

**Multidisciplinary MSc Project: Iapetus Margin
Geology within the Northern Appalachians**

This project is a fully funded, multidisciplinary, field-based MSc, involving a combination of geologic mapping, stratigraphic logging, U-Pb and trace element analyses of detrital zircon, and geophysical interpretation. The study will focus on Neoproterozoic to Cambrian rift-related strata, which were deposited on Laurentia's eastern margin and presently exposed within the Quebec and New England segment of the Appalachian orogen. Applying a combination of these varied geoscience techniques on earliest rift-related strata, will aid in determining Laurentia's pre-orogenic margin configuration, a vital starting point in understanding structural inheritance and rift-generated fault reactivation through time within the orogen. Applicants should have a strong interest in structural geology and tectonics, and a desire to combine field and laboratory-based techniques. Interested candidates should express interest by June 1st, 2022, by emailing Dr. Shawna White (Shawna.White@smu.ca).

The Department of Geology at SMU hosts faculty members with a broad range of expertise in Appalachian geology. Its prime location, in the Northern Appalachians, allows for the study of orogenic processes right in our own backyard. The University is located in the historic port city of Halifax, Nova Scotia, a vibrant, urban community of over 350,000 people. Halifax is a major educational centre for Atlantic Canada and is home to five universities. It is conveniently located close to recreational areas and to other major urban centres in Canada and the Northeastern United States. For information about the University and the Faculty of Science, please see <http://science.smu.ca/>.

The project is fully funded through the support of an NSERC Discovery grant. The successful candidate is encouraged to apply for external funding, through scholarship, during their program. Start date is either September 2022 or January 2023. For a September start, fieldwork will take place in August 2022. Students starting in January should be prepared for fieldwork in the summer of 2023. With your email, please include the following: (i) a current CV; (ii) an unofficial academic transcript; and (iii) the names as well as contact information (email) of two referees.