

PhD Position in Wildlife and Vector-borne Diseases

A 3-year PhD position is available commencing September of 2016 in the laboratory of Dr. Nicole Nemeth, Department of Pathobiology, University of Guelph. This PhD position will involve assessing the risk of Orbivirus (i.e., epizootic hemorrhagic disease [EHDV] and bluetongue viruses [BTV]) incursion and establishment in Ontario, Canada through data collection and analysis on vector composition, abundance, distribution, and seasonality in livestock- and deer-utilized habitats, as well as serologic evidence of orbivirus transmission in cattle and deer in high-risk areas of Ontario. The goals of the research are to: 1) better understand the potential threat of EHDV and BTV to cattle, sheep, and farmed and free-ranging deer in Ontario; 2) elucidate the potential pathways of virus transmission to livestock and deer using a qualitative risk assessment framework for EHDV and BTV establishment in Ontario; and 3) establish a current baseline of orbivirus activity in southern Ontario.

The research will involve a combination of field and laboratory work, as well as data management, interpretation and analyses, including but not limited to vector trapping and *Culicoides* spp. identification, coordination and participation in blood collection from cattle and deer, the use of geographic information software (GIS), spatial analysis, and application of a qualitative health risk assessment. The graduate student will serve as a liaison between stakeholders and collaborators in the Ontario Ministry of Agriculture, Food, and Rural Affairs, Canadian Food Inspection Agency, livestock industry partners (sheep and dairy and beef cattle), Brock University, as well the Ontario Ministry of Natural Resources, Canadian Wildlife Health Cooperative, Ontario Federation of Anglers and Hunters, and others.

Students must provide stipend funding, which may be available to Canadian students as scholarships through the Ontario Veterinary College, as well as the Natural Sciences and Engineering Research Council (NSERC), Ontario Graduate Scholarship (OGS), and Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) HQP scholarship. Please contact Donna Kangas for details (contact information below).

An MSc or outstanding undergraduate record is required; a DVM is desirable, but not required.

The position will remain open indefinitely until a suitable candidate is found.

Additional information regarding admission requirements and the application process can be found at:

<https://www.uoguelph.ca/registrar/calendars/graduate/2013-2014/gradprog/path-msc.shtml>

https://horizon.ouac.on.ca/webapp/account.d2w/report?ident=ACCOUNT_DSP&merchant_rn=810327&action_id=choose

Further inquiries can be directed to Ms. Donna Kangas, Department of Pathobiology, University of Guelph, Guelph, Ontario, N1G 2W1, Canada; phone 519- 824-4120 ext. 54725; e-mail: pathgrad@uoguelph.ca

Research-related inquiries should be directed to Dr. Nicole Nemeth (nnemeth@uoguelph.ca).

