

MSc position available starting in the summer 2018 semester

One MSc graduate student position is available in lab of Dr. Lucy Mutharia, Department of Molecular and Cellular Biology. The goal of the project is to characterize specific secreted proteins of *Mycobacterium paratuberculosis* and assess their potential in the development of a peptide-epitope based diagnostic assay for Johne's disease. The student will work closely with a post-doctoral fellow and obtain training in cloning, protein expression and purification techniques, identifying B-cell epitopes and opportunity to interact with industry-based researchers in the development of the assay. This NSERC-CRD funded project is collaboration between Dr. Mutharia's lab at the University of Guelph and an industry partner. Johne's disease is a chronic and ultimately fatal intestinal disease of ruminants caused by *Mycobacterium avium* subspecies *paratuberculosis*. The research integrates protein chemistry, proteomics, bioinformatics, molecular biology, protein expression and immunology.

A fundamental understanding of molecular biology and microbe-pathogen interactions is required.

Past experience with working in a research lab (e.g. undergraduate research project or similar) is an asset.

Independent self-motivated applicants interested in applied research are encouraged to apply.

Applications will be accepted until a suitable candidate is identified.