

UNIVERSITY | Clayton H. Riddell Faculty of OF MANITOBA | Environment, Earth, and Resources Centre for Earth Observation Science

POSTING: MSc STUDENT – Arctic Primary Production

We are seeking a motivated student for a MSc thesis project starting January, 2018 to study physical and biological processes controlling primary production in a dynamic region of the Canadian Arctic. The student is to be co-supervised by Drs. C.J. Mundy and C. Michel. The student's degree will be housed within the Centre for Earth Observation Science (umanitoba.ca/ceos), Department of Environment & Geography at the University of Manitoba, Winnipeg, Canada and field work will be focused marine region around Southampton Island, northwestern Hudson Bay. The successful student will also become a member of the Arctic Science Partnership (asp-net.org) and MEOPeer training program (meopar.ca/training/our-training-program/), providing national and international opportunities above and beyond a standard graduate degree. The successful candidate will have a BSc honors (or equivalent) degree in biological oceanography or related field. The studentship is fully funded over a 2-year period as part of the MEOPAR Network (meopar.ca) and Polar Knowledge Canada (canada.ca/en/polar-knowledge.html) funded Southampton Island Marine Ecosystem Project (SIMEP).

The marine region around Southampton Island, northwest Hudson Bay (Nunavut), encompasses one of Canada's largest summer and winter aggregations of Arctic marine mammals, yet we know surprisingly little of the region's oceanography, productivity or biological community and trophic structure below marine mammals. It is hypothesized that the system is under bottom-up control, driven by enhanced primary production associated with localized mixing processes. To help test this hypothesis while contributing to the larger food web study of SIMEP, the student project will involve field- and laboratory-based research to examine the processes driving primary production in the study region. Fieldwork will be carried out on the newly attained and fully equipped Churchill Marine Observatory (CMO) research vessel, a jointly operated vessel of the Arctic Research Foundation and University of Manitoba. Field experience on oceanographic research vessels and a knowledge base of primary production (e.g., C and N stable isotope tracer techniques) will be assets for the position.

Initial applications should be sent directly to Drs. Mundy (ci.mundy@umanitoba.ca) and Michel (christine.michel@dfo-mpo.gc.ca) and include: two letters of academic reference; a copy of your University transcripts; a letter of intent (1-2 pages) briefly describing your previous research or experience and a short research proposal fitting the above thesis topic, touching on objectives/hypotheses, preferred methods, and scientific significance; and an English Language test score, such as TOEFL or IELTS, if you are an international student. For further information, please contact Dr. Mundy.

Application deadline: 10 July 2017







