TIPS: NEW FRONTIERS IN RESEARCH FUND (NFRF) – TRANSFORMATION 2026 LETTER OF INTENT (LOI)

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OVERVIEW

This document is intended to guide you in completing various sections of the LOI and fully addressing the assessment criteria. This document is not intended to replace a careful review of the Transformation competition overview or the LOI instructions.

Assessment Criteria:

The multidisciplinary panel will assess your LOI using the following merit indicators:

MERIT INDICATOR	RATING SCALE
Interdisciplinarity Equity, diversity, and inclusion in research practice (EDI-RP) and support of early career researchers (ECRs)	Pass / Fail
High risk (20%) High reward (60%) Feasibility (20%)	Assessed on a seven-point rating scale ranging from “Exceptional” to “Poor”

See detailed expectations for each criterion in the merit indicators. Given the highly competitive nature of this funding stream, successful LOIs will likely need to achieve all “Exceptional” scores, or at least a mix of “Exceptional” and “Excellent.”

LIST OF PARTICIPANTS

The team should include world-leading experts in all disciplinary areas and, wherever possible, members from multiple institutions and regions.

Team members (NPI, co-PIs, co-applicants) identified at the NOI stage are expected to remain part of the project team. Additional team members can be added at the LOI stage. All **core members** of the team must be confirmed when the LOI is submitted. Note that collaborators do not need to create an account in the Convergence Portal.

RESEARCH PROPOSAL (maximum 10 pages—attach as supporting document)

General Tips

- The LOI will be reviewed by a multidisciplinary/multisectoral panel with a diversity of subject-matter expertise.
  - Write for a multidisciplinary audience, including those who may have limited familiarity with the proposed topic; minimize the use of technical language and abbreviations and define specialist terms when they are first used.
  - At the same time, provide enough information and detail to be persuasive to reviewers who have expertise in the topic.
  - Ask a subject-matter expert *and* someone outside the research area to read the proposal to ensure it is clear and compelling to both.
- Clearly convey why the proposed project is transformative—you want to “sell” the project and get the panel excited about the research and its potential impacts.
- Use the program’s merit indicators to inform the structure of your LOI, addressing all of the bullet points assessed at the LOI stage.
- See instructions for attachments for detailed formatting guidelines.

Below you will find detailed guidance on how to approach the **four key areas** that must be addressed in the Research Proposal. Make it easy for the reviewers to find what they are looking for by using headings for each of the key areas, as well as relevant sub-headings (e.g., “Expertise,” “Workplan,” “EDI in Research Design,” etc.). There is no prescribed order of information or allocation of space.

Novelty of Approach

- The “high risk” criterion score will reflect the persuasiveness of the argument regarding novelty; focus on crafting a compelling narrative about the innovative, groundbreaking nature of the approach.
- Describe, in concrete and explicit terms, how your research approach is novel, world-leading, a “first of its kind”, and expected to lead to real change.
- Clearly explain the current gaps in knowledge/technology and describe how your approach will fill these gaps.
- Describe the potential challenges associated with implementation and how you plan to address these challenges. Explain why your approach is likely to succeed where others have failed.
- Describe how the project integrates the knowledge of world-leading experts across disciplines.

Interdisciplinarity

- The “interdisciplinarity” criterion is assessed on a pass/fail basis, and the onus is on the applicant to demonstrate that the project **integrates** knowledge and methods from different disciplines to bring a novel perspective and approach to the defined challenge.
- Explicitly demonstrate that the project is *inter*disciplinary, rather than *multi*disciplinary by explaining that it is a coherent “whole-stack” project informed by the integration and synthesis of disciplinary expertise, as opposed to a series of siloed disciplinary projects. Explain how the different disciplines will interact together and how the different aspects or aims of the project are integrated.

- Provide a compelling justification for why the project requires and will benefit from an interdisciplinary approach. Justify the particular combination of disciplines involved. Avoid generic language about the value of interdisciplinarity in general.
- Explain how researchers from the different disciplines will be integrated into the project and how they will collaborate across the different aims.
- Describe the researchers' prior experience in interdisciplinary research collaborations and indicate if team members have worked together previously. For new collaborations, describe your approach to building successful relationships.
- Consider including a figure/matrix presenting the relationship between the team members' expertise, the project themes, and the methodology.

Feasibility

- Feasibility is reviewed in greater detail at the full application stage; consult the merit indicators for more information on which Feasibility elements are assessed at the LOI stage.
- The overall rating for Feasibility cannot be higher than the rating of any single element in the Feasibility matrix. For example, if a reviewer scores most of the elements as Very Good, but one element is Poor, then the overall rating for Feasibility cannot be higher than Poor.
- Articulate the challenge/problem you are addressing, demonstrating that it is significant.
- Demonstrate the team's awareness of the current state of research in this area. Include a concise literature review/state of the field.
- Include specifics on *how* the team will carry out the research (methods and approaches), as well as a realistic workplan and timeline. Emphasize the project's interdisciplinarity and how the different disciplines will be integrated. Give examples of where your methods have been successfully used in other fields.
- Equity, diversity, and inclusion in the research design (EDI-RD) must be addressed in the proposal, if applicable to the research. If the project integrates EDI-RD, this point should be explained for all research aims (e.g., if there are three research aims but EDI-RD is mentioned in relation to only two of these aims, reviewers may assign a lower score).
- Demonstrate that the team has the resources necessary to complete the proposed project, clearly describing the availability of all required resources, infrastructure, facilities, etc.

Anticipated Transformation, Change or Impact

- The "high reward" criterion is worth 60% of the total score at the LOI stage—it is especially important to emphasize the transformative potential of your project at this stage.
- Describe the anticipated impacts in concrete terms, including any significant benefits for Canadians (e.g., the project will meet socio-economic needs, produce a scientific breakthrough, improve health outcomes, address environmental challenges, etc.).
- Describe how the research will have a wide and diverse reach and demonstrate the likelihood that the impact will be realized. Describe the pathways for achieving this impact, including plans for knowledge mobilization and translation, and identify specific end-users and/or partner organizations that will help realize this impact.
- Connect the specific research objectives/aims to the research outcomes and their impact on particular regions, populations, sectors, etc.
- Describe concrete, realistic, and measurable short-term benefits, as well as the wider and longer-term benefits and impacts.
- Ensure that information regarding anticipated impacts is specific and well-defined. Demonstrate impact with tangible examples wherever possible. Avoid broad or high-level statements.

EQUITY, DIVERSITY & INCLUSION IN RESEARCH PRACTICE AND SUPPORT OF EARLY CAREER RESEARCHERS – OVERVIEW

NFRF Transformation LOIs must demonstrate the team's commitment to equity, diversity, and inclusion in research practice (EDI-RP), as well as the meaningful integration of early career researchers (ECRs).

General Tips for Addressing EDI-RP and ECRs

- **Do not simply copy and paste** text from this document into your application. Please tailor and customize these suggestions to fit the EDI context that is specific to your research team and disciplines.
- The EDI-RP section should identify and describe **specific** and **intentional** practices that proactively address EDI in recruitment practices, training/mentorship, and the research and training environment. This specificity will not only be convincing to reviewers but will also enable your team to develop and carry out an EDI plan on an **ongoing basis**.
- Actions should remove barriers for individuals from all groups, including women, Indigenous Peoples, members of racialized groups, persons with disabilities, and members of 2SLGBTQIA+ communities.
- Be sure to identify practices that are feasible and that you can meaningfully implement over the life of the research grant (and beyond).
- Structure the content of the EDI-RP and ECR sections around the merit indicators, ensuring that you directly speak to the points in the "Pass" column.
- **Do not provide any demographic/self-identification information about team members or trainees**, including the number of team members belonging to various under-represented or equity-deserving groups. The focus is on the team's commitment to EDI and the support of ECRs, as demonstrated by concrete plans and actions, not on its demographic profile.

EDI ANALYSIS OF CONTEXT (maximum 2,500 characters)

This part of your LOI must describe the EDI context of the team, focusing on the specific circumstances or EDI challenges related to the team, the institutions, or the research disciplines.

- You might start by asking the following questions:
  - Is there diversity in the current team, or in the relevant research fields in general?
  - If no, what are some of the key explanations? What systemic barriers exist?
  - If yes, is this diversity the result of intentional actions or of chance? What can teams do to more **intentionally** engage and support members of under-represented groups?
  - What are the usual practices for recruitment and research training in your team or research disciplines? Are these practices fair and consistent?
  - Do all team members and trainees feel included and supported in their success? Why or why not?
- When thinking about this context, point to **specific systemic barriers** and structural factors that have an impact on the disciplinary areas. For example, you could discuss some of the following barriers, as relevant, providing additional details specific to the team context:
  - The impact of unconscious bias in recruitment/hiring and peer review
  - Narrow definitions of excellence that undervalue emerging areas of research, non-traditional scholarship, or Indigenous ways of knowing

- ➢ Inequitable access to research, training, and career development opportunities
- ➢ A lack of role models/mentors for students, trainees, and junior faculty members from under-represented groups
- ➢ Exclusion from networks, particularly informal networks
- ➢ Physical, sensory, and other barriers experienced by researchers with disabilities
- ➢ Disproportionate service burdens faced by faculty members from under-represented groups
- ➢ Isolation, microaggressions, and stereotyping for those who are especially under-represented in their department or discipline
- ➢ The "hidden curriculum" in research (norms, practices, unwritten rules), which can be exclusionary

- If you require additional resources on systemic biases and barriers, please contact Andrea Gill, Manager, Inclusive Excellence & Proposal Development, at amk.gill@utoronto.ca.
- As noted in the merit indicators, the context and the barriers identified in this section must be targeted by the specific actions to be described in the remainder of the EDI-RP section.
- Describe the team's overall commitment to advancing EDI and addressing these barriers. As applicable, discuss the team's strengths related to EDI-RP. For example, describe team members' expertise in EDI and their experience in/leadership of EDI initiatives , stating how this engagement will continue and will benefit the project team.

EDI-RP PRACTICES

In the next sections of your LOI, you will name and describe the best practices that you will adopt for each of the following areas:

- team composition and recruitment processes;
- training and development opportunities; and
- inclusion

For examples of best practices to advance EDI, please consult the VPRI handbook on Equity, Diversity, and Inclusion in Research Teams and Training. This handbook offers a range of potential EDI-RP practices, as well as excerpts from successful funding applications at U of T. Links to institutional resources have been included for your reference and information; it is **not sufficient** to simply state that you will follow an institutional policy or to link to an existing institutional policy or resource.

You are also encouraged to consult the NFRF guide on Best Practices in Equity, Diversity and Inclusion in Research.

These resources are intended to provide you with a wide range of potential practices. While you are encouraged to implement EDI in all aspects of your research and training programs, this section of the LOI has strict character limits , so you will need to **describe the particular strategies that are most applicable** to your research team context. At the same time, this list of resources and suggested practices is not exhaustive, and you are encouraged to describe other relevant strategies or resources with which you are familiar.

Provide the Best Practices (maximum 250 characters for each area)

For each of the three areas (team composition and recruitment, training and development, and inclusion), provide the best practices that your team has adopted/will adopt.

- For each area, identify **at least one concrete practice**, identifying specific steps and processes.
- Name or list the practice(s) using concise language, providing further description in the "Relevance, Approach, and Expected Impacts" section (see below).
- Each of these specific practices must be related to the context and challenges you have described in the "Analysis of Context" section.

Provide the Relevance, Approach, and Expected Impacts (maximum 2,500 characters for each area)

For each of the three areas (team composition and recruitment, training and development, and inclusion), provide a more detailed description of the best practices you have identified.

Describe the salience, approach, expected impacts, and how the impacts will be measured:

- Describe the relevance to your team for each of the identified practices. Each practice must be **specific to the context of the research team** you have described in the "Analysis of Context" section; be sure to make the connections between the context and the practices clear for the reviewers.
- Describe how the team members are already engaged in EDI practices. When describing actions undertaken to date, indicate these actions will continue going forward.
- Describe the planned implementation of the identified practices—say how you will carry them out, what specific steps you will take, how you will follow through on these practices over the life of the grant, etc.
- Describe any potential challenges in implementing these practices, as well as plans to mitigate or address these challenges.
- Describe the anticipated impact of these practices on EDI within your team, and include the measures/indicators for assessing this impact.
- When assessing impacts related to recruitment, keep in mind that you most likely won't have access to self-identification information for trainees and team members. Instead of measuring recruitment impact by providing demographic information, for example, you could point to the size and breadth of applicant pools or to successful outreach and engagement with prospective trainees/team members.
- Other measures of impact might include the following:
  - Successful completion of EDI team training/education (e.g., number of team members completing EDI education, number of workshops attended/hours of training completed, reflections on learnings)
  - Equitable delivery of training and development opportunities, relative to career or academic level (hands-on experience, co-publications, conference presentations, access to research infrastructure, mentorships, networking, etc.)
  - Successful execution of mentorship/training plans
  - Development, distribution, and implementation of team resources/materials that support EDI (e.g., team values statement or code of conduct, team manual or handbook, onboarding materials, etc.)
  - Organization and hosting of accessible and inclusive events
  - Increased diversity among invited speakers or presenters

SUPPORT OF EARLY CAREER RESEARCHERS (maximum 3,500 characters)

This section should provide a description of how ECRs will be integrated into team activities as well as plans to support their leadership and development. Where possible, go beyond the minimum requirement of including one ECR in the team, especially if there are ECRs who can bring valuable expertise or interdisciplinary experience to the project.

- Provide **concrete measures** to show how ECRs will be actively and meaningfully involved in the research, training, and knowledge mobilization activities of the team over the lifetime of the project.
- Describe how the expertise of ECRs on the team will contribute to the success of the proposed research and to the interdisciplinary approach.
- Demonstrate how ECRs will be engaged in team leadership, management, and/or decision-making.
- Describe the ways in which team leaders will develop ECRs' capacity through workshops, new collaborations, networking opportunities, and other supports.
- Discuss the mentorship opportunities and supports that will be available to ECRs. Ensure that ECRs have access to a network of mentors to foster their career development and support them in building a complementary set of skills (interdisciplinary research, experience using infrastructure, publishing, leadership, HQP training and development, lab management, knowledge of EDI, etc.).
- Describe how participation in the team will further position the ECRs as leaders in this topic or in innovative interdisciplinary research.
- If ECRs will act as mentors to trainees, ensure this mentorship work is equitably distributed and that ECRs are not over-burdened.