MSc position in Bacterial Pathogenesis in Swine

A 2-year MSc position is available in the Department of Pathobiology commencing May 1 or September 1, 2021.

The MSc research project will involve conducting a series of challenge trials in the OVC Animal Isolation Facility to optimize an infection model for post-weaning *E. coli* diarrhea. Specifically, the association of genetic factor, age of pigs, and infectious dosage with severity of diarrhea, bacterial shedding, and histology lesions in pigs challenged with enterotoxigenic *E. coli* will be investigated. The optimized infection model will then be used to study the effect of alternative method (Ex. probiotics) on post-weaning *E. coli* diarrhea.

The research project will include animal work (e.g. animal trials, sample collection from live pigs and during postmortem), as well as laboratory work (e.g. RFLP-PCR, bacteriology), analysis of clinical and laboratory data collected during trial, and use of epidemiological methods to analyze data. Experience with animal handling/animal management will be considered an asset, as will previous experience with laboratory work.

Selection of the successful candidate is based on a combination of academic criteria, relevant interest and experience, referees’ evaluations, and an assessment of the candidate’s career goals and motivation. **Review of applications will begin immediately, and continue until the position is filled.**

A formal application should be submitted to Dr. Lillie at blillie@uoguelph.ca or Dr. Vahab Farzan at afarzan@uoguelph.ca and should include a CV, a copy of undergraduate transcripts, names of three references, and a cover letter stating interest in the above-mentioned titles.

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Research-related inquiries or inquiries about the specific project should be directed to Dr. Lillie and/or Dr. Farzan. Further inquiries related to general application procedures can be directed to Ms. Jessie Beer, Graduate Program Assistant, Department of Pathobiology, University of Guelph, Guelph, Ontario, N1G 2W1, Canada; phone 519- 824-4120 ext. 54725; e-mail: pathgrad@uoguelph.ca

The University of Guelph is committed to an Employment Equity Program that includes special measures to achieve diversity among its faculty and staff. We therefore particularly encourage applications from qualified aboriginal Canadians, members of the LGBTQA community, women, veterans, persons with disabilities, and members of visible minorities.