

Postdoctoral Fellow in Environmental Microbial Genomics

The **Ecosystems and Global Change Group** (www.ecosystemchange.com) at Trent University jointly led by Prof Andrew Tanentzap (Canada Research Chair in Climate Change and Northern Ecosystems) and Dr Erik Emilson (Research Scientist, Canadian Forest Service sector of Natural Resources Canada, <https://glfc-wet.github.io>) is recruiting a Postdoctoral Fellow to **start immediately**. The initial appointment will last for two years with a possibility for renewal.

The project: Permafrost thaw risks releasing microbes into the natural environment that have been isolated from modern ecosystems for millennia with unknown consequences for people and wildlife. We are searching for an experienced researcher to characterise microbial community composition and functioning in thawing North American permafrost, with a particular focus on environmental pathogens and the application of single-cell sequencing approaches. Our research group also holds large sequencing datasets from freshwaters and soils that are often coupled with untargeted metabolomics data, offering substantial opportunities for focused data mining. The appointed candidate will have completed the requirements for a PhD by their start date and have evidence of an emerging publication record using state-of-the-art bioinformatics tools to analyse metagenomics sequencing data. The ideal candidate will have some knowledge relevant to long-read sequencing, single-cell microbial genomics, and whole genome assembly. The candidate will be expected to mentor junior team members, so leadership experience will be advantageous.

What we can offer: Our research training environment features some of the most advanced environmental research infrastructure in Canada, including access to a Fourier-transform ion cyclotron resonance mass spectrometer, short- (Illumina) and long-read (Oxford Nanopore) sequencing facility with dedicated HPC, radioisotope and stable isotope labs, and eddy covariance systems, with extensive support for field research (ATVs, snowmobiles, autonomous surface vessel). As our team partners with government scientists, you will have a unique opportunity to influence environmental policy and make connections outside of academic to bolster your career.

We offer competitive wages (starting \$55k/yr) plus enhanced health and dental benefits. Peterborough is one of the most affordable and desirable places to live in Ontario, offering the best of urban (70 mins to Toronto) and rural living all under 30 minutes to the heart of the Kawarthas that boasts endless lakes and forests to explore. Our group supports flexible working arrangements and encourages applicants from diverse backgrounds as we strive to build a more equitable, diverse, and inclusive workplace. Overseas applicants will be supported in applying for a Work Permit.

How to apply: Please email Andrew Tanentzap (atanentzap@trentu.ca) with a CV and brief cover letter describing what you hope to get out of working with us, how your research interests are a good fit to our group, and how your past experiences make you suitable for this position. The position will remain open until filled.

