MSc in Fisheries Science – Improving capelin stock assessments using acoustic surveys (Full Scholarship)

A two year, fully funded MSc Scholarship is available at the Centre for Fisheries Ecosystems Research at the Fisheries and Marine Institute, Memorial University of Newfoundland, in St. John's, Canada.

Research Focus:

Capelin (*Mallotus villosus*) is the most abundant forage fish in Newfoundland and Labrador marine ecosystems, and a key link for energy transfer from lower (zooplankton) to higher (piscivorous fish like Atlantic cod) trophic levels. One of the main tools used for the assessment of the Newfoundland and Labrador capelin population is an annual spring acoustic survey. This survey produces a biomass index from which scientific recommendations are provided to fisheries management.

The main objective of this project is to use geostatistical techniques to reprocess the 44-year acoustic time-series to improve estimates of capelin spatial distribution and population dynamics. These updated estimates will then be used to evaluate if the updated time-series modifies current understanding of relationships between capelin population dynamics and environmental variables and subsequent management advice. This project will be completed in close collaboration with Dr. Hannah Murphy at Fisheries and Oceans Canada.

Program Details:

The student will be enrolled in the MSc in Fisheries Science and Technology program at the Fisheries and Marine Institute of Memorial University in St. John's, NL, Canada. The Fisheries and Marine Institute is Canada's most comprehensive centre for education, training, applied research and industrial support for the ocean industries. Memorial University of Newfoundland is a hub of ocean sciences located in the province's capital. St. John's is a safe and friendly city with great historical charm, known for its hospitality, live music, a vibrant cultural life, and easy access to wilderness and a wide range of outdoor activities.

Funding includes a $24,000 annual stipend for two years plus funds to travel to professional meetings and conferences. The student is expected to participate in Fisheries and Oceans stock assessment meetings and will benefit from a vast scientific network.

Requirements:

- BSc in Fisheries Science or Ecology, Statistics, Mathematics, Marine Ecology or Biology, Oceanography or related discipline
- Demonstrated quantitative skills and experience with R
- Strong written and communication skills
- Experience in bioacoustics is not required but will be considered.

Start Date: September 2026

To Apply: Please send a cover letter explaining your relevant experience to, and interest in, the position, CV with two academic references, and university transcripts (official or unofficial) to Dr. Matthew Robertson (matthew.robertson@mi.mun.ca) and Dr. Maxime Geoffroy (maxime.geoffroy@mi.mun.ca).

Application deadline: Applications will be reviewed as received. To ensure your application is given priority consideration, apply by May 31st, 2026.