

## PhD Position – Identification of Causes of Mortality and Population-Level Implications in St. Lawrence Marine Mammals

**Desired start date: January 2027**

The laboratories of Prof. Joanie Van de Walle at the Université du Québec à Rimouski (UQAR), Prof. Émilie L. Couture at the Faculty of Veterinary Medicine of the Université de Montréal in Rimouski (FMV-CQSAS), and Prof. Gesche Winkler at the Institut des Sciences de la Mer (ISMER) are recruiting a PhD student for a research project on the identification of causes of mortality and their population-level implications in St. Lawrence marine mammals.

### Project Description

Marine mammals in the St. Lawrence play a key role as sentinels of ecosystem health. Monitoring these species helps detect environmental pressures, emerging threats, and demographic changes affecting this highly anthropogenically influenced ecosystem. This doctoral project aims to analyze more than 20 years of stranding data, along with post-mortem evaluation results (2022–2025), in order to:

- **Standardize and quantify causes of mortality and morbidity** in St. Lawrence seals and cetaceans.
- **Detect signals of ecosystem health deterioration**, including emerging diseases, interspecific predation, and trophic competition.
- **Infer population mortality parameters** from stranding data, including the development of a predictive mortality indicator based on discrepancies between expected and observed strandings.

The project is part of an interdisciplinary collaboration integrating ecology, veterinary medicine, and oceanography.

### Candidate Profile

- Background in **ecology, biology, marine sciences**, and/or **veterinary medicine**.
- Strong interest in conservation, population dynamics, trophic interactions, and/or wildlife health.
- Autonomy, scientific rigor, critical thinking, and ability to collaborate in an **interdisciplinary environment**.
- Valid driver's license.
- Experience and/or willingness to **conduct fieldwork**, including assisting necropsy procedures.
- **Assets**: experience in necropsy, quantitative ecology, large database management, and interspecific interactions.

## Conditions

- The student will be enrolled in the PhD program in Oceanography at ISMER.
- Location is in Rimouski, Québec, which is a French environment. UQAR as a French policy (<https://www.uqar.ca/app/uploads/2024/06/20C2.pdf?v=1738254553>). A student who does not speak French, but does speak English, could be admitted with a mandatory enrollment in French lessons.
- International students must satisfy admission requirements (<https://www.uqar.ca/programmes-formations-et-admission/admission/etudiant-es-etrangers/admission-pour-etudiants-internationaux/#cout-et-financement>)
- **Funding is guaranteed for four years (22 000\$ per year)**. However, the student will be encouraged to apply for external funding opportunities for additional financial support.
- **Access** to unique long-term datasets, specialized infrastructure, and a network of governmental and private collaborators.
- **Inclusive** research environment committed to equity and training the next generation of scientists.

## Application

Interested candidates should submit:

- **CV**;
- **A letter** (maximum 2 pages) describing research interests;
- Relevant and up-to-date **university transcripts**;
- Contact information for **two references**.

Applications must be sent before August 1, 2026 (or until the position is filled) to: [joanie\\_vandewalle@uqar.ca](mailto:joanie_vandewalle@uqar.ca).

