

Department of Veterinary Medicine

Funded MPhil in Molecular Veterinary Pathology, Department of Veterinary Medicine, University of Cambridge. Funded by BSAVA PetSavers.

We are seeking a talented and enthusiastic veterinarian who wishes to gain experience in veterinary pathology research, to pursue a one year MPhil project in the Department of Veterinary Medicine, University of Cambridge. This is a unique opportunity to gain experience at the interface between anatomic pathology, machine learning and small animal endocrinology.

The project: The islet microenvironment in canine and feline diabetes mellitus: an unexplored therapeutic target. This project will characterise the microenvironment of canine and feline pancreatic islets in health and disease, in order to identify potential targets for novel immunomodulatory therapeutic approaches in canine and feline diabetes mellitus. A range of histochemical, immunohistochemical and immunofluorescent techniques will be undertaken, and pathological assessment will be carried out in parallel with machine learning approaches. The project will involve prospective sampling of pancreata from deceased dogs and cats, providing fresh tissue for molecular and genetic analyses.

The person: We seek a bright and motivated individual to undertake this project. You will be registered with, or eligible to apply for registration with, the RCVS. This studentship is available to students who qualify for Home/EU fees. Further information here:

<https://www.graduate.study.cam.ac.uk/finance/fees> - *note the University has confirmed that students from the European Union starting courses in England in the 2019/20 academic year will continue to be eligible for home/EU fees.

The supervisory team: The primary supervisor of this project is Dr Kate Hughes ([Profile here](#)), a research active veterinary pathologist. Should the scholar wish to subsequently apply for a pathology residency program, it is envisaged that completion of this program of study would be commensurate with the European College of Veterinary Pathologists requirement that, before registration, trainees have undertaken a prior year of training in a field relevant to veterinary pathology. Whilst a stand-alone project, this research is also embedded within the Canine Diabetes Genetics Partnership (CDGP) and the co-supervisory team includes Prof Lucy Davison, of the Royal Veterinary College and Oxford University. It is anticipated that the successful candidate will gain exposure to canine genetics research through attendance at quarterly meetings of the CDGP and visits to the Davison laboratory. Supervision of machine learning approaches will be under the tutelage of Dr John Wills, University of Cambridge.

Funding:

Funding will cover the successful candidate's stipend at £17,757 and tuition fees at the UK/EU rate.

To apply: Please submit your curriculum vitae and covering letter detailing your experience to date, motivation for applying and future career goals, to Fiona Roby [fr288@cam.ac.uk] by the closing date: 28th April 2019. Preliminary interviews will be held on 20th May 2019 after which the preferred candidate will be invited to submit a formal application: (see here for info:

<https://www.vet.cam.ac.uk/study/postgrad/apply> - noting non-refundable £60 application fee). A confirmed offer of a place will only be made once the full application process is complete, suitable references have been received and the candidate has been approved by the Department and University.

For further information: Please contact Dr Kate Hughes kh387@cam.ac.uk