POST-DOCTORAL FELLOWSHIP IN QUANTITATIVE ECOLOGY

Post-doctoral Fellow: Impact of humans on the scaling of the biodiversity – ecosystem functioning relationship

Start date: As soon as possible

Salary: 50,000$ per annum + benefits

Duration: 2 years

Location: McGill University

Supervisors: Dr. Andrew Gonzalez (McGill) and Dr. Elise Filotas (Université du Québec)

We are looking for an outstanding postdoctoral researcher to conduct research on the relationship between biodiversity and ecosystem function (BEF) and how it changes at larger spatial and temporal scales. The PDF will develop simulation models and quantitative methods and apply them to geospatial data from forest inventory monitoring.

The specific objectives of this research are: (i) identification of indicators of species richness and productivity to measure BEF relationships from geospatial data across increasing spatial scales; (ii) quantification of the impact of anthropogenic transformations (fragmentation, land-use change, harvesting) on the scaling of the BEF relationship; (iii) development and simulation of land-use and climate change scenarios in a spatially-explicit forest dynamics model to determine the variation in BEF relationships over long time scales.

Essential Duties: The primary responsibilities of the successful candidate will be to conduct innovative research. The specific duties of the position will include geospatial data analysis; model development and simulation; the preparation of manuscripts in collaboration with the supervisors. The successful candidate will also be responsible for training graduate students and contributing to the development of competitive research grants as needed.

Applicants must have completed a Ph.D. in a relevant discipline within the last three years and have primary publications in refereed, English language journals. We are seeking fluency in written and spoken English, the ability to work cooperatively with the supervisors, and strong communication and organizational skills.

The ideal candidate will have expertise in quantitative ecology, GIS and remote sensing, ecosystem modelling, ecoinformatics, and biodiversity science, and a desire to develop novel methods to investigate the problem of scales in changing ecosystems. We value creative and autonomous thinkers used to working in an interdisciplinary setting. National and international travel will be required. Note that priority will be given to Canadian residents because of immigration restrictions due to COVID.

To apply, please send a cover letter describing your research background, interests, and qualifications; two example publications demonstrating your relevant research experience; plus, a complete curriculum vitae and contact information for at least two references to andrew.gonzalez@mcgill.ca and elise.filotas@teluq.ca

Application deadline: Open until filled. Only short-listed candidates will be notified.