

PhD position: Testing and modelling the diversity – drought resistance hypothesis

We seek an excellent candidate to fill a PhD position to work on the diversity – drought resistance hypothesis using both an observational and modelling approaches. This position is part of a NSERC-Strategic project aimed at testing the poorly documented and still controversial hypothesis that forest diversity will buffer the negative impacts of water stress on productivity, especially via a reduction in tree mortality.

The candidate will test the hypothesis that reduced mortality and increased stability result from increased diversity in natural forests, using data from a range of permanent forest plots and experiments, such as the Global Forest Biodiversity Initiative (GFBI) (Liang et al. Science 2016). Furthermore, we will evaluate the impact of increased mortality (due to maladaptation of trees to GC) on forest productivity, which is largely unknown and unaccounted for by managers. The modelling part of the project will make use of a climate-driven stand-level model of forest dynamics.

The ideal candidate has a background and interest in modelling, theoretical and functional ecology, or forestry. Prospective students should contact us with the following information: letter of interest (1 page), CV, unofficial transcripts, and contact information for three references. Informal inquiries to gain information about the positions are welcome. Highly motivated MSc candidates will also be considered.

Candidate is expected to start in early 2018, but applications will be accepted until the position is filled. The position is based at the Centre for Forest Research at UQAM in Montreal, Québec, Canada, a busy and lively multicultural city. UQÀM is a French speaking university, but knowledge of the French language is not necessary. However those wanting to learn a new language will find a friendly place to do so.

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International Diversity Experiment Network with Trees (IDENT)

Global Forest Biodiversity Initiative (GFBI)

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