

Offer : PhD or MSc in systematics of freshwater tidal plants

Project description

Freshwater estuaries of Northeastern North America are one of the most productive, densely populated and endangered ecosystems on the planet. Large tides (>2 m), high turbidity and low salinity promoted the evolution of **endemic** plant species and varieties (found nowhere else on Earth). Proximity to major city centers make this unique flora severely **at risk of loss to global warming, sea level rise, invasive species and habitat destruction**. Indeed, one endemic species is already extinct. Unfortunately, complex patterns of morphological variation between freshwater tidal endemics and their closest relatives have fueled controversies surrounding the recognition of several taxa. Taxonomic uncertainty has therefore become one of the main challenges in the conservation of freshwater tidal endemics.



Our project aims to establish a robust taxonomic and evolutionary framework to support conservation of this unique flora. By combining field studies, phylo-genomic analyses and common garden experiments, we will study speciation, phylogeography and evolution of freshwater tidal endemics. Projects are available on taxa in several plant families (Apiaceae, Asteraceae, Cyperaceae, Gentianaceae, Lamiaceae...) according to the interests of candidates.

Supervisor: Étienne Léveillé-Bourret (Université de Montréal: UdeM)

Principal collaborator: Robert Naczi (New York Botanical Garden)

Start: to discuss

We will consider MSc, but prefer PhD applications. **We strongly encourage applications from women, first nations people, individuals of all origins, LGBTQ+ or with disabilities.**

Eligibility conditions

- **Participation in the 2022 field season (August and September)**
- Strong interest in botany and/or biodiversity conservation
- Commitment to apply for additional scholarships (FRQNT, CRSNG, IRBV, UdeM)
- Excellent written and oral communication (english) and willingness to learn french
- Experience in taxonomy, population genetics or plant ecology an asset

Avantages

- Scholarship of **\$15,000 per year** for 4 years (2 years for a master's degree)
- **Additional monetary support available** through teaching assistantships
- Flexible working conditions (flexible hours, remote work, etc.)
- We are located at the majestic Montreal Botanical Garden
- The Plant Biology Research Institute (IRBV) is one of the most important botanical research centers in Canada (over 21 researchers and >100 students and postdocs)

Deadline : 28 january 2022

(we will continue to evaluate applications after this date if the position is not filled)

To apply, please send a letter explaining your interests, a CV, a transcript from your last diploma (MSc or BSc), and the contact details of two references to :

Étienne Léveillé-Bourret

etienne.leveille-bourret@umontreal.ca