# RESEARCH CALL BETWEEN FRANCE AND QUEBEC IN THE MARITIME SECTOR 2019 EDITION

Opened jointly by the French National Research Agency (ANR) and the Fonds de Recherche du Québec (FRQ)

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**Opening date**
**February 19, 2019**

**Closing date**
**May 15, 2019, at 1:00 p.m. (CET) for researchers in France**
**May 15, 2019, at 1:00 p.m. (EST) for researchers in Quebec**

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**Please note that in case of discrepancy, the French version of the present document shall prevail.**

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## 1. CONTEXT AND RESEARCH CALL OBJECTIVES

The Fonds de recherche du Québec (FRQ) and the French National Research Agency (ANR) are launching an intersectoral research call between France and Quebec on the maritime sector for teams of researchers from both France and Quebec.

The governments of France and Quebec value the development of knowledge and good practices regarding the management of maritime areas given the human and natural pressures it is subject to. This interest has been reinforced by the attention paid to the implementation of the *Comprehensive Economic and Trade Agreement* (CETA). They are aware of the issues related to sustainable and smart maritime transport, and to the sustainability of marine ecosystems.

Together, ANR and FRQ are launching this call for research projects to offer grants in this field. The overall goal is to improve the understanding of the combined impacts of natural ocean variability and human activities, such as those related to maritime transport, on the sustainability of the ocean-coastal zones-estuaries continuum and the related socio-economic services.

Projects must be interdisciplinary,[1] inter-sectoral[2] and/or transdisciplinary.[3] Researchers are strongly encouraged to develop public-private partnerships and/or to engage societal actors (e.g., local communities, conservation NGOs, fisheries) in their consortium.

The technology readiness level (TRL) of the projects submitted must be less than or equal to five.

## 2. RESEARCH AXES

These three axes represent the research areas that the projects must address. The research axes clarify the context and the objectives.

- Characterize and reduce the environmental, economic and social impacts of maritime transport and port infrastructures between Europe and Canada, in particular potential impacts of CETA, using ecosystems and integrative approaches.
- Decrease the ecological footprint of maritime activities, including impacts of contaminants (e.g., antifouling and heavy fuel oil), invasive species (e.g., ballast water), noise pollution, dredging, etc., including but not restricted to the development of green technologies.
- Develop socio-ecological-economic scenarios for adaptation towards sustainable management of the ocean-coastal zones-estuaries continuum and using different temporal scales.

1. See section 3, "Definitions and glossary."
2. See section 3, "Definitions and glossary."
3. See section 3, "Definitions and glossary."

## 3. DEFINITIONS AND GLOSSARY

**ANR Funding :** Amount offered by ANR to a beneficiary in the form of a grant to carry out a research and development project. For the purpose of this call, the term *grant* will be used.

**Beneficiary:** Funded, contractual partner of ANR, a research organization as defined in the Regulations concerning the conditions of allocation of ANR funding, identified in the *Conditions particulières*.

**Collaborator:** For the purpose of this call, a "collaborator" is considered a non-funded partner for the Quebec component. See the FRQ Common General Rules.

**Consortium:** All funded and non-funded partners from France and Quebec who are involved in the proposal.

**Coordinator:** This person is in charge of scientific and technical coordination of the project, implementing and formalizing cooperation between the partners, producing certain documents related to the project to be submitted to ANR and FRQ, holding progress meetings and communicating results. The coordinator must be a funded partner or be part of a funded partnership.

For the French component, the coordinator and the scientific leader(s) are appointed in the *Conditions particulières*.

For the Quebec component, the coordinating partner is the principal investigator as defined in the FRQ Common General Rules. The person must be a funded partner.

**Eligibility:** Necessary and required conditions that must be complied with when submitting a proposal in order for the project to potentially be funded. For the purpose of this call, this term is equivalent to admissibility.

**Overheads:** For the French component and for marginal-cost beneficiaries, a standard charge of 8% of all the eligible costs apart from overheads applies. Seeing as the price is standardized, marginal-cost beneficiaries do not have to justify these fees. These fees apply only to the French component. See the Regulations concerning the conditions of allocation of ANR funding for a complete definition.

**French component:** Any part of the project, including partners, that ultimately falls under or relates to ANR.

**Funded partner:** For the French component, a funded partner is a research organization that contributes to the project. The consortium must include at least one French "public research

organization" or other similar partner. See the Regulations concerning the conditions of allocation of ANR funding for a complete definition.

For the Quebec component, a funded partner is a person with a status characterizing a person's professional situation and qualifications to determine their eligibility to an FRQ program, either as a funding recipient or as a co-researcher. There are six possible research statuses, including that of researcher. For a complete definition of the statuses eligible for funding, see the FRQ Common General Rules.

**Funding recipients:** After the final funding decision has been made, funding recipients, within the meaning of the FRQ Common General Rules, become funded partners of the Quebec component. For the purpose of this call, the term is equivalent to grant for Quebec researchers.

**Grant:** Funding provided by FRQ following an evaluation by a committee of experts, to cover the direct costs associated with research projects, groups or infrastructures. For the purpose of this call, the term is equivalent to ANR funding for French researchers.

**Indirect costs of research (FIR):** Indirect costs of research are costs incurred by Quebec institutions to support research. These costs apply only to the Quebec component. See section 8.2 of the FRQ Common General Rules for a complete definition.

**Interdisciplinarity:** A research and collaboration process that brings together researchers from a variety of scientific disciplines to work on a research topic, issue, method or question. Interdisciplinarity in research is characterized by:

- The joint design and development, within the project, of research projects that engage research questions or topics common to or shared by representatives of the different scientific disciplines.
- The development of an innovative methodology, adapted to each research question and integrative approaches from each scientific discipline represented within the project.
- Consortium composition: the project must be headed by funded partners from at least two scientific disciplines.

**Intersectorality:** By intersectorality, or intersectoral networking, FRQ means research and collaboration processes that bring together researchers from disciplinary fields or research practices belonging to at least two of the three major sectors covered by FRQ to work on a research topic, issue, method or question. The three sectors are those defined in the legal structure of FRQ, namely: natural sciences and engineering; humanities and social sciences, arts and letters; and health. The fields within these three major sectors are listed on the three respective FRQ websites: FRQ – Nature et technologies (FRQNT), FRQ – Société et Culture (FRQSC) and FRQ – Santé (FRQS). Intersectoral networking in research is characterized by:

- The joint design and development, within the project, of research projects that engage research questions or topics common to or shared by representatives of the different sectors.
- The development of innovative methodology, adapted to each research question and integrative approaches from each sector represented within the project.
- Consortium composition: the project must be headed by funded partners from at least two sectors.

**Non-funded partner:** For the French component, a non-funded partner is a research organization and/or business (as defined in European legislation) of corporations, which the coordinator declares as bringing specific expertise to the project or the research program that is subject to the funding request. No portion of the grant may be transferred to the non-funded partner.

For the Quebec component, a non-funded partner is equivalent to a collaborator within the meaning of the FRQ Common General Rules.

**Project:** Basic research, applied research and/or feasibility studies, as defined in European legislation, to which the grant applies and that are carried out by the beneficiary and any prospective partner(s).

**Proposal:** Project submission, including all necessary documents for both agencies.

**Quebec component:** Any part of the project, including partners, that ultimately falls under or relates to FRQ.

**Rapporteur:** One of the two committee members assigned to evaluate the project. The rapporteur is in charge of preparing a final evaluation report based on his or her own evaluation, his or her counterpart's evaluation, external peer reviewers' reports, and discussions that took place at Scientific Evaluation Panel meetings, thus reflecting the consensus that the committee reached.

**Research outcome, dissemination and valorisation strategy:** Overall strategy ensuring the commercial or non-commercial development of expertise and results from research activities. It must incorporate actions to distribute, disseminate and valorise results (publications, conferences, etc.), to exploit the results (patents, technology transfer, etc.), to promote scientific culture (conferences for the general public, popularization of science, etc.) and to identify potential user environments.

**Researcher (Status):** For the purpose of this call, a *researcher* is considered a funded partner for the Quebec component. See the FRQ Common General Rules.

**Scientific leader:** For the French component, the scientific leader is the individual responsible for carrying out the project on behalf of a partner. A scientific leader is appointed for each partner (funded or non-funded). The coordinator also performs the role of scientific leader for one of the consortium's funded partners.
For the Quebec component, each funded partner is a scientific leader. A non-funded partner may also be a scientific leader.

**Scientific report:** The beneficiary(ies) of a research project grant must prepare and submit one or more reports at the time(s) indicated in the research project call's rules.

**Specific conditions:** Document entitled *Conditions particulières* signed by the beneficiary and ANR outlining the specific conditions, serving as general conditions that apply to ANR grants.

**Transdisciplinarity:** A research and collaboration process that brings together academic researchers and company stakeholders (research co-production and co-design) to work on a research topic, problem, method or question.

## 4. ELIGIBILITY CRITERIA

Eligibility checks are conducted by ANR and FRQ[4] based on the information and documents available on the submission websites and on the detailed proposals submitted at the closing date. Common eligibility criteria are to be met (4.1). There are also eligibility criteria to be fulfilled by the French component (4.2) and eligibility criteria to be fulfilled by the Quebec component (4.3).

Eligibility checks on partners are carried out according to each respective agency. If a funded partner is ineligible, the entire proposal is no longer eligible.

A proposal can be declared ineligible at any point during the submission, evaluation and funding process based on the criteria described below. Proposals considered ineligible by ANR or FRQ are not evaluated.[5]

ANR and FRQ must be informed as early as possible of any change that could affect a project's eligibility, by one of the partners. Each partner is responsible for maintaining their eligibility throughout the entire submission, evaluation and funding process.

4. FRQ is responsible for the call for the Quebec component. Management and all activities needed to implement the call are assigned to FRQNT.

5. Projects for which the proposal is considered ineligible are rejected without being evaluated by members of the Scientific Evaluation Panel.

Please note: For eligibility analyses, information entered online takes precedence over information contained in the scientific document, should the two sources of information be inconsistent, including if there is inaccurate or missing information.

### 4.1 COMMON ELIGIBILITY CRITERIA

**Consortium composition:**

- The consortium must consist of at least one partner that is eligible for ANR funding and one partner that is eligible for FRQ funding (funded partners)
  -AND-
- The consortium must consist of at least two French partners and two Quebec partners (funded or non-funded partners)
  -AND-
- If the consortium includes a French business, it must also include a Quebec business, and vice versa. Private businesses—in both France and Quebec—are encouraged to become partners, but they cannot receive funding. They participate as non-funded partners.

Two scientific coordinators must be clearly identified: one for the French component and the other for the Quebec component.

There is no limit to the number of funded and/or non-funded partners.

**Identical projects submitted:** The projects submitted to ANR and FRQ must both be identical. They must have the same consortium, the same funding plan and the same duration.

**Completeness of proposal:** The proposal must be finalized on the ANR and FRQ submission websites at each agency's specified date and time of closure, indicated on page 1.

**Project duration:** The project must last 36 months.

NB: Upon request during the third year, 12 additional months may be granted without additional funding in agreement with ANR and FRQ.

**Limit to participation No. 1:** A partner that qualifies for funding from both ANR and FRQ may apply for a grant from only one of these two funding agencies.

**Limit to participation No. 2:** An individual may be the coordinator of only one project submitted as part of this call between France and Quebec.

## 4.2 ANR ELIGIBILITY CRITERIA

**Completeness of proposal:** The proposal must be finalized on the ANR submission website by the specified date and time of closure indicated on page 1. To be considered complete, the proposal must include:

- The fully completed online form
- The scientific document uploaded to the submission website not exceeding 20 A4 pages

**Limit to participation No. 3:** A researcher may only submit one project as coordinator and cannot be involved (as coordinator or as a partner's scientific leader) in more than three proposals submitted to ANR under the Generic Call for Proposals, including International Collaborative Research Projects (PRCI), and under the specific bilateral calls for proposals outlined in Work Program 2019.[6] For 2019, this exclusion rule does not apply to international multilateral calls (*ERA-NET*, *JPI*, *Article 185*, etc.), or to *MRSEI*, *Astrid* and *Astrid Maturation*, *LabCom* and *LabCom Consolidation*, *Challenge*, *Chair* and *Flash calls*.[7]

**Uniqueness of the proposal:** A proposal cannot be similar in whole or in part to another proposal submitted to a call being evaluated by the ANR (all calls for proposals, all evaluation stages taken together) or that resulted in funding from the ANR. All similar proposals are ineligible.

Similarity is established if the proposals in question (in whole or in part) describe the same main objectives, or are simple adaptations, and share one or more team members with a major role in implementation of the project.

**Partner(s) receiving a grant:** The consortium must include at least one partner that is a French "public or assimilated research body"[8] applying for a grant from ANR.

**Budget limit:** The maximum funding available for each project is €360,000 for French partners, including overheads.

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6. The participation limit of no more than three projects as coordinator or as a partner's scientific leader also applies to specific bilateral calls (i.e., France-Germany, France-Japan or France-Quebec for 2019). The coordinator of a proposal submitted under a specific bilateral call cannot be the coordinator of a separate Collaborative Research Project (PRC), Collaborative Research Project Involving Enterprises (PRCE), International Collaborative Research Project (PRCI) or Young Researchers Project (JCJC) proposal under the Generic Call for Proposals 2019, regardless of the outcome of the stage 1 and 2 evaluations for that PRC, PRCE, PRCI or JCJC proposal.

7. An applicant can submit a proposal for the Generic Call for Proposals 2019 or a specific bilateral call 2019, and a separate proposal for an MRSEI, Astrid or Astrid Maturation, etc. call for proposals. However, the scientific objectives of the proposals must be materially different (see the "uniqueness of the proposal" criterion).

8. See the Regulations concerning the conditions of allocation of ANR funding.

### 4.3 FRQ ELIGIBILITY CRITERIA

The following eligibility criteria are supplemented by the FRQ Common General Rules.

**Completeness of the proposal:** On the date and at the time of submission, the proposal must include all supporting information, including the attached scientific document and the completed *FRQnet* form must be completed.

Projects written in French and English are accepted. Any document written in a language other than French or English must be submitted in two versions: the original and a translation. Documents that do not comply with the required format will be deemed not submitted.

**Status of partners:** At least one Quebec partner on the team must hold an eligible status for grants within the meaning of the FRQ Common General Rules.

This call for research projects is open to people who hold one of the following statuses:

- University researcher
- Clinical university researcher (under FRQS)
- College researcher (under FRQNT and FRQSC)

Individuals who are retired from a recognized institution, who met all the criteria until recently but are no longer full-time or part-time paid employees of an employing institution recognized by the FRQ to manage funding, and who continue to pursue research or supervision activities in the institution, from which they have obtained a formal commitment, are not eligible.

Individuals completing a postdoctoral program are not eligible for this program as non-funded partners.

All researchers must be affiliated with a Quebec university or college-level institution (including college centres for technology transfer), according to the conditions described in the FRQ Common General Rules.

Individuals who hold the status of clinical university researcher must demonstrate that they are entered on the roll of the order that governs their profession in Quebec, that they have the right to practise in Quebec, and that they have professional insurance.

**Budget limit:** Quebec funded partners must stay within the budget limit of CAN$200,000 per year, for three years. The amount includes indirect costs of research of 27%.

**Limit to participation No. 4:** Concurrent grants are prohibited as set out in the FRQ Common General Rules.

**Project intersectorality:** Members of the FRQ Scientific Evaluation Panel are in charge of validating the eligibility criteria for project intersectorality at the evaluation step.

Intersectorality will be validated in terms of the entire project and all French and Quebec partners applying for a grant. Non-funded partners are excluded from this validation. Proposals that are not intersectoral will be rejected for ineligibility at the evaluation step.

NB: Members of the ANR and FRQ Scientific Evaluation Panels will evaluate interdisciplinarity at the evaluation step.

See section 3. Definitions and glossary, for the definition of intersectorality and interdisciplinarity.

## 5. SUBMISSION OF PROPOSALS

Proposals must be submitted to both funding agencies individually. A proposal is deemed submitted if it is on both the ANR submission site and the FRQ submission site by the closing date for the call. Proposals submitted on either the ANR site or the FRQ site without any of the required documents will be considered ineligible, as mentioned in section 4. Eligibility criteria.[9]

Both projects submitted must be identical: same scientific content, same consortium and same funding plan. The French coordinator and the Quebec coordinator are responsible for the projects.

Overall, the proposal must:

- Clearly state whom the project's partners are (at least two French partners and two Quebec partners) and demonstrate how each partner will successfully collaborate on the research project. The main individuals involved in the project (coordinators, scientific leaders, doctorands, postdoctorands, etc.) must specify the amount of time allotted to it.
- Identify the two coordinators, one for the French component and the other for the Quebec component, who are both truly involved in coordinating the project.
- Describe a common scientific project (hereafter referred to as "scientific document") that includes a work program showing scientific contributions from French and Quebec funded partners.
- Provide financial data broken down by expenditure heading for French and Quebec partners. The presentation of data must indicate amounts in euros for ANR

9. See "Completeness of proposal" eligibility criteria.

and in Canadian dollars for FRQ, and therefore separate the French component from the Quebec component.

A guide to drafting a research project will be posted to the ANR and FRQ sites dedicated to the call for research projects to help with scientific document[10] preparation**.** Using this guide, which is shared by both agencies, is strongly recommended but not required.

**Scientific document for the proposal:**
Both the French component and the Quebec component require a scientific document. It is strongly recommended to submit the same document to ANR and FRQ. The document's content must be the same in both cases, and it must comply with the following conditions:

- The document must be no longer than 20 A4 pages, including the bibliography, diagrams and references, the required budget summary and the scientific justification.
- The document must be submitted as an unprotected PDF (generated using word-processing software, not scanned).
- The submission sites automatically reject documents of more than 20 pages or in formats other than PDF that are uploaded.
- The following table must be included at the beginning of the detailed proposal as a summary of the individuals involved:

| Country | University or Institution | Last Name | First Name | Current Employment | Role in the Project | Involvement Throughout the Project (Person Months)[11] |
|---|---|---|---|---|---|---|
| | | | | Professor? | Coordinator Task No. | |
| | | | | Technician? | Task No. | |
| | | | | Post-doc? | Task No.? | |

## 5.1 SUBMISSION TO ANR

French coordinators must submit proposals to ANR on the submission site, which will be indicated on the page of the ANR website where the call for research projects is published.

10. Required document for the proposal.

11. To be indicated with respect to the total duration of the project.

The project submission includes:

- An online[12] form to be filled out, which includes administrative and budget information, as well as a non-confidential scientific abstract. At minimum, the following information about foreign partners must be provided in the online form: the institute's[13] name, address and category (private or public), and details about the Quebec coordinator (country referent). The French coordinator must appear as the scientific coordinator on the ANR submission site, and the Quebec coordinator, as the country referent.
- The scientific document (see the description in section 5. Submission of proposals).
- The CVs of both the French and the Quebec coordinators and of all scientific leaders of the other funded and non-funded partners. CVs must be submitted in PDF format in an appendix, preferably in a single document. Please note that appendixes containing anything other than CVs will be not accepted. A CV template (for consistency with the Quebec component) will be posted on the ANR site for the call for research projects. The Quebec coordinator and the Quebec scientific leaders can submit the Canadian Common CV as a PDF in an appendix.

An electronic acknowledgement of receipt will be sent to the coordinator upon the closing of the call to confirm that the project was successfully submitted online, on the ANR site.

Writing proposals in English is encouraged insofar as experts from around the world will be sought. In the event that a scientific document is written in French, ANR may request that the French coordinator provide an English translation.

The French coordinator may name up to two individuals they do not want to be chosen as members of the Scientific Evaluation Panel or external peer reviewers, with whom there may be a conflict of interest or confidentiality issues should they be asked to contribute to the evaluation of the project.[14]

**Commitment from researchers submitting a project:**

- Each scientific leader of each French partner seeking funding (not including foreign partners) formally declares that their managers, particularly the appropriate administrative and financial departments and the persons authorized to legally commit the institution to manage funds, or their representatives have consented to

12. The account used to access the online submission site must absolutely be created with the French **scientific coordinator's** information (last name, first name and email address [preferably the email provided by the institution]), even if a third party is in charge of inputting the information online.

13. Partner as corporation.

14. ANR and FRQ reserve the right to verify potential conflicts if the list provided was too long and made evaluation impossible.

their current submission procedure and all information relating to the proposal has been communicated to them.
ANR may send the list of registered submissions to laboratory directors and administrative directors of organisations managing funding for projects that are related to them.

- The coordinator formally declares that all project participants—regardless of whether they are requesting funding—abide by the French National Charter for Research Integrity and ANR's Code of Ethics and Scientific Integrity.
- Where the proposed project uses genetic resources, the coordinator formally declares that all project participants—regardless of whether they are requesting funding—abide by the obligations arising from the Nagoya Protocol.[15]
- Requirements regarding the dissemination of research results, arising from the *Loi pour une république numérique* [Act for a digital republic], are brought to the attention of researchers submitting a proposal to ANR, in section 9 of the rules of this call for research projects.

### 5.2 SUBMISSION TO FRQ

This call for research projects is issued by FRQ and administered by FRQNT.

To fill out the form required by FRQNT, the coordinator must visit the FRQnet website and log in: https://frqnet.frq.gouv.qc.ca/researchPortal/faces/jsp/login/login.xhtml. If the coordinator does not have an account, they must create one. The form is located in the "Concours disponibles" [open competitions] section of the portal, under the "Subvention de recherche" [research grant] tab.

The coordinator must fill in all sections of the form and attach supporting documents in the section "Autres documents" [other documents]. A complete list of supporting documents can be found in the application form and below:

- The scientific document (see the description in section 5. Submission of proposals).
- For funded partners of the Quebec component:
  - The Canadian Common CV (required). For FRQNT, FRQS and FRQSC, the Funding CV version is required (last updated between June 2016 and the deadline for the call for research projects).
  - Detailed contributions of all funded partners (last update between June 2016 and the deadline for the call for research projects); see document Guidelines for the CV attachment for 1 -FRQNT or 2 – FRQS or 3 – FRQSC for information about the content of detailed contributions. Detailed contributions must be submitted with the CV.

15. In this context, ANR requires that due diligence declaration (DDD) slips be provided for research projects funded in 2019. This requirement also applies retroactively to projects funded in 2018.

  - Clinicians: A letter from the clinical department head or faculty dean specifying the number of hours the clinician will be discharged from his or her clinical duties to complete the research project (only for individuals who are not recipients of FRQS career funding).
- For non-funded partners of the Quebec component and scientific leaders of funded and non-funded partners of the French component:
  - CVs. For Quebec partners, it is recommended to use the Canadian Common CV. For French partners, a CV template will be posted on the ANR website for the call for research projects.
  - Letters of support from funded and non-funded partners, as needed.
- Letter of support from the head of the institution or university department where the research will be conducted.
- The Quebec coordinator may name up to two individuals they do not want to be chosen as members of the Scientific Evaluation Panel or external peer reviewers, with whom there may be a conflict of interest or confidentiality issues should they be asked to contribute to the evaluation of the project.[16]
- Translations, if needed.

**Project abstract**

The proposal must include a project abstract written in French or in English. The abstract must not exceed 500 words and must be submitted at the same time as the *FRQnet* form. This abstract is separate from the scientific document.

By submitting the project and abstract, the funded partners authorize FRQ, within the scope of this call for research proposals, to publicly disseminate the abstract in whole or in part, by any means (websites, Facebook, Twitter, etc.).

Therefore, the abstract must not contain any personal information or any confidential or protected information whose dissemination may prevent publication or the filing of a patent application.

FRQ will respect applicable copyright law, in particular by naming the author. FRQ reserves the right to proofread and/or edit the text without prior notice prior to publication.

**Commitment from researchers**

By submitting a proposal, the coordinator commits to:

16. ANR and FRQ reserve the right to verify potential conflicts if the list provided was too long and made evaluation impossible.

- Respect the FRQ Common General Rules, the Policy regarding open access to published research outputs (FRQS researchers) and all conditions and requirements described in the electronic form as well as in the research project call's rules.
- Upon the request of FRQ, submit additional documents related to planned uses of the grant.
- Comply with ethics and integrity standards as set forth by FRQ in the Policy for the Responsible Conduct of Research, the FRQNT *Politique d'éthique et d'intégrité scientifique* [scientific ethics and integrity policy] and the FRQS *Standards en éthique de la recherche et d'intégrité scientifique* [research ethics and scientific integrity standards].
- Authorize FRQ to store and use any personal or scientific data contained in their file in accordance with the *Énoncé relatif à la protection des renseignements personnels et confidentiels des dossiers des candidats, candidates et titulaires d'un octroi* [Statement regarding the protection of personal and private information contained in funding candidate and recipient files] and on the condition that any individuals with access to personal information respect its confidential nature.

Requirements regarding the dissemination of research results, arising from the *Loi pour une république numérique* [Act for a digital republic], are brought to the attention of researchers submitting a proposal to FRQ, in section 9 of the rules of this call for research projects.

## 6. EVALUATION

ANR and FRQ will each have one Scientific Evaluation Panel to evaluate submitted applications. These two panels will proceed in a similar manner. They will use the same evaluation criteria and will have access to the same external *peer reviewer reports*. Each Scientific Evaluation Panel is led by a chairperson. The chairs and vice-chairs of the ANR and FRQ panels will work in close collaboration throughout the entire evaluation process.

The expert evaluations, called external *peer reviewer reports*, will be completed by people whose expertise is highly relevant to the proposals that they receive. These people will not participate in the Scientific Evaluation Panels. They will independently prepare written evaluations of one or more proposals. They will work individually and in confidentiality without discussing with third parties. They will have access to either the French or Quebec proposal submitted by the closing date and time. The goal is for each proposal to be evaluated by at least two external peer reviewers.

Proposals will also be evaluated by two members of the ANR panel and two members of the FRQ panel. They will individually evaluate the proposals based on the elements submitted by the coordinator by the closing date and time of the call for research projects. These members are highly qualified individuals from the research communities concerned.[17] The composition

17. The composition of the scientific evaluation panels is confidential for the duration of the selection process. The list of ANR panel members and the results are published on the ANR site simultaneously.

of each Scientific Evaluation Panel will cover all of the disciplinary fields and subjects related to the projects submitted to the panel.

The members of both panels will examine the same external *peer reviewer reports*. These reports will be considered from the synoptic view that panels members have of all proposals that are evaluated by their panel (but that the external peer reviewers do not have).

Following the individual evaluations, each panel will meet for a plenary session. A proposal-by-proposal collegial discussion will result in the proposals being ranked with respect to one another.

One of the two panel members appointed to evaluate the proposal—the rapporteur—will prepare a final evaluation report based on his or her own evaluation, his or her counterpart's evaluation, external *peer reviewer reports* and discussions that took place in Scientific Evaluation Panel meetings, thus reflecting the consensus that the committee reached.

Next, the panel chairs will pool the results of both Scientific Evaluation Panels and establish the final proposal ranking. The chairs will be able to draw from any of the documents mentioned above, assistance from the vice-chairs, where applicable, and their own conclusions based on panel activities.

Each peer reviewer, panel member, chair and vice-chair will respect ANR and FRQ standards and regulations pertaining to conflict of interest and confidentiality. In the context of this call for research projects, ANR and FRQ will exchange personal and scientific information (data gathered online via the forms on each evaluation site) and the scientific evaluation reports. The individuals who have access to this information agree to uphold its confidential nature.

The final decision whether or not to fund a proposal will be made jointly by ANR and FRQ based on the final ranking and budgetary capacity approved for this ANR-FRQ call for research projects.

The list of projects selected for funding will be published by ANR and FRQ on their respective websites after the evaluation process ends. Only the final evaluation report and the external *peer reviewer report* will be sent to the coordinators, after the evaluation process ends.

NB: The coordinators from France and Quebec agree with having their first and last names listed on the ANR website when the results are published in the event that the project they are coordinating is selected for funding.

### 6.1 EVALUATION CRITERIA

The evaluation criteria are intended to be a guide for the coordinator, so that they can prepare their proposal and prepare the scientific document; for the external peer reviewer, so that they can prepare their external *peer reviewer report*; and for Scientific Evaluation Panel members, so

that they can prepare the evaluation report. A weighting for each criterion is indicated as a guide.

During the evaluation, the "Scientific quality of the research project" criterion is determining: to receive funding, proposals must earn an "A" (very good) or an "A+" (excellent) rating on this criterion after the results of the two panels are combined.

Panel members will be responsible for verifying that the Technology Readiness Level (TRL) of submitted projects is equal to or less than 5. If a submitted project has a level higher than 5, it cannot earn an A or A+ rating for the first criterion. However, no priority will be given to any TRL of 5 or less during the evaluation.

| **Criterion 1: Scientific quality of the research project (40%)** |
|---|
| • Compliance with the general objective of the call for research projects and integration of the project in at least one of the research axes<br>• Clarity of research objectives and hypotheses<br>• Novelty, originality, position in relation to the state of science and/or the art<br>• Appropriateness of the methodology, scientific risk management, appropriateness of suggested and implemented resources, budget justification |
| **Criterion 2: Added value of the scientific collaboration (20%)** |
| • Complementarity of the scientific expertise of the respective funded partners in France and Quebec in the context of the project<br>• Added value for France and Quebec from the collaboration<br>• Competence, expertise and role of each funded partner of the project |
| **Criterion 3: Added value of the interdisciplinarity, intersectorality and transdisciplinarity (20%)** |
| • Value of the interdisciplinarity and/or intersectorality<br>• Value of the transdisciplinarity, if applicable: engagement of societal actors in the co-design and co-production of the project |
| **Criterion 4: Benefits of the research project for France, Quebec or the international community (20%)** |
| • Contribution of the project to the advancement of knowledge<br>• Potential impact in the economic, social, cultural, environmental and/or public health fields, including the training of highly qualified personnel<br>• Relevance of the research outcome, dissemination and application strategy |

The profiles of the Scientific Evaluation Panel members who are involved in this type of program are very diverse. Coordinators are encouraged to present their project in all the documents that are submitted for evaluation, but particularly in the scientific document, in a way that facilitates comprehension in an inter- and transdisciplinary context.

The scientific content of the proposal should present the elements that are needed to evaluate it based on the four evaluation criteria.

A guide to drafting a research project will soon be posted on the ANR and FRQ sites dedicated to the call for research projects. Using this guide, shared by both organizations, is highly recommended (see section 5. Submission of proposals).

### 6.2 EVALUATION BY ANR

**The provisions of the ANR Ethics and Scientific Integrity Charter apply to all individuals involved in the project evaluation process.**

The Scientific Evaluation Panel is led by a chairperson who is trained in the ANR selection process procedures and ethics. They head the Scientific Evaluation Panel's bureau, which generally consists of one or two vice-chairs who assist in preparing and carrying out the panel's work.

Members of the panel are appointed by ANR for their scientific expertise after being recommended by the panel's bureau. They are in charge of evaluating and ranking proposals with the assistance of external peer reviewers.

ANR will send e-mails to all scientific coordinators from France informing them whether or not their proposal was selected. Coordinators will also receive the external *peer reviewer reports* and the final evaluation report on which the panel based its decision.

### 6.3 EVALUATION BY FRQ

The FRQ Common General Rules apply to the Scientific Evaluation Panel and are outlined in section 6.1 of this document.

## 7. FUNDING

ANR funds the French component of selected projects, and FRQ funds the Quebec component of selected projects, each according to their own rules.

Each project may receive up to €360,000 for French partners, including overheads, and up to CAN$600,000 for Quebec partners, including indirect costs of research.

A partnership could potentially be established between ANR, FRQ and Mitacs to co-fund selected proposals as part of this call for research projects. This co-funding could require students to relocate. Additional information will be available on the ANR and FRQ websites when the submission platforms open on February 19, 2019.

### 7.1 FUNDING OF THE FRENCH COMPONENT BY ANR

The procedures for attributing ANR grants are set out in the Regulations concerning the conditions of allocation of ANR funding, which is available at the following address: http://www.agence-

nationale-recherche.fr/RF. Coordinators are encouraged to read this document carefully so that their project complies with the provisions therein, especially in terms of the budget.

For this call for project proposals, full-cost partners (corporations, associations, businesses) will only be accepted as self-funded partners and may not receive ANR grants. Only marginal-cost partners are eligible to receive ANR grants.

The selected proposals will be funded by ANR, following administrative and financial checks (mainly related to the compatibility and regularity of grants in accordance with European legislation) and on condition that a grant agreement is signed by each partner benefiting from a grant.

**Consortium agreements**
For projects conducted in partnership with research organizations and businesses, partners must sign an agreement with the project coordinator that sets out: i) how tasks, human and financial resources and deliverables will be distributed; ii) the shared ownership of intellectual property rights of the results obtained as part of the project; iii) the plan for publishing and disseminating the results, and iv) the application strategy of the research outcomes.

These agreements (see the "Consortium agreements" fact sheet on the ANR site http://www.anr.fr/RF) determine the potential existence of an indirect grant that could affect the calculation of the maximum grant rate authorized by the community framework of research, development and innovation grants (hereinafter the "framework").

## 7.2 FUNDING OF THE QUEBEC COMPONENT BY FRQ

FRQ Common General Rules apply to the funding of research projects. Financial contributions from FRQ are conditional upon the National Assembly of Quebec adopting the required budgetary appropriations to ensure they are available in accordance with the *Financial Administration Act* (CQLR, c. A-6.001) and the decisions of FRQ's boards of directors in relation to its strategic planning. For these reasons, financial contributions are subject to change without prior notice.

**Financial management**
The institution that employs the grant recipient is responsible for managing the grant (see section 6.2 of the Common General Rules).

The list of establishments[18] that may manage FRQ grants is limited to managing institutions that are recognized by FRQ and consists primarily of universities, CIUSSSs, CISSSs, certain institutions within the health network, and colleges.

18. This list is available in French only at: http://www.frqnt.gouv.qc.ca/fr/bourses-et-subventions/etablissements-reconnus-financement/etablissements-admissibles.

**Expense eligibility**

In addition to the list of eligible and non-eligible expenses set out in section 8 of the FRQ Common General Rules, the following expenses are eligible:

- Remuneration of students (master's and doctoral) and postdoctoral interns
- Transportation and trip expenses for Quebec researchers travelling outside of Quebec (sensible amounts)
- Participation in conferences and symposia up to a maximum of 3% of the grant amount, as of the second year of the grant
- Costs associated with the joint publication of articles

Non-eligible expenses:

- Remuneration of the principal investigators, co-investigators (funded partners) and non-funded partners
- Any indirect costs associated with the layout, renovation, leasing or maintenance of the premises and the indirect costs paid by the host institution
- No amount may be transferred outside of Quebec

**Commitment from funded partners**

All funded partners are required to take a basic research ethics training course when their research project or program involves human subjects.

Research on human subjects consists of any research involving:

- Live human subjects;
- Cadavers or human remains;
- Tissue, biological fluids, gametes, embryos or foetuses, cells, or genetic material ;
- Personal information on file.

Personal information is any information that could be used to identify an individual. This basic training course consists in completing levels one and three of the Online Tutorial in Research Ethics developed by the *Ministère de la Santé et des Services sociaux*.

Researchers must complete the training before receiving the first installment of their grant.

**Commitment from non-funded partners**

All parties partnering with a business agree to respect the principles set out in the *Plan d'action en gestion de la propriété intellectuelle dans les universités et les établissements du réseau de la santé et des services sociaux où se déroulent des activités de recherche* [action plan for managing intellectual property in universities and health and social services network institutions conducting research], the Common General Rules, the Policy for the responsible conduct of research in

effect in all three FRQ, and the FRQNT *Politique d'éthique et d'intégrité scientifique* [scientific ethics and integrity policy].

## 8. SCIENTIFIC AND FINANCIAL FOLLOW-UP

Funded projects will be subject to scientific follow-up by ANR and FRQ during the project and for one year thereafter.

The interim report must be submitted 18 months after the start date of the research. The final scientific report must be submitted no later than three months after the end date of the research. Templates of these reports will be provided to the coordinators for the French and Quebec components in a timely manner.

ANR's and FRQ's respective regulations regarding scientific and financial follow-up apply.

## 9. RESEARCH RESULTS AND KNOWLEDGE TRANSFER

- ANR and FRQ encourage grant recipients to lead and contribute to knowledge mobilization (transfer, exchange, promotion, development and dissemination) in practice environments and among the general public when relevant. Please read the FRQ knowledge mobilization document in the toolbox.
- Under the obligations set out in the French *Loi pour une république numérique* [Act for a digital republic] and in line with the French national open archives plan, the coordinator, if granted funding, agrees to: 1) submit the full texts of scientific publications that result from the research project to an open archive, either directly to HAL or through a local institutional archive; and 2) provide a data management plan (DMP) at the start of the project, as per the conditions agreed upon when signing the agreement.

## 10. COMMITMENT OF THE HOST INSTITUTION

The host institution agrees to provide:

- Laboratories or functional research locations and the basic equipment required to complete the research project
- An environment that meets the ethics and integrity standards defined in the FRQNT, FRQS and FRQSC documents regarding scientific ethics and integrity and in the FRQ Policy for the responsible conduct of research.

## 11. INTELLECTUAL PROPERTY

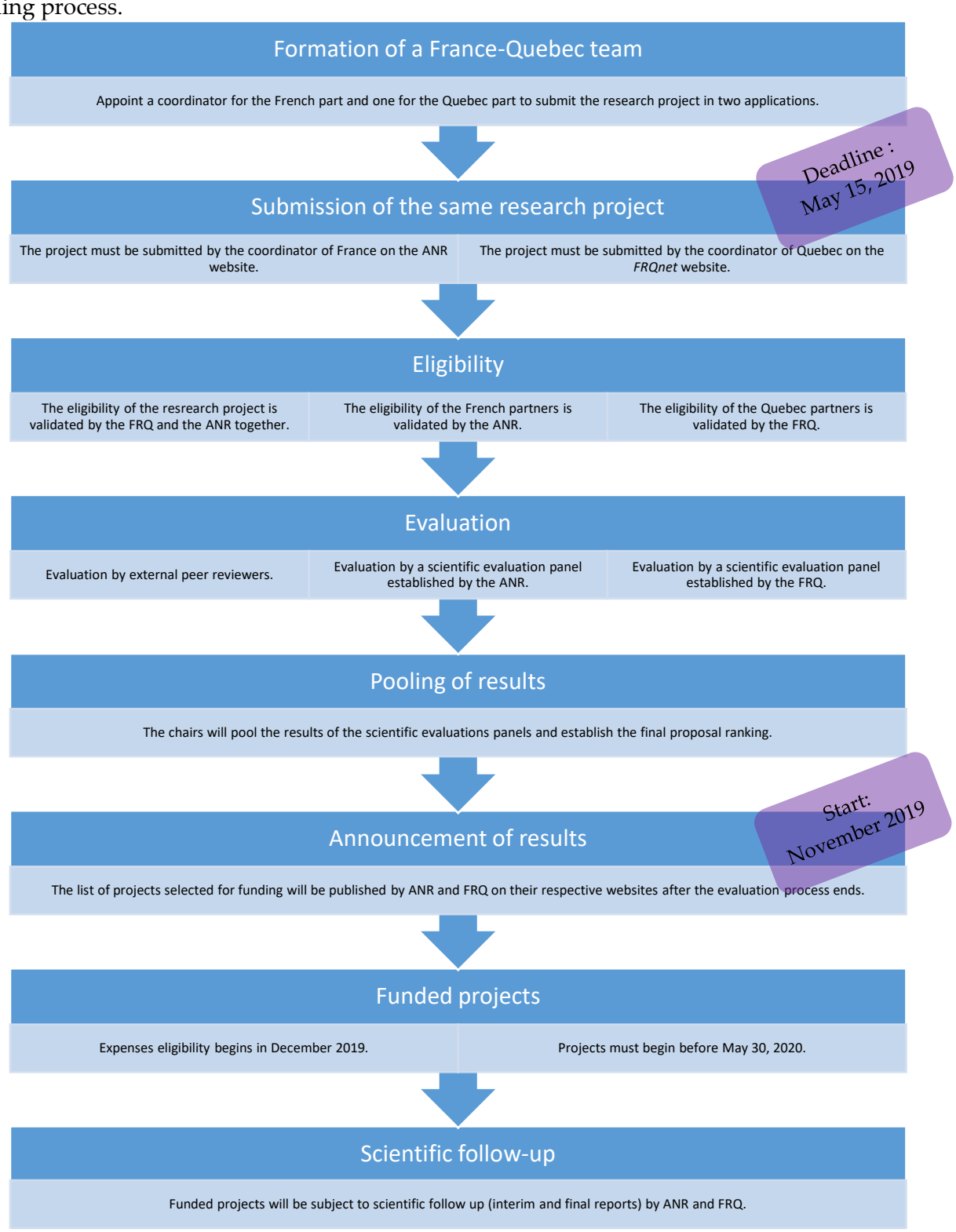
Funding agencies recognize that the grant recipients and their associated institution hold the intellectual property rights in accordance with the internal regulations of the institution.

## 12. CALENDAR

- Publication of the call for research projects: January 14, 2019
- Opening of ANR and FRQ submission platforms: February 19, 2019
- Closing of submission platforms:
    - For the French component: May 15, 2019, at 1:00 p.m. (CET) on the ANR site
    - For the Quebec component: May 15, 2019, at 1:00 p.m. (EST) on the FRQ site (FRQnet)
- Publication of the results: Early November 2019 (approximate date)
- The start date of the research must be between December 1, 2019, and May 31, 2020. The French and Quebec partners must organize their efforts and begin their research on the same start date.
- The expense eligibility date will be December 1, 2019, and the first grant installment will be provided on December 15, 2019, at the very earliest, subject to the requirements having been met by the French component and the Quebec component. These dates are approximate.

## 13. APPENDIX 1: SUMMARY OF THE CALL PROCESS

For informational purposes only. Please refer to the table below to understand the call and funding process.



## 14. APPENDIX 2: TRL SCALE

The grid below outlines the scale used to evaluate the Technology Readiness Level (TRL). The scale does not apply to the humanities and social sciences, arts and letters.

| TRL | Definition | Description | Supporting information |
|---|---|---|---|
| 1 | Basic principles observed and reported | Lowest level of technology readiness. Scientific research begins to be translated into applied research and development (R&D). Examples might include paper studies of a technology's basic properties. | Published research that identifies the technology's basic principles. References relative to this work (who, where and when?) |
| 2 | Technology concept and/or application formulated | Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative, and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytical studies. | Publications or other references that outline the application being considered and that provide an analysis to support the concept. |
| 3 | Analytical and experimental critical function and/or proof of concept | Active R&D is initiated. This includes analytical studies and laboratory studies to physically validate that the analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative. | Results of laboratory testing performed to measure parameters of interest and comparison to analytical predictions of critical subsystems. References relative to completing these tests and comparisons (who, when and where?). |
| 4 | Component and/or breadboard validation in laboratory environment | Basic technological components are integrated to establish that they will work together. This is relatively "low fidelity" compared with the eventual system. Examples include the integration of "ad hoc" hardware in the laboratory. | Expected system performance concepts and results from laboratory-scale breadboard testing. References relative to the completion of this work (who, where, when?). Estimates of the differences between the breadboard, the test results and the expected system performance goals. |

| | | | |
|---|---|---|---|
| 5 | Component and/or breadboard validation in simulated environment | Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so they can be tested in a simulated environment. Examples include the "high-fidelity"" laboratory integration of components. | Results from laboratory-scale breadboard testing of the system integrated to supporting elements in a simulated operational environment. Discrepancies between the laboratory environment and the eventual operating environment. Comparison of the test results and the anticipated results. Potential problems encountered. Was the laboratory-scale breadboard system refined to better correspond to eventual system objectives? |
| 6 | System/subsystem model or prototype demonstration in a simulated environment | Representative model or prototype system, which is much more developed than TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in a simulated operational environment. | Results from laboratory testing of a prototype system that is very close to the desired form in terms of performance, mass and volume. Discrepancies between the testing environment and the operational environment. Comparison of the test results and the anticipated results. Potential problems encountered. Plans, options or actions considered to resolve the problems encountered before proceeding to the next level. |

| | | | |
|---|---|---|---|
| 7 | Prototype ready for demonstration in an appropriate operational environment | Prototype near or at planned operational system. Represents a major step up from TRL 6 by requiring demonstration of an actual system prototype in an operational environment (e.g., in an aircraft, in a vehicle, or in space). Examples include testing a prototype in a test bench aircraft. | Test results of a prototype system in an operational environment. Indication of organization(s) that conducted the testing. Comparison of the test results and the anticipated results. Potential problems encountered. Plans, options or actions considered to resolve the problems encountered before proceeding to the next level. |
| 8 | Actual technology completed and qualified through tests and demonstrations | Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation (DT&E) of the system in its intended system to determine if it meets design specifications. | Test results of the system in its final form under the potential environmental conditions of any area of use. Evaluation of its capacity to satisfy operational demands. Potential problems encountered. Plans, options or actions considered to resolve the problems encountered before finalizing the design. |
| 9 | Actual technology proven through successful deployment in an operational setting | Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation (OT&E). Examples include testing the system under operational mission conditions. | Test and operational evaluation reports. |

Source: https://www.entreprises.gouv.fr/files/files/directions_services/politique-et-enjeux/innovation/tc2015/technologies-cles-2015-annexes.pdf [translation of original French]

# 15. APPENDIX 3: MITACS GLOBALINK RESEARCH AWARD

In accordance with *Section 7. Funding* in the Research Call between France and Quebec in the maritime sector 2019 Edition, Mitacs, ANR and FRQ announces the possibility to receive an additional funding to the initial grant with a maximum of two Mitacs Globalink Research Award for each funded research project.

Each consortium funded by ANR and FRQ will be ensured to receive these two Globalink Research Awards, subject to comply with Mitacs eligibility requirements.

### MITACS GLOBALINK RESEARCH AWARD

The Mitacs Globalink Research Award provides CAD$6,000 for senior undergraduate student (corresponding to third-year undergraduate students in France) and graduate students (corresponding to Master and Doctorate level in France), and postdoctoral fellows, to conduct 12–24-week research projects at universities overseas.

For the projects selected in this Call, two Globalink Research Awards may be received by a student from Quebec going to France and/or by a student from France going to Quebec.

The Globalink Research Award granted by Mitacs (CAD$6,000 in value) covers costs related to student travel, student living expenses, and student stipend (allocated to the student).

Please, refer to the other Mitacs eligibility requirements on their website.

### APPLICATIONS TO RECEIVE A MITACS GLOBALINK RESEARCH AWARD

To receive the Globalink Research Awards, the coordinators of projects will need to contact one of the representative of Mitacs mentioned below, in the four weeks following the publication of the list of projects selected for funding by ANR and FRQ.

### FOR MORE INFORMATION ON THE GLOBALINK RESEARCH AWARD

For Quebec partners: please contact a representative of business development affiliated to your Canadian University

For French partners: please contact Simon Bousquet, Senior Director, Business development operations, Mitacs, sbousquet@mitacs.ca