



1. INTRODUCTION

The Ocean Frontier Institute (OFI) is an international hub for ocean research, that brings together experts from both sides of the North Atlantic to understand our changing ocean and create safe, sustainable solutions for development.

OFI Research Vision

OFI research focuses on the North Atlantic and the Canadian Arctic Gateway. The region's unique physical, chemical, and biological processes make it an epicentre of international scientific interest and a predictor for the global ocean. Its deep overturning circulation results in the most intense carbon sequestration on the planet. It has a highly productive marine ecosystem and air-sea interactions that modulate the weather and climate of both North America and Europe. Access to the environmentally sensitive Canadian Arctic occurs through this region, raising key sovereignty and security issues, which are compounded by increased shipping associated with diminishing ice cover. For these and other reasons, this sentinel area for change in the global ocean requires better observation and understanding of change, whether physical, geochemical, biological, or even human. OFI research will help improve prediction and projection of the atmosphere and ocean, manage human activities as they relate to ocean resources, increase the fishing and aquaculture industry's potential to meet global seafood demand, strengthen marine safety, and transform how we monitor the ocean with new data capture and IT tools.

OFI currently has two overarching research themes to address the safe and sustainable development of the ocean frontier: 1) "Ocean Frontier Changes" examines key aspects of changes in atmosphere-ocean interaction, resulting ocean dynamics, and shifting ecosystems. and 2) "Ocean Frontier Solutions" focuses on effective approaches to resource development that are sustainable, globally competitive, societally acceptable and resistant to change.

These two themes encompass six initial, but not mutually exclusive, areas of research focus:

- 1) Ocean Frontier Changes
 - a. Changes in Atmosphere-Ocean Interactions
 - b. Shifting Ecosystems
- 2) Ocean Frontier Solutions
 - a. Sustainable Fisheries
 - b. Sustainable Aquaculture
 - c. Ocean Data & Technology
 - d. Marine Safety

OFI represents an historic partnership between Dalhousie University, Memorial University of Newfoundland and the University of Prince Edward Island. Meeting the goals of the research program requires globally competitive expertise, and the scale of the challenges requires international cooperation. To this end, OFI depends on strong linkages to international partners. These comprise the Woods Hole Oceanographic Institution and the Lamont-Doherty Earth Observatory in the United States, GEOMAR, Alfred Wegener Institute and the University of Kiel in Germany, LabexMER in France, the Marine Institute (Ireland) and the Norwegian Institute of Marine Research. The support of partners in the Government of Canada's federal science laboratories, the Royal Canadian Navy, National Film Board of Canada and national and international industry, as well as knowledge shared by our international partners will help deliver transformative ocean research.

2. ELIGIBILITY

Seed Funding is open to faculty, staff, and students at Dalhousie University and/or Memorial University of Newfoundland who are conducting research related to OFI priorities. Note that it is NOT intended as supplemental funding for Large Research Modules.

Seed Fund Objectives

Funding priority will be given to initiatives that:

- pursue new ideas or concepts that show clear promise of leading to future opportunities of high commercial, research, or social relevance, and which are likely to be completed during the award period (12 months).
- Examples include:
 - Conducting preliminary research or feasibility studies
 - Testing new approaches or developing prototypes
 - Developing a new concept, idea, or opportunity

Selection Criteria

1. Excellence and creativity of the proposed research program
2. Excellence of the proponent(s)
3. Alignment with the OFI research themes
4. Potential for the project to lead into larger-scale research projects or commercial opportunities

Eligible Expenses

Proposed budget expenses must align with the eligibility requirements outlined in the Canada First Research Excellence Fund Administration Guide (http://www.cfref-apogee.gc.ca/program-programme/admin_guide-guide_administration-eng.aspx)

3. FUNDING AMOUNT AND DURATION

Proposals should normally be within the \$10,000 to \$15,000 range, but particularly compelling ideas could be considered for up to a maximum of \$30,000.

Funds can be used for salaries of highly qualified personnel (but not salaries of the Principal Investigator's), minor equipment, materials and supplies, travel and workshops.

Funding is intended for projects to be undertaken and completed within a 12-month time frame. Within 60 days of the end of the approved award period, the recipients must provide to OFI a final report that describes what was accomplished, future plans, and a summary of expenses.

Applications deadlines for 2018 are March 31, June 29, September 28 with decisions transmitted by April 30, July 31, and October 30 respectively.

4. APPLICATION SUBMISSION (see attached form)

The following information must be compiled and sent as one document (PDF) prior to the application deadline to ofi@dal.ca:

- Applicant information (name, title, affiliation, address, phone, email)
- Title and summary of proposed research (250 words)
- Description of expected outcomes arising from the project, their significance, and how these outcomes will be achieved (500 words)
- A brief description of the project's aims, rationale, methodology (250 words)
- A brief description of how the project supports (or is aligned with) OFI research priorities (250 words)
- Project start date and end date
- Names and contact information of team members: collaborators, partners, students
- A budget that itemizes general categories of expenses and a brief justification for these expenses.

5. CONTACT INFORMATION

For more information please contact Dr. Marlon Lewis, OFI Scientific Director (marlon.lewis@dal.ca) or Dr. Paul Snelgrove (psnelgrove@mun.ca).

Applicant name and contact information

Project Title:

Summary of proposed research (250 words):

Expected outcomes, significance, and how they will be achieved (500 words)

Project's aims, rationale, methodology (250 words)

Describe how the project supports (or aligns with) OFI research priorities (250 words)

Project start date and end date

Names and contact information of all team members

Budget (with itemized categories of expenses and brief justification)