IVADO

# IVADO R³AI RESEARCH CLUSTERS (2027-2030)

## Call for Proposals

## Guidelines

CANADA FIRST RESEARCH EXCELLENCE FUND | APOGÉE CANADA FONDS D'EXCELLENCE EN RECHERCHE

Québec

## TABLE OF CONTENTS

This call aims to fund Research Clusters that will deliver IVADO's scientific program. This scientific program is anchored in IVADO's Canada First Research Excellence Fund (CFREF) funding and application. IVADO currently supports research in ten thematic areas: **the neuro-AI gap, machine learning, NLP, implementation and deployment science, EDI and Indigenous communities, molecules, the environment, health systems, and supply chains** and **safety**.

As part of IVADO's commitment to CFREF, these ten thematic areas must be covered by the set of funded Research Clusters. This call is an opportunity to **add up to three new thematic areas** to this list.

## 1 Context

R³AI – Robust, Reasoning and Responsible Artificial Intelligence[1] is a large-scale, long-term research and innovation initiative led by IVADO in partnership with five Québec universities (U5 - Université de Montréal, Polytechnique Montréal, HEC Montréal, Université Laval and McGill University) and funded by Canada First Research Excellence Fund (CFREF). Its goal is to reshape the scientific, technological and ethical foundations of artificial intelligence (AI) by shifting paradigms and developing AI systems that are more robust, capable of reasoning and responsible. This entails generating advances in AI and machine learning with insights from diverse research fields and sectors.

The R³AI research flagship program is organized around intersectoral Research Clusters that are designed to achieve the objectives of developing and deploying R³AI. Achieving these goals requires ambitious scientific programming capable of delivering wide-reaching, transformative impact. These Research Clusters federate academic expertise, support coordinated research efforts, support knowledge mobilization and strengthen collaboration among universities, research centres, and external partners. They are intended to play a critical role in accelerating the scientific, societal, and economic impact of AI in Québec, Canada, and internationally.

## 2 Objectives

Building on the outcomes of the initial phase (2024-2026), IVADO is launching a new call for proposals (2027-2030) to ensure high research impact and to consolidate and strengthen the R³AI vision. In this context, proposals for Research Clusters submitted for funding under this second funding round are expected to meet the following objectives:

- Demonstrate strong scientific and project ambition, with a clear strategy to ensure high impact and equitable research outcomes.
- Demonstrate strong coherence and integration among all research activities carried out within the Research Cluster, grounded in a collaborative approach.

[1] https://ivado.ca/en/the-r3ai-vision-toward-a-robust-reasoning-and-responsible-ai/

- Enhance and promote the development of local, national and international research collaborations.
- reinforce partnerships with industry, government and other external stakeholders, in particular in Québec and Canada.
- Strengthen knowledge mobilization and support the development of the next generation of researchers and highly qualified personnel.
- Implement and conduct AI research in alignment with the IVADO Equity, Diversity, and Inclusion Action Plan 2025-2030.
- Envision and proactively pursue strategies to leverage and secure complementary funding beyond the support provided by IVADO, ensuring the long-term sustainability of existing research actions.

## 3 Research Clusters aligned with R³AI priorities

Consistent with the objectives that guided the initial deployment of the Research Clusters, IVADO strongly encourages the submission of research proposals aligned with the existing thematic areas[2]. Drawing on the initial phase (2024-26), **IVADO strongly supports the continuation and strengthening of successful research collaborations**, while offering the opportunity to refine or change the Research Cluster's leadership structure.

In addition, IVADO encourages the submission of Research Cluster proposals that explore emerging, high-potential directions in AI. Through this call, **IVADO intends to support up to three Research Clusters focused on novel research areas** that have the potential to shape the future of AI and its applications.

We particularly encourage proposals that align with one or more of the strategic priorities identified in Canada's National Artificial Intelligence Strategy. These priorities include, but are not limited to:

- Advancing safe, trustworthy, and responsible AI;
- Strengthen democracy, and privacy in the AI era;
- Supporting Indigenous leadership and participation in AI research and innovation;
- Accelerating the adoption and application of AI in strategic sectors, including Health and Life Sciences; Energy and Sustainable Resources; Transportation and Mobility Systems; Agriculture and Food Systems; Advanced Manufacturing and Robotics.

IVADO is committed to fostering collaborative and participatory approaches that values the diversity of traditional and contemporary knowledge. That includes co-creation with Indigenous people and communities and ensuring that Indigenous perspectives are meaningfully embedded into the research design, governance, knowledge production and dissemination. It also acknowledges that these approaches might take time to develop and to yield results, and the evaluation of the projects will take this into account.

[2] Existing thematic areas: neuro-AI gap, machine learning, Natural Language Processing, implementation and deployment science, Equity, Diversity and Inclusion and Indigenous communities, molecules, environment, health systems, and supply chains, safety.

Research Clusters - across any thematic areas - must demonstrate strong scientific ambition, with proposed research projects developed through a collaborative approach, and supported by clearly articulated objectives and anticipated outcomes (see **Section 2 - Objectives**).

## 4 Alignment with IVADO Equity, Diversity, and Inclusion Action Plan 2025-2030

As a CFREF funded initiative, IVADO is committed to transforming the discipline and the ecosystem of AI to become more equitable, diverse and inclusive. This vision is embodied in its Equity, Diversity, and Inclusion Action Plan 2025-2030, in which IVADO positions equity, diversity and inclusion (EDI) as essential to building AI that is robust, reasoning, and responsible.

The success of its implementation relies on embedding these principles across all levels and dimensions of its R³AI programming, including within the research ecosystem. IVADO therefore calls upon its research community to actively contribute to this structural transformation: by addressing current underrepresentations, enabling environments where everyone can fully contribute and ensuring the benefits of AI extend to all.

Within proposals, EDI principles should be substantially integrated through two complementary approaches: 1) application of these principles to research teams, to ensure equitable opportunities and the accessibility and inclusivity of research environment throughout the research cycle; and 2) integration of EDI considerations at each stage of the research process[3].

1) Applicants should make sure their governance, recruitment, collaboration and training practices account for and mitigate systemic barriers for members of underrepresented groups, including women, racialized persons, Indigenous Peoples, persons with disabilities, and members of 2SLGBTQI+ communities. For example, effective practices to ensure EDI considerations within team management include:

- Establishing clear commitments to EDI principles with defined accountability, ongoing training, and proactive communication.
- Fostering a safe, flexible, and supportive team environment with zero tolerance for harassment.
- Ensuring transparent, bias-aware recruitment of team members (including students) and equitable access to funding allocations, opportunities, mentorship, and career development.
- Building diverse candidate pools through community outreach and inclusive partnerships.
- Tracking progress on commitments to EDI principles using regular indicators, climate surveys, and corrective measures.

2) An EDI lens must be applied to the framing of research questions and study design, the data collection and analysis, and the dissemination of results methods. This includes, where relevant:

[3] For more information and resources on how to include EDI considerations in research, applicants can refer to the NSERC guide on integrating equity, diversity and inclusion considerations in research.

- Ensuring representative sampling or collecting of disaggregated data - research that involves or impacts human subjects are particularly expected to reflect on how factors such as sex, gender, race, age, disability and socioeconomic status that may affect research outcomes and the applicability of findings.
- Auditing for bias in models and datasets, developing systems that are continuously improved based on user feedback and favoring universally accessible tools and platforms.
- Adopting participatory or collaborative methods that meaningfully engage the communities most impacted in defining needs, choosing solutions, and evaluating outcomes.
- Reach diverse audiences through varied channels, adapted resources, and community engagement partnerships.

Personal information collection must be limited to what is needed and on the basis of voluntary self-identification. Data must be handled with strict confidentiality complying with the applicable data management policies. Proposals that involve Indigenous communities are strongly encouraged to establish early contact with communities and ensure that projects are in accordance with the federal standards, like the Indigenous Research Statement of Principles.

Integration of EDI principles within research teams and processes will be monitored and measured through submission of progress reports.

## 5 Funding and duration

IVADO will commit up to $20 million (CAD) over a maximum period of three years (March 1, 2027 - February 28, 2030) to support the implementation or consolidation of approximately 8 to 12 Research Clusters. The level of funding awarded to each Research Cluster will be determined based on the scope of the proposal and the total number of Research Clusters funded. Each Research Cluster is eligible for indicative funding of up to $1,950,000 for the entire funding period.

## 6 Timeline

- Deadline to submit the LOI: **July 31, 2026, at 11:59 p.m.** EDT (UTC-4)
- Expected date for invitation to the full proposal stage: **September 15, 2026**
- Deadline for submission of the full proposal: **November 19, 2026, at 11:59 p.m.**, EST (UTC-5)
- Notice of decision: **February 5, 2027**
- Funding start date: **March 1, 2027**

## 7 Team composition

Each Research Cluster must be led by **a single Principal Investigator (PI)**, supported by **up to three co-Principal Investigators (co-PIs)**, and additional **co-Investigators (co-Is)**. The suggested team size is 4 to 8 members, including PI, co-PIs and co-Is. Research Clusters are also encouraged to include collaborators and partners, as appropriate (**Table 1**).

**a) Principal Investigator (PI)**

A **PI** is an independent researcher who conducts research activities autonomously and holds an academic or research appointment at one of the five universities leading IVADO's activities (U5). The PI is responsible for providing overall scientific leadership and strategic direction; overseeing research coordination and activity monitoring, ensuring the implementation of the scientific program, and fostering engagement within the research community (see **Section 8 – Application process**). They must demonstrate proven experience in leading large scale, collaborative research initiatives, as well as recognized expertise in the proposed research area. The PI is eligible for funding.

The PI also serves as the primary point contact with IVADO on all matters including - but not limited to - budget oversight, communications, and EDI considerations.

An individual may serve as PI or co-PI for only one Research Cluster.

**b) Co-Principal Investigator (co-PI)**

A **co-PI** is an independent researcher who conducts research activities autonomously and holds an academic or research appointment at one of the U5. They support the scientific leadership of the Research Cluster and contribute to the implementation of the research activities, in collaboration with the PI. Co-PIs are eligible for funding.

An individual may serve as PI or co-PI for only one Research Cluster.

**c) Co-Investigator (co-I)**

A **co-I** is an independent researcher who conducts research activities autonomously and holds an academic or research appointment at a university in Québec or elsewhere in Canada, and who contributes to the design and execution of the planned research activities within the Research Cluster. Participation as a partner across multiple Research Clusters is not subject to a limit. Co-Is are eligible for funding.

**d) Collaborators**

A **Collaborator** is an individual who contributes to the execution of the research project or provides a specific service or expertise within the research activities (e.g., access to equipment, provision of a specific product, statistical analysis, access to a patient population). They may be based in Canada or abroad. They may come from any sector (academia, government, non-for-profit, private industry, and community organizations) and are not required to be affiliated with an academic institution. Participation as a partner across multiple Research Clusters is not subject to a limit. Collaborators are not eligible for funding.

**e) Partners**

A **Partner** is any organization with which the PI, co-Pi(s) or co-I(s) have a relationship that is characterized by mutual cooperation, collaboration and shared responsibility to achieve a specific research goal. A partner may be based in Canada or abroad. Participation as a partner across multiple Research Clusters is not subject to a limit. Partners are not eligible for funding.

IVADO supports the development of the next generation of researchers. Proposals are required to integrate **Early Career Researchers (ECRs)**[4], either as PIs, co-PIs, or co-Is, within the research team, with a minimum of 10% of the total budget dedicated to their involvement.

IVADO welcomes and encourages the participation of **IVADO Professors** in the Research Clusters.

**Table 1**. Key roles, responsibilities, eligibility criteria, and funding eligibility for team members.

| Role | Key responsibilities | Eligibility | Funding eligibility |
|---|---|---|---|
| Principal Investigator (PI) | Provides overall scientific leadership and strategic direction; oversees research coordination, activity monitoring, and implementation of the scientific program; fosters engagement within the research community. | Must be an independent researcher conducting research autonomously and hold an academic or research appointment at one of the five IVADO member universities (U5). | Eligible |
| Co-Principal Investigator (co-PI) | Supports the scientific leadership of the Research Cluster and contributes to the implementation of the research activities, in collaboration with the PI. | Must be an independent researcher conducting research autonomously and hold an academic or research appointment at one of the five IVADO member universities (U5). | Eligible |
| Co-Investigator (co-I) | Contributes to the design and execution of research activities within the Research Cluster. | Must be an independent researcher conducting research autonomously and hold an academic or research appointment at a university in Québec or elsewhere in Canada. | Eligible |
| Collaborator | Contributes to the execution of the research project or provides a specific service or expertise within the research activities (e.g., access to equipment, specialized materials, statistical analysis, or access to a target population). | Any individual contributing to the project's execution or providing a specific service; may be based in Canada or abroad. | Not eligible |
| Partner | Contributes to the co-development and co-implementation of the research project through a relationship of mutual cooperation, shared responsibilities, and common objectives. | Any organization collaborating with the PI, co-PIs, or co-Is to achieve defined research objectives; may be based in Canada or abroad. | Not eligible |

IVADO values collaboration as a means of achieving impact and facilitating knowledge mobilisation. Research Clusters are encouraged to **establish partnerships** with industry, decision makers, under-

[4] For the purposes of this programme, an **Early Career Researcher (ECR)** is defined as a researcher within five years of their first independent research appointment or PhD completion.

represented communities, knowledge users and other external stakeholders - particularly in Québec and Canada - to ensure alignment of research impact with societal needs.

IVADO believes that a diverse, open, and welcoming environment enhances both research activities and outcomes. Proposals should demonstrate how the team's composition - from the initial building of the team to their roles throughout the stages of the research process - will contribute to strengthening research activities and improving results[5].

## 8 Application process

The application process consists of two stages. The first stage involves the **submission of a Letter of Intent (LOI)**, followed by the second stage, which consists of **submitting a full proposal**. LOIs and proposals may be submitted in either French or English.

**For the first stage (LOI), applicants are required to:**

1. Complete the LOI application form (*Word file*)
2. Complete the overall budget form (*Excel file*)
3. Collect CVs (from any Canadian funding agency) from the PI, co-PI(s), and co-I(s)
4. Submit documents (1), (2) and (3) using the LimeSurvey form

The forms and the Call for Proposals Guidelines are available on the IVADO website.

Submission of a LOI (see **Appendix A and Appendix C**) is mandatory and serves to assess the administrative compliance and research excellence of the proposed Research Clusters and to select the projects that will be invited to submit a full proposal, while providing applicants with initial feedback.

A limited number of research teams will be invited to proceed to the second stage, during which more detailed full proposals will be submitted. Selection at the LOI stage (see **Section 8.1 – Letter of Intent evaluation**) considers both the intrinsic quality of each proposal and how well it contributes to a coherent, balanced set of projects aligned with the call's objectives, i.e. the proposals are not only evaluated *against* other proposals, but also *in synergy* with these other proposals.

To proceed to the full application stage, successful applicants must agree to the public disclosure on IVADO's website of selected elements of their LOI (project title, project summary, and the names and institutional affiliations of the PI, co-PIs, and co-Is). This disclosure will support the organization of networking events and foster a more open process involving relevant members of the community.

[5] https://ivado.ca/en/equity-diversity-and-inclusion/

The applications selected for the full proposal stage (see **Appendix B and Appendix C**) – although expected to have a high success rate - will continue to undergo the evaluation process, and only those meeting a high level of excellence across all criteria (see **Section 8.2 – Full proposal evaluation**) will be funded.

During the full proposal stage, applicants may consult IVADO and will receive feedback to support the development of their full proposals. IVADO also seeks to facilitate constructive exchanges and collaboration. Networking opportunities will be provided, and applicants are encouraged to take advantage of them to strengthen their teams and foster new collaborations among, for example, researchers, industrial partners, international collaborators, students and postdoctoral fellows.

### 8.1 Letter of Intent evaluation

LOIs must demonstrate a clear alignment with the following four criteria (see **Appendix A** for more details):

**a) Strategic positioning**

- Alignment with the R³AI objectives.

**b) Scientific quality**

- Clear identification of the major scientific problem to be addressed and objectives of the proposed research.
- Originality, ambition and transformative nature of the project.

**c) Anticipated outcomes and impacts**

- Description of the anticipated outcomes and impacts, including explicit consideration of implications for underrepresented groups facing systemic barriers.

**d) Team strength**

- Composition of the team (including leadership) reflecting the diversity of the community, and processes to ensure the research environment is and remains open and inclusive.
- Demonstrated leadership and expertise of the PI, co-PIs, and co-Is and overall expertise of the research team.
- Concrete and well-articulated plans demonstrating the coordination and active engagement of the interdisciplinary research team.

**e) Budget**

- **Budget justification**. Alignment of the requested annual and total budget with the proposed project activities (see **Appendix C**).

For the LOI, the evaluation criteria are weighted as follows: 50% for the Scientific Quality criterion, 30% for Anticipated outcomes and Impacts, and 20% shared between the Team Strength and Budget criteria. The Strategic Positioning criterion is assessed separately and does not factor into the overall weighting.

LOIs will be evaluated by an evaluation committee composed of external experts with expertise aligned to the subject areas of the submitted LOIs. The strategic positioning of each LOI will be assessed by a joint committee composed of IVADO's internal (co-)scientific leadership and external experts. At the conclusion of this stage, feedback will be provided to all applicants. The decision to invite the submission of a full proposal will be made by IVADO leadership based on the assessment results.

### 8.2 Full proposal evaluation

Full proposals will be evaluated based on the four criteria below (see **Appendix B** for more details):

**a) Strategic positioning**

- Alignment with R³AI objectives[6]
- Local, national and international collaborations, including collaborations with IVADO's established partners.

**b) Scientific quality**

- Clear identification of the major scientific problem to be addressed and objectives of the proposed research[6]
- Originality, ambition and transformative nature of the project[6]
- Robustness of the methodological approach, including the underlying concepts, methods, and assumptions, and scientific rigour.
- Integration of equity, diversity and inclusion (EDI) considerations into all aspects of the research process and, where appropriate, adherence to indigenous engagement principles.
- Interdisciplinarity nature of the proposed Research Cluster.

**c) Anticipated outcomes and Impacts**

- Description of the anticipated outcomes and impacts, including explicit consideration of implications for underrepresented groups facing systemic barriers[6]
- Credibility of the knowledge-mobilization strategies (e.g.: organization of Thematic Semesters), including planned measures and identified target audiences.
- Involvement of knowledge/end users (e.g., citizens, policymakers, communities, industry, and other relevant stakeholders) to maximize research impact, whether planned or, preferably, formally confirmed.
- Training plan for highly qualified personnel (HQP) and the next generation of researchers.

**d) Implementation**

- Credibility and feasibility of the work plan, including the clear identification of deliverables and milestones covering all major components of the project (e.g., scientific activities, knowledge mobilization).

[6] As defined in the LOI, and potentially refined following evaluation

- Clear definition and justification of the roles and responsibilities of each team member in delivering the proposed research.
- Identification of key research risks and corresponding mitigation strategies.
- Strategies to leverage existing resources and to secure complementary funding.

**e) Team strength**[6]

- Composition of the team (including leadership) reflecting the diversity of the community, and processes to ensure the research environment is and remains open and inclusive.
- Demonstrated leadership and expertise of the PI, co-PIs, and co-Is and overall expertise of the research team.
- Concrete and well-articulated plans demonstrating the coordination and active engagement of the interdisciplinary research team.

**f) Budget**

- **Budget justification.** Alignment of the requested annual and total budget per funded researcher with the proposed project activities (see **Appendix C**).

For the full proposal, the evaluation criteria are weighted as follows: 50% for the Scientific Quality criterion, 30% for Anticipated outcomes and Impacts, and 20% shared among the Implementation, Team Strength and Budget. The Strategic Positioning criterion is assessed separately and does not factor into the overall weighting.

Full proposals will be evaluated by an external evaluation committee with expertise aligned to the thematic areas of the proposed Research Clusters. Strategic positioning of proposals will be assessed by a joint committee composed of IVADO internal scientific leadership and external experts. The final funding decision will be made by IVADO leadership based on the assessment results.

## 9 Commitments

As recipients of funds under the Research Clusters, researchers commit to:

- Submit reports on time:
  - **Progress reports**. Each funded Research Cluster will be required to submit progress reports at the end of Years 1 and 2, outlining progress achieved, milestones reached, challenges encountered, and any adjustments to the work plan. Reports must also document knowledge mobilization activities, partnerships, alignment with IVADO's EDI Action Plan through the integration of EDI principles within research teams and processes and alignment with program objectives.
  - **Final report**. Each funded Research Cluster will be required to submit a final report at the end of the funding period, providing a comprehensive overview of the Research Cluster's activities, scientific outcomes, achievement of objectives, key results and impacts, lessons learned.

    - **Financial reports**. At the end of each financial year, host institutions of funded researchers must complete and submit a statement of expenses using the F-300 form provided by IVADO.
- Ensure that their projects comply with all ethical requirements. Research involving sensitive data, human participants, animals, or potential risks must be reviewed and approved by the appropriate ethics committee. No funding will be disbursed without proof of ethical approval when required. Ethical compliance is a prerequisite for both the award and the continued receipt of funding. Project timelines and activity planning must be structured to align with the funding period and to adequately account for potential delays in the ethical approval process.
- Notify IVADO of any change in the composition of the research team or in the professional situation of the PI, co-PIs or co-Is. IVADO reserves the right, after examining the request for modification, to adjust its financial contribution, or even suspend it, if the new conditions are no longer compatible with the terms and conditions of the grant.
- Provide IVADO with the necessary information related to the research conducted whenever data is required for Tri-Agency reporting.
- Acknowledge the support of IVADO and the Canada First Research Excellence Fund (Apogée Canada) in scientific communications (e.g., articles, conferences, websites, workshops, interviews).
- Comply with the Tri-Agency (CIHR, NSERC and SSHRC) Open Access Policy on Publications. Researchers are encouraged to publish the results of their research (e.g. articles, recordings of presentations, source code, datasets) in compliance with the intellectual property rules governing their specific situation.
- Commit to establishing linkages between the Research Cluster the IVADO's Scientific Thematic Semester Program and the IVADO Visiting Scholar Program.
- A statement regarding conflicts of interest from the Research Cluster leadership team will be required upon submission of the full application.
- Ensure that funds are used according to the funding rules: disbursements for the second and third years will be contingent upon at least 70% of the previous year's budget having been spent, and upon IVADO's receipt and approval of the annual progress report. This report consists of two components: a scientific report and a statement of expenses, both submitted using IVADO's prescribed templates.

**APPENDIX A – Letter of Intent application content**

The Letter of Intent may be submitted in either French or English. Maximum 5 pages if written in English; maximum 6 pages if written in French[7].

**a) Strategic positioning** *(suggested: 1 page)*

**Alignment with R³AI.** Describe how the proposed project aligns with R³AI objectives and contributes to their achievement.

**b) Scientific quality** *(suggested: 1 ½ page)*

**Scientific problem and research objectives.** Provide an overview of the current state-of-the-art, clearly identify the main scientific problem addressed by the proposed research, and outline the research objectives, explaining how they are designed to address this problem.

**Originality, ambition, and transformative nature of the project.** Outline the originality and ambition of the proposed project, and demonstrate how this advances research in the field and goes beyond the current state of the art.

**c) Outcomes and impacts**[8] *(suggested: 1 page)*

Describe the **anticipated outcomes and impacts** of the proposed research, including explicit consideration of implications for underrepresented groups facing systemic barriers. Please explain both short- and long-term impacts.

**d) Team strength** *(suggested: 1 page + CV)*

**Composition of the interdisciplinary team**. Describe the extent to which the composition of the research team reflects the diversity of the broader community (e.g., career stage, disciplines, and other relevant dimensions), and how this diversity is meaningfully integrated.

**Demonstrated leadership and expertise.** Describe the leadership and expertise of the PI, as well as the expertise of other team members. Outline the governance structure and the mechanisms in place to ensure effective project management, progress monitoring, and clear reporting responsibilities.

**Community engagement and team coordination.** Describe the strategies to ensure sustained engagement of the project team as well as the wider research community. Outline the approaches used

[7] When drafting the text in a specific language, please take into account the suggested length for each section as well as the maximum total number of pages allowed (5 pages for English and 6 pages for French).

[8] These may include, without being limited to the following outcomes and impacts: scientific and research (e.g., significantly improving robustness and interpretability of AI models), technological and innovation (e.g., enabling new applications or services based on AI innovation), societal (e.g., addressing societal challenges, such as inequality, accessibility or sustainability), economic (e.g., strengthening competitiveness or productivity in specific sectors), environmental (e.g., supporting environmental monitoring or resource optimization), institutional and capacity-building (e.g., strengthening interdisciplinary collaboration between AI and domain sciences).

to foster a welcoming and collaborative environment, including the recruitment and onboarding of new members and the implementation of inclusive practices. This should also include how collaboration with local, national and international partners will be established and maintained.

**e) Budget** *(suggested: ½ page)*

Explain how the requested budget aligns with and supports the proposed research and demonstrate the coherence between planned activities and requested resources for the three-year period. All requested amounts must be justified and aligned with the proposed research activities (**Appendix C**).

**APPENDIX B – Full proposal application content**

The full proposal may be submitted in either French or English. Maximum 8,5 pages if written in English; maximum 10 pages if written in French[9].

**a) Strategic positioning** (*suggested: 1 page*)

Describe how the proposed **project aligns with R³AI objectives** and contributes to their achievement.[10]

Describe **local, national and international collaborations**, including collaborations with IVADO's established partners, and how they contribute to achieving the proposed objectives.

**b) Scientific quality** (*suggested: 3 pages*)

**Scientific problem and research objectives.** Provide an overview of the current state-of-the-art, clearly identify the main scientific problem addressed by the proposed research, and outline the research objectives, explaining how they are designed to address this problem[10].

**Originality, ambition, and transformative nature of the project.** Outline the originality and ambition of the proposed project and demonstrate how the project advances research in the field and goes beyond the current state of the art[10].

**Methodological approach**. Describe the methodological approach underpinning the proposed research. Please address key concepts, assumptions and methods. Explain why this approach is appropriate to address the research objectives.

**Equity, diversity and inclusion (EDI) considerations.** Explain how an EDI lens is applied throughout all the stages of the research process, including the formulation of research questions, study design, methodology (data collection, analyses, interpretation), and dissemination of results.

**Indigenous engagement.** Where relevant, describe how indigenous engagement principles are considered and implemented, including methodologies, approaches to work with communities and data protection considerations.

**Interdisciplinarity nature of the proposed research:** Explain how the integration of knowledge, methods, tools and concepts from different disciplines supports the achievement of the proposal's objectives.

**c) Outcomes and Impacts** (*suggested: 1 page*)

Describe the **anticipated outcomes and impacts** of the proposed research, including explicit consideration of implications for underrepresented groups facing systemic barriers. Please explain both short- and long-term impacts[10].

[9] When drafting the text in a specific language, please take into account the suggested length for each section as well as the maximum total number of pages allowed (8.5 pages for English and 10 pages for French).
[10] As defined in the LOI, and potentially refined following evaluation

**Knowledge mobilization.** Describe the knowledge mobilization strategies associated with the proposed research, including the planned measures and target audiences.

**Engagement of knowledge/end users**. Explain how the project meaningfully engages or plans to engage knowledge- and end-users (e.g., citizens, policymakers and, impacted communities, industry, or other relevant stakeholders). Describe how this engagement and collaboration will enhance research outcomes.

**Training plan for highly qualified personnel (HQP) and the next generation of researchers.** Describe the training plan for Highly Qualified Personnel (HQP), including trainees, skills development, and planned training activities.

**d) Implementation** (*suggested: 2 pages*)

**Work plan, deliverables and milestones.** Describe the work plan for the proposed research, clearly identifying major activities, deliverables and milestones across all key components of the project (e.g., scientific research, knowledge mobilization and training).

**Team composition, roles and complementarity**. Clearly identify and justify the roles and responsibilities of each team member in delivering the proposed research. Describe how the team's complementary expertise supports the achievement of the project's objectives. Explain how the team composition practices accounted for and mitigated systemic barriers for members of underrepresented groups.

**Key research risks and corresponding mitigation strategies**. Identify the key administrative, technical and scientific risks associated with the proposed research, and outline the mitigation strategies to address them.

**Complementary funding**. Describe any strategies in place to leverage or secure complementary funding. Where applicable, identify existing or anticipated sources of additional resources.

**e) Team strength** [10] (*suggested: 1 page + CV*)

**Composition of the interdisciplinary team.** Describe the extent to which the composition of the research team reflects the diversity of the broader community (e.g., career stage, disciplines, and other relevant dimensions) and how this diversity is meaningfully integrated.

**Demonstrated leadership and expertise.** Describe the leadership and expertise of the PI, as well as the expertise of other team members. Outline the governance structure and the mechanisms in place to ensure effective project management, progress monitoring, and clear reporting responsibilities.

**Community engagement and team coordination**. Describe the strategies to ensure sustained engagement of the project team as well as the wider research community. Outline the approaches used to foster a welcoming and collaborative environment, including the recruitment and onboarding of new

members and the implementation of inclusive practices. This should also include how collaboration with local, national, and international partners will be established and maintained.

**f) Budget** (*suggested: ½ page*)

**Budget justification.** Explain how the requested budget aligns with, supports the proposed research, and demonstrate the coherence between planned activities and requested resources. The three-year budget justification must include a detailed allocation clearly indicating the amounts to be granted to each team member - PI, co-PIs, co-Is - for the research activities they will carry out. All requested amounts must be justified and aligned with the proposed research activities (see **Appendix C**).

**APPENDIX C – Budget form**

Funds must be used in accordance with the Canada First Research Excellence Fund (CFREF)[11] Administration Guide regarding eligible direct costs, as well as with the applicable institutional policies of the institution to which the funds will be transferred. Please note that funds awarded to each Research Cluster will be transferred to the researchers designated as recipient of the funds, in accordance with the allocation specified in the approved budget submitted with the full proposal. Any transfer of funds is subject to IVADO's approval.

**Description of expenses**

The researchers designated as the recipients of the funds must indicate the amounts requested for each of the eligible expenses[12] listed below.

**1. Compensation-related expenses (Salaries, stipends, and benefits)**

**1.1. Salaries paid to students**

Costs related to the remuneration of undergraduates, master's and PhD students for their contributions to the project are eligible. These include salaries, stipends, benefit and allowable allowances in accordance with institutional policies. IVADO encourages the participation of students at all levels of study in each Research Cluster.

**1.2. Salaries paid to non-students**

Costs related to the remuneration of postdoctoral fellows, research associates, technical research support staff (e.g., technicians), professionals, and administrative research staff (managers, administrators, research assistants).

**2. Professional and technical services, contracts**

Eligible costs related to the remuneration of expert advisors required for research activities, such as honoraria for peer review and other professional and technical services. Funds may be used to support academic participants with professional training and their development in novel techniques required for the conduct of the research initiative.

**3. Dissemination of research results and networking**

Costs related to dissemination and mobilization of research results, such as the preparation and publication of scientific articles, reports, policy briefs, and other knowledge transfer materials, as well as

[11] https://www.cfref-apogee.gc.ca/program-programme/admin_guide-guide_administration-eng.aspx

[12] Guidelines for budget allocation by Research Cluster: Salaries and benefits and Professional and technical services, contracts by (78%); Equipment, including computers and electronic communications (10%); Travel and accommodation expenses (5%); Dissemination of research results and networking (4%); and Materials, supplies, and other expenditures (3%).

participation in conferences, workshops and seminars. This category also covers expenses associated with organizing or participating in networking activities aimed at fostering collaboration, strengthening partnerships, and enhancing the visibility and the impact of research, including engagement with academic, industry, public sector, and community stakeholders.

**4. Equipment, including computers and electronic communications**

Costs related to computers, tablets, modems, new technologies, specialized software, and other computer equipment necessary for research (e.g., for data collection, analysis) that is not normally provided by the institution, subject to appropriate justification of their necessity in relation to the funded research. This includes purchase of specialized or non-standard equipment required for the successful completion of the project. Cell phones, smartphones, and other electronic devices, if these are necessary for the research (for example, for data collection).

**5. Materials, supplies and other expenditures**

Purchase of consumable materials and general supplies necessary for conducting project activities. Costs of acquiring, operating and maintaining research equipment, research vehicles and other resources required for research.

**6. Travel and accommodation expenses**

Travel and subsistence expenses[13] (meals, accommodation) for professors, research staff, postdoctoral fellows, students, visiting researchers and expert advisors, covering transportation, lodging, and per diem costs to carry out project activities (e.g., fieldwork, meetings, workshops, or conferences) directly related to their participation in the project.

[13] Reasonable incidental costs.