



PhD opportunity: Hibernia Tectonostratigraphy Research Group
Department of Earth Sciences, Memorial University

Applications for a fully funded 4-year PhD opportunity in sedimentology and tectonostratigraphy are currently being accepted by Dr. David Lowe at the Earth Sciences Department, Memorial University. Dr. Lowe is the Hibernia Chair in Tectonics of Sedimentary Basins at Memorial University and has a background in the oil and gas and mining sectors. The proposed project will focus on Upper Cambrian and Lower Ordovician sections in Western Newfoundland, Quebec, and Vermont, tentatively entitled “Comparative stratigraphy and tectonostratigraphic evolution of the Late Cambrian to Early Ordovician Laurentian Margin”.

The project will be multifaceted and will expose the PhD candidate to clastic sedimentology, facies analysis, drone-assisted architectural analysis of outcrops, sedimentary system reconstructions, and provenance analysis (including, but not limited to petrography and U-Pb geochronology of detrital zircons). Using these techniques, the candidate will critically evaluate the relative roles of tectonics, climate change and global sea level change on the sedimentary evolution of Cambrian and Ordovician Laurentian margin. Focus will be placed on coeval sections in Western Newfoundland, Southern Quebec and Western Vermont covering cryptic lowstand intervals recording periods of accelerated erosion and margin collapse.

The PhD candidate is expected to have completed an MSc focused on field-based mapping, sedimentology, and stratigraphy. Geochemistry and/or geochronology experience is an asset. Applicants with experience in contributing to scientific publications, presenting research at conferences and public science outreach are preferred.

Motivated candidates are asked to send a CV, cover letter, names and contact information of three referees, and a statement of interest to dlowe@mun.ca.