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Supervisor(s): Professor Eithne Comerford / Dr Karl Bates

Project title: Validation of owner-reported mobility data using a tool developed for the Generation Pup longitudinal study.

Closing date for applications: 31st January 2020

Stipend: £23,164

Project description [max 700 words including the equality statement below]

This should include details of the work to be done and the training the student will receive.

Owner-based questionnaires verified with objective gait data are available for use in dogs already diagnosed with osteoarthritis to help accurately quantify changes in mobility. However, declines in canine mobility can be gradual and dogs are not always presented to veterinarians for early assessment. Currently, there is no validated owner-based questionnaire to determine these more subtle mobility changes

This project will test agreement between an novel owner-based mobility questionnaire used in the lifetime study "Generation Pup", veterinary assessment and objective gait data. Validation of this questionnaire will identify risk factors for reduced mobility thereby contributing to early management and improved canine welfare in veterinary practice.

Our group have worked with the Generation Pup team (https://generationpup.ac.uk) developing a questionnaire ("GenPup-M") to collect mobility data from dog owners at repeated time points. However, objective validation of "GenPup-M" has not been performed for use in either the Generation Pup or general dog populations. This is essential prior to detailed analysis and publication of risk factors for owner-reported canine mobility problems.

We will assess the accuracy of owner-responses to "GenPup-M" questions in dogs with/without mobility problems using independent veterinary assessments and gait analysis. Study participants will be recruited from owners of dogs presented for routine appointments at the University of Liverpool (UoL)'s Small Animal Practice and at the UoL Small Animal Teaching Hospital. Development of this validated questionnaire will facilitate early identification and diagnosis of mobility issues thereby having far-reaching uses for veterinarians, particularly in first opinion practice where mobility assessment relies partially on owner-reporting.

This project will provide a short period of multidisciplinary research training for a qualified veterinary surgeon, which will lead to a Masters in Philosophy qualification at the University of Liverpool. The student will be a member of both the Institute of Veterinary Science (based within the small animal hospitals (first opinion and referral)) and the Comparative Musculoskeletal disease and Evolutionary Morphology and Biomechanics groups, Institute of Ageing and Chronic Disease. This clinical and research environment will provide a great opportunity for the MPhil student to learn new skills in study design, participate in veterinary clinical research, gait data acquisition and analysis and preparing work for publication.

The Institutes of Ageing and Chronic Disease and Veterinary Science are fully committed to promoting gender equality in all activities. In recruitment we emphasize the supportive nature of the working environment and the flexible family support that the University provides. The Institute holds a silver Athena SWAN award in recognition of on-going commitment to ensuring that the Athena SWAN principles are embedded in its activities and strategic initiatives.

Funding notes and any specific eligibility requirements: (max 100 words)

This project is fully funded by the Dogs Trust.

All applicants must be MRCVS.

Any references to publications:

Harris LK et al, Veterinary Journal. 2018; 234: 85-90

Enquiries to: Informal enquiries to Professor Eithne Comerford on <u>ejc@liverpool.ac.uk</u> or 07807 106568

To apply: please send your CV and a covering letter to <u>ejc@liverpool.ac.uk</u> with a copy to <u>iacdpgr@liverpool.ac.uk</u>

Expected interview date/week : Middle February 2020

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