



## **CLEAN LEADERSHIP POSITION OPENING AT SAINT MARY'S UNIVERSITY, HALIFAX.**

### **LEGACY GOLD MINE CONTAMINATED SITE MONITORING**

The Dynamic Environment and Ecosystem Health Research (DEEHR) Group at Saint Mary's University, reporting to Dr. Linda Campbell has an opening for a CLEAN Leadership position. In this position, you will be mainly responsible for assisting with research and fieldwork at wetland sites round Nova Scotia and ecotoxicology testing in the DEEHR laboratories. Our work at the DEEHR Lab currently focuses on researching wetland sites impacted by historical gold mining activities. There will be opportunities to assist with other ongoing projects within the DEEHR group as well. The successful candidate needs to be comfortable with working long hours outdoors (in a variety of weather conditions), indoors with repetitive laboratory processes, be physically fit with the ability to lift up to 50 lbs, comfortable on and around water, and be willing to work with invertebrate species.

**Start date:** as soon as possible (can start no later than June 24 2019)

**End date:** within 15 weeks or August 31.

**Salary:** \$13.25 - \$15/hour (based on experience), 35 hours a week (overtime can be banked)

**Contact:** Dr. Linda Campbell, [lm.campbell@smu.ca](mailto:lm.campbell@smu.ca)

**Website:** <http://www.ap.smu.ca/~lcampbel/>

### **DUTIES AND RESPONSIBILITIES**

Our work this spring/summer will include site visits to several contaminated and reference freshwater sites within Nova Scotia impacted by historic gold mine tailings. At these sites, we will be collecting dust, rain, sediment, water and invertebrate samples, and water chemistry data. We will also be conducting invertebrate ecotoxicology experiments to assess the potential feasibility of low-dose in-situ remediation approaches for reducing toxicity of gold mine sediments and soil. All samples will be prepared for analysis for mercury, arsenic, and other contaminants to assess the ecological damage and bioaccumulation of contaminants happening in these areas. There will be opportunities to assist with other projects especially with our invasive & species-at-risk projects as well.

Other duties of the intern(s) will include lab work (such as washing glassware, general lab cleaning, assisting in the preparation and analysis of the collected samples). Tasks may also include assisting in literature reviews and developing a poster presentation on the topic of environmental consequences of historic gold mining activities. The DEEHR group typically also assigns an independent mini-project to each 15-week intern based on their interests as well.

## **REQUIREMENTS/QUALIFICATIONS**

- Must be willing to work potentially long hours outdoors in a variety of weather conditions.
- Must be able to lift up to 50 lbs.
- Must be willing to work with invertebrates and environmental samples (all technical skills will be trained).
- Must be comfortable working in wetland, lake and stream environments (i.e. potentially very wet and muddy).
- Must be able to work long hours in laboratory settings and maintain accuracy with protocols.
- Must be able to work well in both close team environments and individually.
- Must be willing to work with data and data entry as part of sample coordination.

*Past experience with the below is an asset but not necessary:*

- Outdoors and outdoor field work.
- Laboratory work.
- Research animal care, especially with invertebrates (e.g. insects, freshwater invertebrates).
- Past experience/knowledge in environmental science and/or ecotoxicology.
- Standard first aid and/or wilderness remote first aid experience.

*The requirements below are required for all Clean Youth Leadership positions:*

- Must be a Canadian citizen or legally entitled to work in Canada;
- Must be between the ages of 15 and 30;
- Must be a full-time student and intending to return to school in fall 2018;
- Is not a member of immediate family of community partner;
- Have an aptitude for safe work practices and the ability to multi-task in a busy work environment.
- Be able to work productively as part of a team while responding to feedback;
- Demonstrates interest in future employment in the environmental or 'green' sector.

## **WORKING CONDITIONS**

Working conditions will include periods of intensive field work, which will include long hours working outdoors in wetland ecosystems and in the laboratory preparing for sampling, experiments and sample processing. Applications must be willing to work outdoors in a variety of weather conditions, and have proper gear (i.e. rain gear, proper close-toed shoes), to do so. Working in laboratory settings will also be a major component of the position(s) and ability to pay attention to detail, take accurate notes and work with a team are also important.

## PHYSICAL REQUIREMENTS

- This position may be physically demanding and applicants must be able to lift up to 50 lbs (field gear, water samples, sediment samples). Some sites require short-distance walking through dense forests (e.g. “bushwhacking) while carrying field gear and samples.
- Laboratory work may require standing for extended periods (e.g. pipetting, analyses) and sitting for extended periods (e.g. microscopy work). However, accommodation for laboratory work can be provided if needed.

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The Nova Scotia Youth Conservation Corps (Youth Corps) was established in 1989 to provide Nova Scotian youth with training and employment opportunities in the environmental field. This program engages community partners across the province to hire students to carry out work that enhances the local environment through the summer months. Clean Foundation and the Government of Nova Scotia announced in September the official re-branding of the Nova Scotia Youth Conservation Corps as the Clean Leadership Program. The Clean Leadership program provides Nova Scotian youth with environmental work experience, an enhanced appreciation of the environment and their community, and develops skills for life-long learning (including team-building and leadership skills, increased knowledge for future employment and/or education ventures, program evaluation techniques, and the ability to give back to their community and their environment.

Saint Mary's University was founded in 1802 and is located in Halifax, Nova Scotia, Canada. The university has a long tradition of academic excellence in teaching and research. Our campus is home to more than 7,000 students from over 115 countries. Saint Mary's University is recognized as having one of the most internationalized student populations in Canada. In keeping with our motto, *Age Quod Agis* - do what you do, we have achieved excellence in undergraduate studies within Liberal Arts, Environmental Studies, Business, Science and Engineering. We also offer graduate programs in areas of particular strength. All of our academic programs are accredited and recognized internationally, to ensure students have worldwide access to employment and graduate studies. For more information: <https://smu.ca/welcome.html>.