

Post-doctoral Position – Plant Evolutionary Genomics and Evolutionary Ecology

Prof. Marc Johnson's EvoEco Lab (www.evoeco.org) is seeking applications for a Post-Doctoral Researcher to study Plant Evolutionary Genomics and Evolutionary Ecology in the Department of Biology at the University of Toronto Mississauga (UTM). The successful candidate will have the ability to work on one of two projects. Project 1 builds on the Global Urban Evolution project (GLUE, see www.globalurbanevolution.com) to examine how urbanization influences evolutionary processes (gene flow, genetic drift and adaptation) using a large dataset of whole genome sequences of ca. 1000 *Trifolium repens* plants, sequenced from 100s of populations in 50 cities worldwide. Project 2 examines how hybridization and a loss of sex contribute to rapid phenotypic and species diversification in the plant genus *Oenothera* in South America. Project 2 may also involve field work in South America and lab work. Both projects require expertise in bioinformatics (PERL, Python or equivalent programming languages) and statistical methods (in R and comparable programmes) related to whole genome sequence data, including analyses of population structure, demographic modeling and gene flow. The successful candidate will have substantial intellectual freedom to tailor research questions to their own interests. Previous work on plants or urban systems is not required.

In addition to being a part of the EvoEco Lab, the post-doctoral researcher will have the opportunity to be a member of the Department of Biology (<http://www.utm.utoronto.ca/biology>), the Department of Ecology and Evolutionary Biology (<http://www.eeb.utoronto.ca>), and the Centre for Urban Environments (www.urbanenvironment.ca).

The UTM campus has excellent facilities for research (wet and dry lab infrastructure, growth chambers, greenhouses), and 225 acres of fields, forests, many trails and a wild salmon/trout river for recreation. Toronto and Mississauga are world-class cities that are interconnected and culturally diverse. They boast an abundance of restaurants, excellent transit systems, a diversity of cultural activities (theatres, sports, bars, clubs), and an abundance of parks and water.

Starting salary: Commensurate with experience + benefits

Start date: Flexible, but preferably before Sept. 1, 2021

Required qualifications: Ph.D. by the start date, and skills related bioinformatics of whole genome sequence data and associated analyses.

Duties: Include but are not limited to collection of data, analyses, writing scientific papers for publication, mentoring students, attending lab meetings, seminars and journal clubs

Duration: 1- 3 years (conditional on favourable annual performance review)

Application Deadline: Review of applications will commence January 15, 2021, and continue until a successful applicant is selected. Please send applications to marc.johnson@utoronto.ca

Applications should include: i) a cover letter (describe which project you are interested in), ii) CV, iii) PDFs of top three publications, and iv) contact information for three references.

This job is posted in accordance with the CUPE 3902 Unit 5 Collective Agreement. The normal hours of work are 40 hours per week for a full-time postdoctoral fellow recognizing that the needs of the employee's research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work. The position may require evening and/or weekend work.

The EvoEco Lab and the University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas. For the lab's equity, diversity and inclusion statement please see here: https://evoecolab.files.wordpress.com/2020/09/edi-statement_final.pdf