MSc and PhD opportunities | Permafrost thaw, aquatic biogeochemistry and microbial ecology

I am seeking MSc and PhD students for a recently funded project to examine the effects of permafrost thaw on carbon, nutrient, and toxin cycles in the Canadian north. This work continues our ongoing efforts in the western Canadian Arctic, where we have been working for the past several years to understand how massive permafrost thaw propagates through stream networks, and ultimately affects regional and global biogeochemical cycles. This work is part of a collaborative effort that includes scientists at the University of Alberta (led by Dr. Suzanne Tank), other Canadian institutions, and territorial government institutions. Project focal areas will include:

- Examining how organic and inorganic carbon are processed within stream networks affected by permafrost thaw. This work includes an examination of the effects of thaw on weathering processes and particle transport, and will be carried out across a series of watersheds that are variably affected by thaw, and several different regions that experience permafrost thaw of different types
- Examining how the transport of toxins, such as mercury, is enhanced as a result of thawing permafrost
- Examining how permafrost thaw affects microbial community structure and carbon processing in permafrost thaw-affected streams

Positions will be based at the University of Alberta. I am currently recruiting candidates to start in January or May of 2020, with additional students being brought on to the project in subsequent years. To apply, please send an email to suzanne.tank@ualberta.ca, with the subject line “Studentship in Arctic biogeochemistry”. Applicants should include a statement of interest, a CV, and a copy of transcripts (unofficial transcripts will be accepted). Recruitment for these positions will be ongoing, with an initial assessment of applicants anticipated to occur on June 17, 2019.