

Department of Biology

Postdoctoral Position in Pine Population Genomics

An exciting postdoctoral opportunity is available to join the TRIA-For team to study how the genetics of lodgepole and jack pine influences the spread of mountain pine beetle, based in the Coltman lab in the Biology Department at Western University (https://www.uwo.ca/biology/) in London, Ontario, Canada; and also working closely with the Cullingham lab in the Biology Department at Carleton University (https://carleton.ca/biology/people/catherine-cullingham/). TRIA-For is a team of researchers using ecology, physiology and genomics to study the mountain pine beetle system (https://genomecanada.ca/project/tria-transformative-risk-assessment-and-forest-resilience-using-genomic-tools-mountain-pine-beetle/). This position will lead landscape-scale population genomic analysis of jack pine to determine whether adaptive variation has the potential to affect spread-risk. The candidate will conduct range-wide analyses of jack pine to identify spatial variation in putatively adaptive alleles that may relate to host quality using exome-capture to identify variants throughout the genome of jack pine. The candidate will also extend our analyses to other pine species important to eastern North America from both economic and cultural perspectives.

The ideal candidate will have a Ph.D. in population genetics/genomics, phylogenetics/genomics, molecular ecology and/or related fields, fluency in written and spoken English, computational proficiency with bioinformatics, including command-line computing. Familiarity with GIS and spatial or landscape genetic analyses, and/or a background in quantitative genetics, are also assets. The candidate should be able to work independently yet also function as an effective member of a large collaborative team. Canadian citizenship or permanent residents will be given preference.

The Department of Biology is a thriving and diverse academic unit, where we study living systems at scales ranging from the level of genes to entire ecosystems. Western University is one of Canada's top researchintensive universities and ranked frequently among Canada's Top 100 Employers. Located midway between Toronto and Detroit and within short driving distances from the Great Lakes, London is known as the "Forest City" and home to "Canada's most beautiful university campus". It is also considered Southwestern Ontario's cultural and educational hub (please also refer to http://www.startlondoncanada.com/ and https://www.londontourism.ca/).

To apply please submit a cover letter, CV, and the names and email addresses of three references in a single PDF to David Coltman (<u>dcoltman@uwo.ca</u>).

The salary will be commensurate with experience, but competitive with current scholarships (~\$45 000 CDN) and is available for one year with the possibility of extension.

Review of applications will begin immediately, and the position will remain open until filled.

Western University Department of Biology • Biological & Geological Sciences Building • London, Ontario • CANADA • N6A 5B7 PH: 519-850-2542 • FAX: 519-661-3935 • <u>www.uwo.ca/biology/</u>