



ONTARIO VETERINARY COLLEGE

MSc and PhD positions

One MSc and one PhD position are available in the Departments of Pathobiology or Population Medicine on *Streptococcus suis* in pigs.

The research will focus on molecular epidemiology of *Streptococcus suis* in pigs using a whole genome sequencing approach and advanced data analysis methods. The goal is to determine the molecular characteristics (including virulence-associated-factors, multilocus sequence typing (MLST) groups, and antimicrobial resistance genes) of *Streptococcus suis* isolates already recovered from Ontario nurseries. Genetic variants associated with *Streptococcus suis* infection will be identified and the relative importance of host factors versus pathogen related factors will be determined. The projects will primarily include the application of bioinformatics and epidemiological methods to explore the host-pathogen interaction at the molecular level.

Selection of the successful candidate for both the MSc and PhD position will be based on a combination of academic criteria, relevant interest and experience, referees' evaluations, and an assessment of the candidate's career goals and motivation. However, the ideal PhD candidate should preferably have experience in bioinformatics and/or programming.

The successfully applicants will work with an interdisciplinary team including Drs. Nicole Ricker, Vahab Farzan, Zvonimir Poljak, and Brandon Lillie in the Departments of Pathobiology and Population Medicine.

Application should be submitted to Dr. Ricker at nricker@uoguelph.ca or Dr. Farzan at afarzan@uoguelph.ca, and should include a cover letter, CV, a copy of transcripts, and names of three references. We encourage applications from aboriginal Canadians, members of the LGBTQA community, women, persons with disabilities, and members of visible minorities.

Research-related inquiries, or inquiries about the specific project should be directed to Drs. Ricker and/or Farzan. Further inquiries related to general application procedures can be directed to pathgrad@uoguelph.ca.