

DEPARTMENT OF ECOLOGY & EVOLUTIONARY BIOLOGY

Faculty of Arts and Science, University of Toronto

**Posting – CUPE3902, Unit 5
Postdoctoral Fellow**

The Department of Ecology and Evolutionary Biology at the St. George campus of the University of Toronto invites applications for a Postdoctoral Fellowship in the Sztepanacz lab.

Area of Research: Evolutionary quantitative genetics. Our laboratory is broadly interested in the genetics of quantitative traits, using *Drosophila* as a model system. Ongoing projects focus on the evolution of genetic variation, sexual dimorphism, and selection on multivariate trait combinations.

Description of duties: The postdoctoral researcher will work on projects aimed at determining how patterns of genetic variation and pleiotropy affects the evolvability of multivariate trait combinations. They will be responsible for carrying out lab experiments with *Drosophila*, analyzing genetic and genomic data, and preparing manuscripts for publication.

Salary: \$48,000 - \$50,000 a year

Required qualifications: The candidate must have a recent PhD in evolutionary biology, population/statistical/ quantitative genetics, or a related field, with evidence of published research productivity. The ideal candidate would have some combination of advanced data analysis and statistical skills, experience implementing large quantitative genetic and selection experiments in the lab, and/or working with genomic data.

Application instructions:

All individuals interested in this position must submit the following documents to Professor Jacqueline Sztepanacz (j.sztepanacz@utoronto.ca) by the closing date.

1. A short (1-3 page) document highlighting the intersection of your research interests, accomplishments, and expertise with recent work in the lab;
2. A current C.V.;
3. Up to three (3) relevant publications or preprints; and
4. Contact information for three (3) professional references

Publications relevant to the position:

Sztepanacz, J.L. and Mark. W. Blows. (2017). Artificial selection to increase the phenotypic variance in gmax fails. *The American Naturalist*. 190(5): 707-723

Sztepanacz, J.L., and Houle, D. (2019). Cross-sex genetic covariances limit the evolvability of wing-shape within and among species of *Drosophila*. *Evolution*. 73(8): 1617-1633

Sztepanacz, J.L. and Blows, M. W. (2017). Accounting for sampling error in genetic eigenvalues using random matrix theory. *Genetics*. 206: 1271-1284

Sztepanacz, J.L. and Houle, D. (2021) Allometry constrains the evolution of sexual dimorphism in *Drosophila* across 33 million years of divergence. *Evolution*. 75(5): 1117-1131

Closing date: October 27, 2022

This position will remain open until filled, however we will begin to review complete applications after October 27, 2022.

Supervisor(s): Professor Jacqueline Sztepanacz

Expected start date: January 16, 2023, with flexibility for a later start date.

Term: 12 months, renewable for another 12 months subject to available funding, performance, and suitable research progress.

FTE: 100%. Depending on experimental requirements, evening and/or weekend work may be required.

The University of Toronto is a leading academic institution in Canada with over 60 faculty members specializing in ecology and evolution. Strong links exist between the Department of Ecology and Evolutionary Biology and the Royal Ontario Museum, the Centre for Global Change, and the School of the Environment. The University owns a nearby field station dedicated to ecological and evolutionary research (the Koffler Scientific Reserve, www.ksr.utoronto.ca). The department also has a partnership with the Ontario Ministry of Natural Resources that helps provide access to infrastructure, including lab facilities in Algonquin Provincial Park (www.harkness.ca), funding, and long-term data sets. Genomic analyses are supported by a number of high-performance computing resources, multi-lab bioinformaticians, as well as staff at the Centre for the Analysis of Genome Evolution and Function.

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated for those holding a partial appointment) 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

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

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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 of North America, persons with disabilities, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.