Abnormal Behaviour in Birds: Divulging the Secrets of the Gut-Brain Axis in Birds Kept for Egg Laying

Positions available: 1 PhD (3 years), 1 MSc (2 years)
in the Department of Animal Bioscience and the Campbell Centre for the Study of Animal Welfare at the University of Guelph, Canada
Start date: January 2017

Feather pecking (FP) is an abnormal behaviour performed by birds in a group setting which can be extremely detrimental. Birds will pluck and eat feathers from their neighbours, exposing bare skin and often cause open sores. In these scenarios, birds will sometimes begin injuriously pecking their counterparts and can result in bird mortality rates as high as 30% in extreme cases. With the trend to shift to housing systems where a large number of birds are housed together in close proximity, the potential for this abnormal behaviour to become disastrous is very real. Recently, research (http://www.ncbi.nlm.nih.gov/pubmed/23313560) has been investigating the role of the gut with respect to feather pecking/eating behaviour. The goal of the present research project is to shed light on the possible link between specific microorganisms that live in the digestive tracts of birds with and without abnormal behaviour, how they interact with the nervous system and how this might affect behaviour.

We are looking for a highly motivated PhD and MSc student. Applicants should have a MSc (or BSc for MSc applicants) in biochemistry, biological sciences, veterinary medicine, or related fields. A good working knowledge of gastrointestinal tract function and/or knowledge of physiological regulation of behavioural problems would be an asset. The successful applicants will have excellent communication skills (oral and written) and are expected to communicate project findings in form of scientific publications, conference presentations, and progress reports for funding bodies.

The successful candidates will join members of one of the world’s largest and dynamic interdisciplinary groups of scientists and graduate students focusing on animal welfare (http://www.uoguelph.ca/csaw/). The University of Guelph, located in south-western Ontario, is one hour from Toronto and home to the Ontario Agricultural College (Canada’s largest and most renowned agricultural college) and the Ontario Veterinary College (ranked number 4 of vet schools in the world in 2015). This research project will be carried out in collaboration with the Medical Sciences Department of McMaster University, Hamilton, Ontario. Please submit your applications directly to Dr. Harlander via email at: aharland@uoguelph.ca

Review of applications will begin immediately and will continue until a suitable candidate is found.