

Call for innovative projects

Phase 4 - 2022-2025

* In the event of a divergence between the different linguistic versions of the present call, please note the <u>French version</u> shall prevail. *

The International Observatory on the Societal Impacts of Artificial Intelligence and Digital Technologies (OBVIA) is launching the 4th phase of its call for innovative projects with a total budget of \$CA 1,000,000 to support research projects from one to three years long, up to a maximum of \$CA 125,000 per project.

In order to support the development of early career researchers¹ and collegial researchers², a part of the budget is dedicated to fund at least one project submitted by an early career researcher and one project submitted by a college researcher.

ABOUT OBVIA

OBVIA is an open research network that brings together the expertise of more than 220 researchers in the Humanities and Social Sciences, Science and Engineering, and Health. It is also an open space for discussion and reflection for all stakeholders in the development and use of artificial intelligence (AI) and digital technologies.

Centred around a critical interrogation of technological innovations, the Observatory's mission is to raise crucial issues and identify plausible solutions for the problems and opportunities stemming from the rise of AI and digital technology in the province of Quebec and elsewhere in the world.

OBVIA aims to contribute to the common good that must be pursued through digital innovation. Via knowledge production and research-creation projects, OBVIA addresses technology's benefits to society and engages democratic institutions.

EQUITY, DIVERSITY AND INCLUSION

OBVIA promotes and integrates the values of equity, diversity and inclusion (EDI) in all of its activities. An open and diverse community promotes the inclusion of the voices of those who

¹ Person within five years from the start of their first research-related appointment. A research-related appointment is defined as one where the individual has the autonomy to conduct research independently. All eligible leaves of absence (maternity leave, parental leave, medical leave and bereavement leave) may be deducted from the period. Professional leaves (training, sabbatical, administrative leave) are not deducted.

² Person who has a PhD and who is employed for the equivalent of one full-time position in the college-level institutions recognized by the FRQ to manage funding and/or in the Québec college centres for technology transfer (CCTT).

have been under-represented or discouraged. OBVIA welcomes individuals/projects who/that have demonstrated their commitment to equity, diversity and inclusion values and will help us increase our capacity for diversity in the broadest sense. We encourage applications from groups members who have been marginalized for any of the reasons listed in the Charter of Human Rights and Freedoms(CHRF), including gender, sexual orientation, gender identity or expression, racialization, disability status, political belief, religion, family status, age, First Nations, Metis or Inuit status or Indigenous status.

OBJECTIVES OF THE CALL

This call for projects has for objectives to:

- Support research and creation on responsible innovation and the major societal transformations associated with AI and digital technologies (NumerIA) and the dynamics that structure them.
- Support the development of new interdisciplinary research teams while attracting early career researchers to conduct research on the societal impacts of NumerIA.
- Supporting cross-sectoral projects of importance for Quebec and for other societies facing the same issues in terms of the societal impacts of AI and digital technologies.
- Support the development of research projects and new knowledge related to the five <u>OBVIA's Scientific Guidelines (in French only</u>) which are:
 - Contribute to promoting inclusion and mitigating bias
 - Improving access to data while respecting the rights of everyone
 - Contribute to better control of artificial intelligence algorithms and digital systems
 - Supporting responsible and effective adoption of AI and digital technologies by organizations
 - Promote constructive and democratic dialogue through accessible appropriation of AI and digital

ELIGIBILITY CRITERIA

- A principal investigator must be a researcher member of OBVIA.
- At least two other researchers must also be researcher member of OBVIA.
- The project must be based on the concept of responsible innovation.
- The project must contribute at least to two different OBVIA's research themes (Arts, Media and Cultural Diversity; Industry 4.0, Work and Employment; Environment, Smart Cities, Territory and Mobility; Ethics, Governance and Democracy; Law, Cyberjustice and Cybersecurity; Education and Empowerment; and Sustainable Health).
- The project must propose explicit links with at least one of OBVIA's three functions other than Research and Creation (*Monitoring and Survey; Deliberation; Public Policy*).

EVALUATION CRITERIA

- **Research and creation**. Precision of the project, its hypotheses and methodology, and their coherence with OBVIA's mission. Quality of the principal investigators' and co-investigators' CVs.
- Team, attraction, training and retention of research actors. Support for the next research generation. Relevance and justification of the size and complementarity of the team.
- **Capacity for scientific growth**. Potential for societal impacts and creative outreach.
- Stimulation of partnerships and networking. Active participation of scientific and nonscientific collaborators and partners is strongly encouraged. The main focus needs to remain on the development of knowledge that contributes to the common good, not to the interests of organizations and companies.
- Knowledge mobilization. The project must demonstrate a strong potential for knowledge mobilization and transfer.

EVALUATION PROCESS

OBVIA ensures that its decisions are fair and objective, and that they are perceived as such. The evaluation process is carried out by an independent evaluation committee with the participation of international reviewers and validated by the co-heads of the Research and Creation function and by OBVIA's Scientific Committee.

CALENDAR

- Launch of the Call for Projects Phase 4: Monday, December 13, 2021.
- Deadline for submission of a project: Tuesday, March 1, 2022 at 5:00 p.m. Eastern Standard Time (EST).
- Evaluation: March-May 2022.
- Announcement of projects selected for funding: End of May 2022.

APPLY

All project proposals must be submitted by email as a single document to <u>projets@observatoire-ia.ulaval.ca</u>. **The deadline for submission is** Tuesday, March 1, 2022 at 5:00 p.m. Eastern Standard Time (EST).

For further information about the OBVIA's call for innovative projects, you can send your questions to:

Guillaume Macaux

Scientific Advisor Phone: (418) 656-2131 ext. 409127 projets@observatoire-ia.ulaval.ca

Appendix A - Guidelines for Project Submission

General informations

The project proposal provides information about your project in relation to OBVIA's mission, objectives and specific themes identified in the call for projects. Your proposal will be evaluated according to OBVIA's research project evaluation criteria. It is the responsibility of the principal investigator to ensure that their application meets the following eligibility criteria and evaluation criteria. Submissions that do not meet the eligibility criteria will be rejected.

Language: You can complete your application in French or English.

<u>Deadline</u>: Project proposals must be submitted by March 1, 2022 at 5:00 p.m. Eastern Standard Time (EST). An acknowledgement of receipt will be sent within 24 hours of receipt of the proposal.

<u>Submission</u>: All project proposals must be submitted in a single email to <u>projets@observatoire-</u> <u>ia.ulaval.ca</u> and must include:

- The submission form (available on <u>OBVIA's website</u>) in .docx version ;
- CVs of principal investigators and co-investigators (two-page CVs);
- Letters of support from partners, if applicable;
- Illustrations and/or graphics may be included in the appendix.

Submission content

The project must be presented in the submission form available on the OBVIA website.

1) Title

The title should clearly and concisely state the purpose of the project. The title of the project will be used for promotional and communication purposes by OBVIA.

2) Summary (300 words max.)

Please provide a summary of your project (300 words maximum) that describes the main elements of the proposed research, the nature of the activities to be funded and the anticipated benefits. This summary will be used in the selection process, as well as for OBVIA communication purposes.

3) Research themes

Indicate in which research themes (at least two themes) your project fits and how the knowledge will contribute to these themes:

- Arts, Media and Cultural Diversity;
- Industry 4.0, Work and Employment;
- Environment, Smart Cities, Territory and Mobility;
- Ethics, Governance and Democracy;

- Law, Cyberjustice and Cybersecurity;
- Education and Empowerment;
- Sustainable Health.

The information relating to the research themes, the co-leaders of these themes as well as their affiliated researchers are available on the <u>OBVIA website</u>.

4) Context and objectives (max. 1 page)

Set the context of your research project in relation to OBVIA's mission and objectives. Please describe the objectives of your research, how interdisciplinary collaborations between researchers, students and postdoctoral fellows will be established (if applicable), and the main societal issues addressed by your research project.

5) Approach, methodology, newness and inter-research themes (max. 2 pages)

Provide a summary of the methodology and expected results of your research project in relation to the societal impacts of AI and digital technologies. Emphasize the originality and the novelty of the proposed research, in terms of hypothesis/research questions addressed, new methodology and/or news applications of current methods. Highlight the level of integration and coherence of the team, the complementarity of their expertise, and the value of the proposed interdisciplinary collaborations. Describe how the produced knowledge will contribute to OBVIA research themes identified above.

6) Research team

OBVIA will fund projects conducted by interdisciplinary research teams composed of principal investigators, co-investigators and collaborators. Research teams may involve partners both internal and external to OBVIA. The team is evaluated on the relevance and justification of its size and complementarity.

a. Requirements

One principal investigator must be a member of OBVIA.

<u>At least two other researchers in the team must also be members of OBVIA</u>. Collaborations between researchers from different axes are particularly appreciated.

b. Consents

Members of the research team must consent to their participation in the project by filling out the <u>consent form</u> prior to the submission of the application by the principal investigator.

c. Roles

The role in the application defines the level of involvement and responsibility of those jointly involved in the project³. There are three different roles:

³ In accordance with the <u>FRO Common General Rules</u>.

i. Principal investigator

The principal investigator ensures the scientific direction of the project or research program for which funding is requested.

A principal investigator may submit only one project under this call as a principal investigator.

OBVIA does not allow a researcher to hold multiple research grants simultaneously as a principal investigator. A researcher who has already received research funding under one of the previous calls for innovative projects as a principal investigator is eligible to submit a new application only when the previously funded project is completed.

If there are two principal investigators identified on the project, the first one identified in the Team section has administrative responsibility for the application, including correspondence with OBVIA, and financial responsibility for the grant.

Academic researchers, clinical academics and college researchers are eligible in this role.

ii. Co-investigator

A co-researcher is a researcher participating in the grant application, whose CV is required and taken into account in the scientific evaluation. He/she contributes significantly or brings specific expertise to the proposed research project.

iii. Collaborator

A collaborator is a person identified by the principal investigator as bringing specific expertise to the research project or program for which funding is requested.

7) Attraction and training of young scientists (max. 1/2 page)

Briefly describe the ability of the research team and the proposed project to train graduate students or postdoctoral fellows in an interdisciplinary environment.

8) Impacts, mobilization and transfer of knowledge and links with OBVIA functions (max. 2 pages)

Describe the knowledge mobilization and transfer efforts related to at least one of OBVIA's functions other than Research and Creation (Monitoring and Survey, Public Deliberation, Public Policy) to reach the different audiences. It is not necessary to involve the co-lead of these functions upstream of the project nor to list them as co-investigators.

Indicate how the results of your research will have an impact on responsible innovation and the development of plausible solutions, while maximizing the positive effects and minimizing negative effects of Artificial Intelligence (AI) and digital technologies.

If applicable, briefly describe the networking and interactions between OBVIA researchers and project partners.

9) Budget

Only principal investigators and co-investigators who are members of OBVIA are eligible to receive a portion of OBVIA's funding, in accordance with the FRQ rules.

A maximum total of \$CA 125,000 may be requested per research project for a duration of one to three.

In the application form, you must detail the budget requested for your project on an annual basis and for each budget items.

For each budget item, you must provide a brief description and justification.

Explain the contributions that your partners and collaborators will make to your project. Please note that a letter of support from your partners is required and must be join to the application.

10) References (max. 2 pages)

Present relevant references and recent documentation related to your project.

11) Short resume and support letters from partners

The principal investigators and co-investigators of the project must provide a short CV (PDF format; <u>maximum of two pages)</u> that summarizes, in relation to the project and **in this order** :

- their academic and/or professional training;
- their relevant expertise and experience in relation to the project;
- their scientific or other achievements related to the project.

You must join a support letter from each of your partners to your submission (PDF format).

Appendix B - Criteria for Evaluating Research Projects

- Research team, attraction and training of the next generation of researchers and networking between OBVIA researchers (35%)
 - Experience and leadership skills of the co-principal investigators of the project according to career stage.
 - Expertise, complementarity and achievements of the co-researchers and collaborators,
 - Ability of the team to conduct interdisciplinary research.
 - Ability of the team to train Highly Qualified Personnel (HQP) in an interdisciplinary environment.
 - Potential to expose students to the practical aspects of research by encouraging the active participation of academic, public and private partners in the training process, including internships, co-supervision and joint workshops.
 - Existence, nature and degree of contributions from the private, public and non-profit sectors.
 - Potential for collaboration and networking

• Scientific and social relevance, precision of the project, its hypotheses and methodology (35%)

- Degree of scientific and social relevance of the project to the general objectives of the call.
- Ability to demonstrate how the project aligns with the concept of responsible innovation, with the mission of the OBVIA and addresses different axes and functions.
- Originality of the proposed research in terms of the hypotheses and questions proposed, the development of innovative and/or emerging research and/or methodology.
- Quality and precision of the project, its hypotheses and methodology.
- Clarity of short and long terms objectives, research approach and methodology.
- Demonstration of a high probability of achieving the objectives (including recruitment) within the funding period.

• Impact of the project, creative outreach, networking between the research team and partners, and potential for knowledge transfer (20%)

- Clarity and coherence of the project's potential impact and its creative influence.
- Ability to advance knowledge in emerging fields.

- Ability to disseminate research results (publications, conferences, presentations, media coverage) and to reach out in an original way to society or to the actors concerned.
- Identification of the means planned to promote active and innovative knowledge mobilization and relevance of the planned links with OBVIA's functions (other than Research and Creation).
- Potential for knowledge mobilization and transfer activities and participation in digital literacy and a better understanding of the societal impacts of AI and digital technologies.

• The budget (10%)

- Justification of the level, nature and duration of funding requested in relation to the objectives and milestones identified in the proposal.
- Clarity and relevance of each of the budget items.
- Appropriateness of the budget, including funds requested from OBVIA, contributions from other sources and potential leverage of OBVIA's funding.

Appendix C - Project evaluation and funding

1. Evaluation process, conflicts of interest and confidentiality

Projects will be evaluated according to the Criteria for Evaluating Research Projects (Appendix B) and the evaluation and funding decision process of the Fonds de recherche du Québec (FRQ) (<u>Common General Rules, section 4</u>). This process is intended to ensure the effective management of conflict-of-interest situations in which a participant in the evaluation process may find himself or herself, as well as the confidentiality of personal and others confidential informations submitted as part of the OBVIA's evaluation process. No committee member who has a conflict of interest may participate in the evaluation of a proposal.

1.1. Composition and role of the evaluation committee

The scientific evaluation of projects is carried out by an evaluation committee. The persons who sit on this committee are recognized for their competence in research and for their knowledge of the research objects, methodological approaches and disciplinary foundations specific to the applications to be evaluated.

The committee may call upon internal and external expertise. For this call for proposals, the evaluation committee will be composed of experts from Quebec, Canada and abroad.

The project evaluation committee evaluates projects according to the criteria described in Appendix B. The evaluation committee also considers the adequacy of the budget estimates with the nature of the proposed scientific activities and ranks the applications on merit. Committee members base their evaluation solely on the information contained in the application file and must not, for any consideration, share any information not included in the file.

Committee meetings may be held in person, by conference call or by video conference.

1.2. Managing conflicts of interest

The FRQ and the OBVIA require their evaluation committee members to meet the highest standards of integrity, impartiality and confidentiality in carrying out their duties. All persons attending an evaluation session are subject to conflict of interest rules. Any breach of these standards constitutes a breach of responsible research conduct and may be subject to sanctions by the FRQ.

Committee members must show great transparency in disclosing any interests that may influence, or appear to influence, their decisions. Upon nomination, evaluation committee members sign a Declaration of Interest, and must thereon stay vigilant to identify any real, potential or apparent conflict of interest that may arise during the evaluation process.

A conflict of interest can emerge from the presence of a tension between the duties or responsibilities of a person taking part in the evaluation process and his/her personal, professional, institutional or financial interests. The impartiality of the members could be compromised if their judgement or decisions may be influenced by conflicting interests. For

example, there may be a real, potential or apparent conflict of interest when a person taking part in the evaluation process is in one of the following situations:

- a) the person stands to gain a personal benefit (or suffer a personal disadvantage) of a professional, institutional, financial or other nature, resulting from the conduct of a research support activity undertaken by the Fonds2;
- an immediate family member (spouse, child or parent) or person of special interest stands to gain a personal benefit (or suffer a personal disadvantage) of a professional, institutional, financial or other nature, resulting from the conduct of a research support activity undertaken by the Fonds;
- c) a friend, extended family member or others with whom the person has a close relationship stands to gain a personal benefit (or suffer a personal disadvantage) of a professional, institutional, financial or other nature, resulting from the conduct of a research support activity undertaken by the Fonds;
- d) the person maintains a recent or significant professional relationship that could create a favorable or negative bias (conflictual relationship) with another person who stands to gain a personal benefit (or suffer a personal disadvantage) of a professional, institutional, financial or other nature, resulting from the conduct of a research support activity undertaken by the Fonds;
- e) the person has an institutional, organizational or business relationship, or a disciplinary affiliation, that could bias the conduct of a research support activity undertaken by the Fonds or its outcome;
- f) any other situation that suggests a real, potential or apparent conflict of interest.

Conflict of interest management measures are taken to ensure the integrity and impartiality of the evaluation process, as specified in the *internal rules for the application of the Policy for the Responsible Conduct of Research to research support activities* (available only in French: *Règles internes pour l'application de la politique sur la conduite responsable en recherche aux activités en soutien à la recherche*).

Using the Declarations of Interest signed by evaluation committee members, the Fonds makes every effort to avoid placing evaluators in a conflict of interest situation. Any conflict of interest that comes to light during the application evaluation process must be disclosed by the committee member in question as quickly as possible.

1.3. Integrity of the review process

At no time may applicants or their institutional authorities make contact with evaluation committee members, unless such contact is specified as part of the evaluation process. Similarly, evaluation committee members must not make contact with applicants, unless such contact is specifically indicated in the evaluation process. The identities of evaluation committee members are kept confidential to avoid any attempt at collusion. The Fonds reserve the right to withdraw an application from competition if there is any inappropriate intervention, lobby, undue influence or collusion during the evaluation process, as stipulated in the *Policy for the Responsible Conduct of Research*.

1.4. Recommendation and approval by the Scientific Committee

The final ranking of the projects is the result of the analysis carried out by the co-leaders of the Research and Creation function based on the evaluation of the projects by the evaluation committee.

The report of the co-leaders of the Research and Creation function is submitted to the OBVIA's Scientific Committee for approval. Once approved, the ranking is final and without appeal.

2. Grants Payment, Use of the Grant and Monitoring Reports

2.1. Grants payments

OBVIA research grants are awarded in two or three payments over one to three years.

The first payment is made according to the terms and conditions specified in the award letter and within weeks of the announcement of the results. Subsequent payments are conditional on the submission of progress reports and satisfactory progress of the project.

2.2. Use of the Grant

The grant must be used in accordance with the budget presented in the project, including funds for student personnel, postdoctoral fellows and research professionals. The budget is an integral part of the scientific evaluation and any substantial changes (greater than 15%) to the budget must be requested.

The grant must be used in accordance with the budget presented in the application, including funds for student personnel, postdoctoral fellows and research professionals. The budget is a part of the scientific assessment and any substantial changes (greater than 15%) to the budget must be requested.

2.3. Progress and final reports

The principal investigator is required to submit progress reports by the dates and in the format specified in the award letter.

The principal investigator is required to submit a final project report by the date and in the format specified in the award letter, as well as a final financial statement prepared by the institution managing the funds.

2.4. Availability of funds

The grants awarded by the OBVIA in the context of calls for innovative projects are conditional on the availability of funds and in particular on the payment and renewal of the financial grant by the Fonds de recherche du Québec. If funds are not available, the amount of the grants may be modified at any time upon approval by the Scientific Committee.