



UNIVERSITY  
OF MANITOBA

Clayton H. Riddell Faculty of  
Environment, Earth, and Resources  
Department of Environment and Geography



The Centre for Earth Observation Science <http://www.umanitoba.ca/ceos>, Clayton H. Riddell Faculty of Environment, Earth and Resources is seeking qualified candidates to fill **two** positions at the Research Associate level. These positions will become part of a collaborative team working with Dr. David Barber on Arctic Marine System processes and glacier-marine coupling in the Arctic.

Over the last several decades continuous observations from satellite passive microwave satellites have documented a nearly 50% decline in Arctic sea ice extent at the time of the annual summer minimum. Less is known about how thickness and volume are changing, or how snow on sea ice is changing. Glaciers are also melting throughout the northern hemisphere and these freshwater ice repositories are delivering increasing amounts of solid and liquid phase water to the marine system. The study of climate change processes driving this coupling and consequences of this coupling on ecosystem and biogeochemical exchange, are key objectives of the University of Manitoba's Canada Excellence Research Chair (CERC), the new Churchill Marine Observatory, and several other CEOS related projects.

#### Qualifications:

Successful candidates must hold a doctoral degree or have a Master's degree with experience in one or more of the following fields: Environmental Science, Engineering, Physical Geography, Geology, Science or Agriculture. Where applicable, the successful candidate will be provided with mentorship and supervision by a registered Professional Engineer in support of the EGM Pre-Registration Program.

#### Responsibilities:

- Under the direction of Dr. David Barber, conduct independent research with the use of remote sensing tools in field work and in mesocosms (the Sea Ice Environmental Research Facility (SERF) and the new Churchill Marine Observatory (CMO)).
- Lead and supervise the work of graduate students, research scientists and faculty members in the use of remote sensing tools in field work (will require regular outdoor work).
- Expertise and aptitude with electronic instruments, experience with in situ or satellite remote sensing data and analysis and/or working with airborne or ocean going drones.
- May be required to publish results of work in peer reviewed literature.
- Other duties as assigned by Dr. Barber.

Candidates should send a CV, a letter of intent, and contact information for three references. Send these to Prof. David Barber, c/o Ms. Aggie Roberecki ([aggie.roberecki@umanitoba.ca](mailto:aggie.roberecki@umanitoba.ca)) Pay and benefits are competitive internationally and commensurate with qualifications. **Reviews will begin Dec 15, 2018 for both positions and continue until the positions are filled.**

The University of Manitoba is strongly committed to equity and diversity within its community and especially welcomes applications from women, racialized persons/persons of colour, Indigenous peoples, persons with disabilities, persons of all sexual orientations and genders, and others who may contribute to the further diversification of ideas. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. Application materials, including letters of reference, will be handled in accordance with the protection of privacy provision of The Freedom of Information and Protection of Privacy (Manitoba). Please note that curriculum vitae may be provided to participating members of the search process.