



Post-doctoral research opportunity on acoustic disturbance impacts on marine mammals in the Eastern Canadian Arctic.

Government of Canada Postdoctoral Research Program

Fisheries and Oceans Canada (DFO) is seeking an enthusiastic, team-oriented, and self-motivated candidate for a 2-year Postdoctoral Fellowship leading a research project to document and model underwater noise levels in the Canadian Arctic as well as investigate potential zones of impact of noise on marine mammals. This is an exciting opportunity to work with long-term datasets from different areas in the Canadian Arctic (Northern Baffin Island, Baffin Bay, Hudson Bay). The successful candidate will work closely with [Dr. Marianne Marcoux](#) and [Dr. Cory Matthews](#) at the Freshwater Institute (DFO, Winnipeg). They will also work with a team of collaborators from DFO, the University of Manitoba and the University of Windsor. The successful candidate will also be involved in review processes related to marine noise in the Arctic.

The main project objective is to assess potential disturbance from shipping noise on Arctic marine mammals in the study areas.

Specific objectives include:

- 1) Analyse currently available acoustic data from Northern Baffin Island, Baffin Bay, and Hudson Bay;
- 2) Develop and deploy a network of PAM recorders throughout key areas of the study region, determined in collaboration with Inuit colleagues, to collect additional acoustics data;
- 3) Model anthropogenic sound propagation based on current and predicted shipping levels; and
- 4) Combine all data (e.g., marine mammal presence and behavior, shipping data) to identify spatiotemporal overlaps between species habitat and threats.

Essential Qualifications:

Graduation within the last three (3) years with an acceptable doctoral degree from a recognized post-secondary institution in a field of natural and applied sciences with a specialization in Marine Biology or Oceanography.

Candidates must also possess the following experience criteria and key competencies:

- Official Language Requirement: English Essential
- Experience in planning and conducting research
- Experience in working with a team of researchers and support staff.
- Experience providing technical support for scientific and field or laboratory projects relating to acoustics/bioacoustics.
- Experience inputting and processing scientific data using computer software related to acoustics.
- Experience in operating and maintaining acoustic field equipment.
- Experience in providing technical advice or information on: acoustic data sample and data collection, or equipment and methodologies, or project/survey logistics to meet goals and objectives.
- Productivity/Recognition: Refers to recognized achievement in the form of authorship and editorship of published or unpublished reports, books, papers, peer-reviewed scientific journals, or other communications resulting from:

- Research, experimental development, or tasking associated with operational equipment and problems; OR
- Operational research and scientific analysis; OR
- Planning, analysis, and evaluation of Canadian and foreign programs in research and development; OR
- Developmental work leading to the issue of patents, copyrights, or the creation of improved varieties, functions, or designs, and/or recognition by the professional community of the research environment.
- Key Competencies:
 - Adaptability
 - Initiative
 - Judgment
 - Teamwork
 - Interactive Communication
 - Uphold Integrity and Respect

Who Can Apply: Canadians and non-Canadians. Preference will be given to Canadian veterans and to Canadian citizens, in that order.

Location: The position is based out of DFO's Freshwater Institute in Winnipeg, Manitoba.

Funding: This is a 2-year position that is available to start as early as January, 2022, and will be completed no later than March 31, 2024. Funding includes a salary starting at ~\$61,000–\$67,000 per year depending on experience (see [SE-RES-1](#) Step 1–3 pay scales), medical and dental benefits, and travel and equipment support. The [Canadian Government Postdoctoral Research Program](#) is administered by Natural Resources Canada (NRC). We are committed to employment equity and encourage applications from women, visible minorities, Aboriginal people, and persons with disabilities.

Contact: For more information, candidates can contact the project leads (Marianne.Marcoux@dfo-mpo.gc.ca and Cory.Matthews@dfo-mpo.gc.ca). Interested candidates should submit their application through the [Canadian Government Postdoctoral Research Program](#) and notify Dr. Marianne Marcoux (marianne.marcoux@dfo-mpo.gc.ca) of their submission. Candidate evaluations will begin as early as December 15th, 2021 until the position is filled.