



MSc and PhD positions in marine mammal and *in vitro* toxicology

Description

The Desforges Lab in Ecotoxicology and Wildlife Stress in the Department of Environmental Studies and Sciences at the University of Winnipeg is seeking MSc and/or PhD students to begin September 2023 (or sooner). Led by Dr. Desforges, the students will have the opportunity to conduct field work to collect samples from Arctic marine mammals and perform laboratory experiments to understand the accumulation and toxicity of chemicals of emerging Arctic concern (CEACs). There is opportunity for projects to involve toxicokinetic and toxicodynamic modeling of chemical uptake, elimination, and effects at the cellular level using cell culture methodology. Students will therefore get experience in unique and highly-sought after skills in molecular biology, cell culture, genomics, field work, and modelling.

This NSERC funded project aims to explore different bioassays using wildlife-collected cells and commercial cell lines to better characterize the mode of action and potential risk of CEACs in Arctic species to promote Arctic focused chemical risk assessment. Read more about the Desforges Lab and its project at desforgeslab.weebly.com.

The Desforges Lab

By joining the lab the student will be a member of a growing and exciting research community with opportunities to lead and collaborate on new research projects with diverse partners across academia and government. The lab ensures an inclusive research environment with ample opportunities for growth and development through mentoring in all aspects of scientific research, from study design and proposal preparations to data analysis, writing, and dissemination. The Lab is housed in a state-of-the-art research facility with access to a broad suite of molecular biology and analytical equipment. Students will benefit from the diversity of research projects on-going in the lab to learn and mentor others in new skillsets.

Requirements and how to apply

To apply for this opportunity, submit a cover letter and a CV, with the name of two or three professional references. References will only be contacted if candidates are selected for interview. Unofficial transcripts are also recommended. The cover letter should highlight your

background and achievements, an explanation of why you are interested in the position (specify if MSc or PhD), and how the position aligns with your career aspirations.

Applicants eligible for Canadian federal or provincial funding (e.g., NSERC or Research Manitoba) are especially encouraged to apply. So are applicants from marginalized populations, and those with interest in ecotoxicology, *in vitro* experimentation, cell culture, modelling.

Applicants with demonstrable experience and interest in ecotoxicology and molecular biology, particularly cell culture, will be highly favoured. Experience or interest with computational biology and modelling (toxicokinetics and toxicodynamics, energy budget modelling, compartment modelling, etc.) would be an asset.

Cover letter, CV and transcripts should be sent to: j.desforges@uwinnipeg.ca.