Available MPhil Project:

Supervisor: Paul Freeman, Kate Hughes
Supervisor profile pages: Paul Freeman, Kate Hughes

Project details: Canine intervertebral disc disease; what does the calcium do?
We have begun to investigate the mineral profile of extruded disc material from both the cervical and thoracolumbar regions removed during decompressive surgical procedures, using a combination of FTIR, XRD and other molecular biology techniques. We are comparing the mineral profile of material removed from non-herniated discs at prophylactic fenestration, as well as non-diseased discs from PM specimens, in order to assess whether there is a difference which may help to explain why some discs herniate and other do not. The candidate will be taught the necessary laboratory techniques to enable them to carry out this part of the study with the help of on-site members of staff. This work is at an early stage, and it is likely that it will continue to evolve and develop through the use of electron microscopy and imaging techniques also.

Funding:
This project is not funded. Prospective students would be expected to apply for funding opportunities either through the University (http://www.vet.cam.ac.uk/grad/Prospectivestudents/funding) or other sources.
Deadline to apply in order to be considered in University Graduate funding round: 7th January 2021

How to apply:
Contact the Supervisor to discuss before submitting an application.
More details on how to apply here: http://www.vet.cam.ac.uk/grad/Prospectivestudents/apply