



PhD student position in Plant Conservation and Phylogeography at Memorial University of Newfoundland-Canada

I am seeking a motivated PhD student to conduct a project with two main objectives. The *first* is to **characterize a trans-Andean migration route for rainforest taxa**. This project will use palm taxa (Arecaceae) as case studies to elucidate a pattern of trans-Andean migration across a region of low elevation in the Andes of Loja, Ecuador. There are numerous taxa in the palm family with a disjunct distribution on the pacific side of Ecuador and Colombia (Choco region) and the eastern side of the Andes in Peru and Bolivia (Western Amazonia). Diversification times for taxa on either side of this barrier and a potential directionality of the migration will be inferred through a phylogeographic approach. A *second* goal is to conduct a **conservation genetics study of the palm genus *Parajubaea*** hypothesized to have colonized the Andes from the Atlantic forest of Brazil <22 million years ago. This genus contains only 3 species (did not radiate much), two of which are IUCN threatened with wild populations confined to Bolivia, where it is economically important. Its reproductive biology and specialized habitat could explain its limited diversification and colonization to the rest of the Andes. Other research questions of interest to the student are welcome within the framework of Neotropical plant evolution. The PhD student will work under the mentorship of Dr. Julissa Roncal, and will interact with other graduate and undergraduate students in the team, as well as with collaborators in Ecuador (Dr. Nora Oleas), Colombia (Dr. Maria Jose Sanin) and Bolivia (Dr. Monica Moraes).

Student's qualifications:

- A MSc degree in a related discipline (e.g. biology, botany, ecology, molecular biology, bioinformatics)
- Experience in organismic botany, phylogenetics and/or population genetics analyses, and bioinformatics is highly desirable.
- Excellent analytical, organization and communication skills. Attention to detail.
- Written and oral proficiency in English is mandatory for international students. TOEFL test required for admission to the university, but not the GRE tests.

Position characteristics:

Project start date is January 5, 2018. The PhD program comprises four years with an annual stipend of \$19,500. The student is expected to teach on average 10 hr/wk during the fall and winter semesters but not in the spring. The department of Biology at Memorial University has 29 faculty members and over 100 graduate students. Memorial University is Atlantic Canada's largest university offering a multicultural environment. Screening will begin immediately and will continue until the position is filled.

How to apply:

Interested applicants should send their CV, a one-page statement of research interests and career goals, transcripts, and contact information of 3 references (who have agreed to be contacted) in a single pdf or word file to Dr. Julissa Roncal at Email: jroncal@mun.ca.

For more information on the research group visit: <http://www.mun.ca/biology/jroncal/>

For instructions on how to apply to Memorial's graduate program visit:

<http://www.mun.ca/become/graduate/apply/index.php>