

PhD POSITION (MSc also possible)

Tree diversity's effect on forest functioning; mechanisms and scale

Yep, just that, easy-peasy 😊

Version française disponible

The long-term objective of **IDENT** - the *International Diversity Experiment Network with Trees* - is to identify and understand the mechanisms through which diversity affects forest ecosystems, their function, and the services they provide through time and space. Our focus is on the roles that plasticity, scale (spatial and temporal), and trophic levels play in shifting tree and other plant interactions from competition to facilitation. Over the next five years, it is our intention here at the **PaqLab** to further the fields of Biodiversity - Ecosystem Functioning (**BEF**) and plant functional ecology through these three objectives:

- A) Identifying the mechanisms, such as plasticity and biomass allocation, involved in producing biodiversity effects in tree communities*
- B) Modeling neighbourhood interactions among tree species across time and space*
- C) Intercomparison of experimental results with experimental using permanent forest plots and modelling*

At this time, we are looking for a **PhD candidate** (MSc will also be considered, with fewer objectives) to tackle the first objective, looking at above-ground biomass (an MSc is already courageously working on roots), most probably using both a mobile (from below) and airborne (above) LiDAR to map how biomass is distributed. Many more cool objectives such as B and C above will emerge from that work. We expect to carry much of the field work on the IDENT-MTL site, which is the oldest and easiest to access, but sampling on other sites in North America, Europe and Africa is also possible.

The selected candidate will be hosted at the **PaqLab** – a fun place to work – but will also get to collaborate with several IDENT colleagues, as well as colleagues from the even larger **TreeDivNet** community. Several people could act as co-supervisors (TBD), such as Eric Searle (director of the IDENT-SSM site in Ontario) and Shan Kothari (University of Alberta), both collaborators on the project. Prospective students should contact us (paqlab@uqam.ca) with the following information: **letter of interest, CV, unofficial transcripts, and contact information for references**. Informal inquiries are welcome. Please don't hesitate to share any career interruptions or personal circumstances that may have had an impact on your career goals. Position will be at UQAM in Montreal (start date to be discussed). **Full scholarship** and support such as French language classes and maternity leave is offered, of course.

Think you're out of luck because of your background, a disability, or the way you dress? Relax, we don't care, because innovation is born from diversity. Our team offers an inclusive, equitable, respectful, healthy, and open-minded work environment - because we work there too! UQAM is a French university but it's ok if you don't speak the language – though we'll be happy to help you learn! **An exceptional opportunity to join a dynamic and welcoming research group!**



Learn about us here: paqlab.uqam.ca

About IDENT: paqlab.uqam.ca/ident.php

And the TreeDivNet: treedivnet.ugent.be