

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

POSITION AVAILABLE Animal Systems Modeling The Ohio State University

A PhD graduate research associateship (GRA) is available with Dr. Nora M. Bello in the Department of Animal Sciences at The Ohio State University in Columbus, Ohio.

The successful candidate will be involved in the development and application of quantitative models for efficient and sustainable food production systems. Areas of application are open to any agricultural livestock species and their interphase with cropping systems. The research focus will be integrative of scientific domains in the animal sciences in alignment with the candidate's interest; domains to be considered for integration may include nutrition and metabolism, reproduction, health, behavior and welfare, performance and management, amongst others.

From a methodological standpoint, opportunities for novel and impactful developments relevant to systems modeling include causal inference, networks and graphical models, as well as hierarchical models, structural equations and dynamic modeling, amongst others. The successful candidate will have the opportunity to develop competency in the Bayesian framework of inference, as well as proficiency with big-data analytics and high-performance computing through the Ohio Supercomputer Center (<u>https://www.osc.edu/</u>). The candidate will have the opportunity to interact regularly with a vibrant interdisciplinary collaborative environment, working on cutting edge problems in the life sciences through the Translational Data Analytics Institute (<u>https://tdai.osu.edu/</u>). In conjunction with primary research responsibilities, the candidate will be able to participate in activities, including assisting with teaching of undergraduate and/or graduate courses, developing and articulating novel research questions, grant writing, and research collaborations with peer researchers and faculty in the Department of Animal Sciences, the College of Food, Agricultural and Environmental Sciences (CFAES) and beyond, across The Ohio State University.

Qualifications: Applicants must have completed a BS/MS in animal science, breeding and genetics, crop science, biology, biometry, statistics, biostatistics or related field by the start of the position. Ideally, the successful candidate will combine interests and background in both animal agriculture and quantitative modeling. The successful candidate must be a highly motivated individual with a curious mind, strong work ethic and sharp organizational skills. The candidate must have strong oral and written communication skills, as well as an understanding of scientific methodology. The candidate must be comfortable and interested in working with data and technology, as well as people and livestock. The candidate must enjoy working individually and as a team in a dynamic and collaborative multi-disciplinary research environment.

Benefits: This position includes a graduate stipend, tuition waiver and health insurance benefits. This position is available starting Summer/Fall 2022 and is renewable on an annual basis based on progress in the program. There are fellowship opportunities through the College of Food, Agricultural and Environmental Sciences, and the OSU Graduate School; high quality applications will be forwarded accordingly.

Interested in applying? Send a letter of interest, CV, academic transcripts (un-official) and contact information for 2 references to Dr. Bello (<u>bello.69@osu.edu</u>). Materials will be reviewed continuously until a suitable candidate is identified. Select candidates will be invited to interview. Successful applicants will then need to formally apply and be accepted by the OSU Department of Animal Sciences Graduate Program. TOEFL scores will be needed at the time of application for international students. For information on graduate admissions, please visit: <u>https://ansci.osu.edu/graduate</u>

Please contact Dr. Bello directly if you are interested in this position (bello.69@osu.edu).