directed to Dr. Jay Johnson (Jay.Johnson2@usda.gov).

Interested in applying? Interested individuals should send a cover letter, their CV, and the names and contact information of 3 references to Dr. Jay Johnson (Jay.Johnson2@usda.gov) and Dr. Luiz Brito (britol@purdue.edu). Following receipt of these materials, select candidates will be invited to interview. Applications will be reviewed continuously until a suitable candidate is found.

Successful applicants will also need to submit formal Graduate School applications through the Purdue Animal Sciences Department. Please see the Purdue Animal Sciences Department webpage for more details: <http://www.ag.purdue.edu/ansc/Pages/GradProgram.aspx>

