

## MSc Position in Genetics, Diet and Animal Health

A 2-year MSc position is available (**pending stipend funding**) in the Department of Pathobiology, offered jointly with the Department of Population Medicine, commencing May 1 or September 1, 2017 on host immunity to and epidemiology of bacterial pathogens in swine.

The research project is part of a large multidisciplinary project involving the Departments of Pathobiology and Population Medicine at the Ontario Veterinary College, and will explore the associations between diet, farm management, and pig genotypes with health and growth performance. In this project, on-farm clinical trials are performed to compare growth performance up to market weight among pigs that were fed with either reduced animal protein containing diets or conventional diets during nursery period. In addition, impact of reduced animal-protein diets on immune response (cytokines and antibody) and health of pigs (morbidity and mortality, presence of pathogens) will be explored. Pig genotypes (single nucleotide variants) will be determined and their association with growth performance and health will be studied. The projects will include a review of existing literature, laboratory work (e.g. bacteriology, ELISA, PCR), analysis of data collected on farms and data produced from sample analysis, and use of epidemiological methods to analyze data. The project may involve farm visits to obtain additional samples.

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. There is a significant funding opportunity for graduate stipend funding within the Veterinary College with applications due February 10<sup>th</sup>, 2017, and an alternative source of funding from OMAFRA (the OMAFRA HQP program) due between February 6<sup>th</sup> and February 24<sup>th</sup>, 2017 that could provide the required pending funding. Other funding sources are available for exceptional candidates.**

A formal application should be submitted to Dr. Lillie at [blillie@uoguelph.ca](mailto:blillie@uoguelph.ca) or Dr. Vahab Farzan at [afarzan@uoguelph.ca](mailto: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 Mrs. Donna Kangas, 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](mailto: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.