



PhD opportunities in Arctic Wildlife Health, Nutrition, and Zoonoses Caribou and Muskox Health

Review of Applications to Begin Immediately (March 29, 2022)

We are seeking two highly motivated individuals to join our research group on Arctic Wildlife Health. These positions are based at the University of Calgary Faculty of Veterinary Medicine. The successful applicants will work under the primary supervision of Dr. Susan Kutz, Canada Research Chair in Arctic One Health and within our international, multi-disciplinary, multi-agency, and community-based network to investigate aspects of muskox and caribou health ecology and resilience in a changing Arctic. Our program spans disciplines from the lab to communities and ecosystems and incorporates Indigenous knowledge to better understand the factors influencing muskox and caribou health, emerging disease, and food safety and security in the Arctic.

We are recruiting PhD students for two projects:

- 1. Emerging zoonoses in wildlife: Understanding the ecology, transmission and impacts of *Brucella* and *Erysipelothrix* for conservation and food security in the changing Arctic:** In this project we bring together Indigenous Knowledge, targeted field studies, and western scientific knowledge to understand and mitigate two key emerging zoonotic diseases of caribou and muskoxen. Building on our community-based wildlife health surveillance programs, the student will investigate the ecology of *Brucella* and/or *Erysipelothrix* in the Arctic, including risk factors and the role of potential reservoir hosts/vectors.
- 2. The role of trace minerals in the health of Arctic ungulates:** Are essential trace mineral imbalances linked to recent poor health and increased susceptibility to disease for caribou and muskoxen? How are climate change and other factors driving changes in animal trace mineral status? The student will study the dynamics and effects of essential trace minerals, and their complex interactions with climate, stress, and infectious disease in these species. Candidates with backgrounds in veterinary medicine, animal science and nutrition, and Arctic ecology are encouraged to apply.

Qualifications: This research requires close interactions with northern Indigenous, industry, and government partners, proficiency in the lab and in remote field locations, and excellent communication skills. Candidates should be highly organized, industrious, passionate about science, and have demonstrated competence as team players. Strong interests/competencies in wildlife disease ecology, wildlife health, Arctic ecology and Indigenous knowledge are desired. Candidates with a DVM are encouraged to apply. A GPA of >3.2 on a 4.0 scale is required.

Students will be members of our University of Calgary Wildlife Health and Ecology Research Group and new graduate specialization and will have opportunities to interact with the Canadian Wildlife Health Cooperative based at UCVM (<http://www.cwhc-rclf.ca>) and the Arctic Institute of North America (<http://arctic.ucalgary.ca>).

Stipend: PhD students are guaranteed a minimum stipend of \$25,000/year.

Application Deadline: Applications will be reviewed immediately with the intent of filling these positions for a September 2022 start date.

Email a letter of introduction describing your research interests, experience, and motivation for applying to these positions, as well as a current CV, an unofficial copy of transcripts, and 3 references to:

Dr. Susan Kutz, skutz@ucalgary.ca
<http://people.ucalgary.ca/~kutzrg/>, <https://www.facebook.com/KutzLab/>
Faculty of Veterinary Medicine, University of Calgary

