

PhD opportunity: Hibernia Tectonostratigraphy Research Group

The Stratal Evolution of Ediacaran Diamictites: Bonavista Peninsula, Eastern Newfoundland

Department of Earth Sciences, Memorial University

Applications for an exciting 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. The proposed project will focus on the sedimentation of Ediacaran diamictites in Newfoundland, and will involve extensive field and lab research experience.

The project will be multifaceted and will expose the PhD candidate to: establishing stratigraphic relationships using bedrock mapping; reconstructing sedimentation processes using sedimentology, facies analysis, drone-assisted architectural analysis, and clast analysis; and establishing sediment provenance and depositional age(s) using U-Pb geochronology. Using these techniques, the candidate will define the age, stratigraphic position, and tectonic versus glaciogenic origins of Ediacaran diamictites on the Bonavista Peninsula of Newfoundland. This will help define the relative role of tectonics versus climate change on diamictite sedimentation on oceanic nutrification that enabled the evolution of Earth's first macrofauna.

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.

I am committed to providing a diverse and inclusive research environment. Therefore, I welcome all applicants and strongly encourage applications from equity-seeking groups from across the world.