

Master's project in plant biology

Restoration of mineral disturbances in northern/alpine environments



Scholarship of \$ 17,300/year

Possibility of an additional department or faculty scholarship

Under the supervision of

Line Rochefort (Université Laval)

Starting in September 2014 or January 2015

Our lab seeks to develop techniques for restoration of northern and alpine disturbed environments on mineral soil, such as borrow pits for the creation of roads, roadsides and quarries benches, by facilitating pioneers succession processes.

The project aims to develop solutions of restoration for these types of mineral disturbances by using native plants of the northern and alpine environments (mainly bryophytes and lichens), in the Grands-Jardins national park (Charlevoix region). An experimental approach will help to evaluate the potential of bryophytes and lichens to facilitate the return of typical vascular plants of the boreal forest, such as dwarf birch and black spruce. Also, the project aims to develop a mechanized technique of transfer for mosses and lichens to restore a large-scale borrow pit. Success indicators should be developed. Finally, following the revegetation work of highway 60, the project will test whether the addition of phosphorus (as biochar) could accelerate the recovery of mosses and lichens.

The student will join the team of the Peatland Ecology Research Group (PERG; www.gret-perg.ulaval.ca) led by Line Rochefort. Our laboratories have a dozen of graduate students (M.Sc., Ph.D., postdoctoral fellows) and benefit from the support of several research professionals and postdoctoral fellows. The offer is open until **September 2014** or **January 2015** or until a candidate has been chosen. To apply, send to Line Rochefort: 1) a letter showing your interest, 2) your CV, 3) your most recent transcript of bachelor studies, 4) the names and contact information of three references.

Line Rochefort

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