



OPENINGS FOR 2 GRADUATE POSITIONS (MSc or PhD) for research related to:

Genomics tools to inform conservation translocations and animal welfare

Assiniboine Park Zoo, Winnipeg, Manitoba, Canada, in association with:

The Garroway Lab, Department of Biological Sciences, University of Manitoba, Winnipeg, Manitoba, Canada

POSITION START DATE: Flexible

CLOSING DATE FOR APPLICATIONS: We will begin review of applications in February, but the positions will remain open until filled

CONTACT: Stephen Petersen at ConservationResearch@assiniboinepark.ca

PLEASE SEND: Your CV and a brief cover letter introducing yourself, your research experience, interests, and tell us why you are interested in the positions.

Come work with the Conservation and Research team at the Assiniboine Park Zoo in collaboration with the Garroway lab at the University of Manitoba! We are a diverse, open, inclusive, and collaborative research team. We aim to foster critical thinking and creativity within a supportive learning and research environment and encourage EVERYONE interested to apply. We know confidence gaps and imposter syndrome are natural, normal, and commonly felt. Don't let that hold you back—rest assured we want to hear from you!

The holders of these positions will work on research questions related to genomic tools that inform wildlife translocations for conservation goals and animal welfare while in human care. These projects will focus on Endangered butterflies or polar bears. Exact research topics can be flexible within the scope of available data, and there will be opportunities for students to pursue their own interests. These can be approached in both applied and basic research directions. The research projects will be primarily computer-based but will include laboratory and field research components. We will provide all the training needed for a successful research project.

Conservation and research are integral components of Assiniboine Park Zoo. Our conservation programs protect wild species by promoting conservation connections, protecting urban biodiversity, preventing species extinctions, and understanding the impacts of climate change. Our team also works with the animals in our care to improve their welfare, support scientific inquiry, and validate non-invasive methods to study wild populations. Both students will have the opportunity to join in a multi-partner international collaboration for species conservation and will help inform conservation decisions.

The Garroway Lab's approach has come to be called 'macrogenetics'. Macrogenetics encompasses population genetic research that repurposes genetic data, whether collected from the literature or harvested raw data, to address new questions about the ecological and evolutionary causes and consequences of genetic variation across multiple species. The term macrogenetics is new, but the approach is old. However, interest in the area is growing due to the accumulation of publicly archived genetic data. The group has amassed a very large data set, so students can hit the ground running with data. But we will also expect students to expand the database in line with their own research questions and taxonomic interests.

We have funding for stipends, conference travel and all research-related expenses. If you have additional questions, please get in touch!

You can explore the Conservation Research team at Assiniboine Park Zoo and the Garroway lab more at:

<https://www.garroway-lab.com/>

<https://www.assiniboinepark.ca/conservation-research-sustainability/conservation-and-research>

<https://scholar.google.ca/citations?user=Sbz1W4oAAAAJ&hl=en>

<https://scholar.google.ca/citations?user=B9s3hY4AAAAJ&hl=en&oi=sra>