



## PhD opportunity in Precambrian Gold Exploration

## Project SP2021-PhD1: Orogenic gold metallogeny in the western Guyana Shield

As part of the AMIRA Global's P1061 South American Exploration Initiative, this PhD research project aims to developed a comprehensive gold metallogenic database for the western Guiana Shield, and will document ore mineralogy and paragenesis, regional structural controls, and relative / absolute timing of deformation vs metamorphism vs mineralization. Field work, including outcrop and drill core sampling, will be primarily conducted around orogenic gold deposits / prospects in Guyana. The PhD candidate will be responsible to i) characterize the regional structural control(s) of major mineralized systems through new field mapping and geophysical interpretation, ii) describe the alteration mineral paragenesis, iii) document the relative and absolute timing between these systems, through U-Pb isotopic analyses of gold-related hydrothermal minerals, and iv) identify regional-scale deformation zones that could be the focus of future exploration. This work will contribute linking regional scale deformations and local-scale structural controls on orogenic gold mineralization in the Guiana Shield.

The PhD candidate will be based at Laurentian University and co-supervised at the University of Western Australia. Applicants must be able to travel between Canada, Guyana and Australia on a regular basis. Extensive field work in Guyana during the dry seasons (February / March and September / October / November) is expected. Applicants must possess an MSc degree in geosciences from a recognized academic institution and have a minimum average grade of 80%. Research experience in hydrothermal ore deposits, exploration geochemistry, mineral chemistry and/or field structural mapping is an asset. Research funding consists of the student stipend (CA\$30k including a Laurentian Graduate Teaching Assistantship), analytical and field travel costs for the duration of the PhD project (4 years). The project will begin as soon as a suitable candidate has been found, in January, May or September 2021.

To apply, please email your application to *sperrouty@laurentian.ca* and reference the project identification code in the subject line. The application package must include a cover letter, CV, academic transcripts, contact details and names of three referees.

Laurentian University is a bilingual (French-English), tri-cultural institution. Laurentian University especially welcomes and encourages applications from members of visible minorities, women, aboriginal persons, members of sexual minorities and persons with disabilities. Applicants may self-identify as a member of an employment equity group. All qualified candidates are encouraged to apply. However, Canadians and permanent residents will be considered first for this position.