Carbon Sequestration in Boreal Soils

PROJECT DESCRIPTION

"Boreal forest soils are the single largest terrestrial carbon storehouse in the world. Consequently, changes in boreal carbon stocks and fluxes could significantly affect the global carbon cycle. These northern, high-latitude soils are also highly susceptible to global warming, and in the coming century are expected to face large increases in average temperatures, altered freeze-thaw patterns, and transformative vegetation shifts. The carbon contained in boreal soils is a complex network of interconnected pools, the stability of which may be controlled by various mechanisms. As such, it has been challenging to predict the response of boreal soil carbon to environmental changes.

This project will aim to clarify how interactions between the soil geological material and vegetation may ultimately determine the response of boreal soil carbon to climatic changes. We will use a variety of methods, including NMR and stable isotope tracking, to evaluate the source and fate of boreal carbon in soil profiles under different environmental conditions."

FACULTY-DEPARTMENT

Agricultural, Life & Environmental Sciences- Renewable Resources

DESIRED FIELD OF (STUDENT) STUDY

Soil science, environmental chemistry

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

1

INTERNSHIP START DATE

July 4

INTERNSHIP END DATE

3 months after start date

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)
University of Alberta International
intern@ualberta.ca

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.

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