

JOINT EMHSEED AND XSEED CALL FOR PROPOSALS
Expanding research impact through inter-disciplinary collaboration

The Joint EMHSeed and XSeed program is an interdivisional research funding program designed to promote multi-disciplinary research and catalyze new innovative partnerships between a coPI from the Faculty of Applied Science and Engineering (FASE) and a coPI from outside Engineering. Partner divisions for these programs are:

- 1- For EMHSeed: Temerty Faculty of Medicine (TFoM), UofT Affiliated Hospitals, Translational Biology and Engineering Program (TBEP), TRANSFORM Heart Failure (TRANSFORM HF).
- 2- For XSeed: Faculty of Arts and Science (FAS), University of Toronto Mississauga (UTM), University of Toronto Scarborough (UTSC)/EaRTH District Collaborative Research Grant (EDCRG), TRANSFORM HF, as well as other UofT Divisions.

FASE is committed to supporting projects that are partnered with Indigenous communities. These include projects that focus on the promotion of Indigenous health. FASE will earmark funding for at least one project that proposes inclusive and culturally safe research on the topic. Please note that all community-oriented projects must clearly demonstrate how communities will be meaningfully engaged in the research, with applicants ensuring a sense of accountability and reflexive allyship in their work.

Funding is available for a maximum of fourteen (14) new collaborative projects corresponding to the following breakdown:

Partner Division	No. of Projects (maximum)
Temerty Faculty of Medicine (TFoM)	2
TRANSFORM Heart Failure (TRANSFORM HF)	2*
Translational Biology and Engineering Program (TBEP)	2*
Faculty of Arts and Science (FAS)	4 [‡]
University of Toronto Mississauga (UTM)	2
University of Toronto Scarborough (UTSC)/EDCRG**	1
Other Partner Divisions [‡]	1

*Applications may be considered for funding by [Translational Biology and Engineering Program \(TBEP\)](#) or [TRANSFORM Heart Failure \(TRANSFORM HF\)](#), if they align directly with the criteria and research goals of these programs. For TBEP: Applications related to cardiovascular digital health (including remote monitoring, point-of-care devices, and implantable sensors) and to systems biology approaches to cardiovascular health and disease will receive priority consideration.

[‡]Two of these projects will be earmarked for FAS Humanities and Social Sciences coPIs.

Please visit [EaRTH District Collaborative Research Grant \(EDCRG\)](#) for further information and guidelines. For XSeed-EDCRG proposals, the maximum duration of the project is **one year.

[‡]Includes all other UofT Divisions

Divisional Contacts

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- Faculty of Arts and Science (FAS) – Carrie-Lynn Keiski (carrie.keiski@utoronto.ca)
- Temerty Faculty of Medicine (TFoM) – Joanna King (joanna.king@utoronto.ca)
- TRANSFORM Heart Failure (TRANSFORM HF) – Anne Simard (anne.simard@uhn.ca)
- Translational Biology and Engineering Program (TBEP) – Soror Sharifpoor (soror.sharifpoor@utoronto.ca)
- University of Toronto Mississauga (UTM) – Rong Wu (rong.wu@utoronto.ca)
- University of Toronto Scarborough (UTSC) – Jason Darby (j.darby@utoronto.ca)

PI Eligibility

- 1- Each coPI should be eligible to hold, as PI, tri-council agency grants (NSERC, CIHR, or SSHRC). Both applicants must be eligible to supervise graduate students.
- 2- A PI can hold a maximum of one EMHSeed and one XSeed funded project at any point in time.
- 3- One PI should have a primary appointment with an Engineering unit, and one PI should have their primary appointment outside Engineering as outlined below:
 - a. For EMHSeed: One faculty member should have an appointment at TFoM; this includes clinical faculty with related appointments at UofT Affiliated Hospitals. For projects aligned with TBEP or TRANSFORM HF, applicants should have an appointment status at a non-Engineering U of T division.
 - b. For XSeed, one faculty member should have a tenure track appointment status at FAS, UTM, UTSC, or another UofT division, or be affiliated with TRANSFORM HF.

Application Instructions

EMHSeed and XSeed selection committees are highly interdisciplinary. As such, proposals must be written for non-experts. Successful proposals must address the following criteria:

(1) A new opportunity.

Joint Seed funding supports **new collaborations**. Projects must catalyze new partnerships between PIs that have not previously worked together and have not been co-funded. As collaborations involving at least one early career researcher are usually rated more highly by panelists, priority may be given to research teams that include one coPI in the first 10 years of their academic career.

(2) A clear overarching goal.

The project should have a clear end goal, such as a key finding, a compelling prototype, or a persuasive data set that paves the way for larger funded projects.

(3) Excellence in research.

The researchers should provide evidence of established or emerging leadership in their area(s).

(4) Research proposal and plan.

The application should describe a clear research project and plan, highlighting its novelty and excellence and how the project aims to address a compelling, important, and unsolved problem. The researchers must show how their interdisciplinary expertise will be effectively united on the project. As this funding is meant to catalyze new partnerships and initiatives, avoid using existing grant application materials in this proposal.

(5) Inclusion of equity, diversity, and inclusion (EDI) and accessibility principles.

The researchers should indicate how principles of EDI and accessibility will be meaningfully integrated into the project. This will be assessed most strongly if incorporated into research design. EDI principles can also be discussed in terms of team composition, training and recruitment practices, inclusive and equitable lab/environment culture and practices, and/or beneficiaries of the research. See [VPRI's website on EDI in Research & Innovation](#) for definitions and resources on the importance of EDI in research and innovation. If applicable to your research, please include a paragraph describing how you will integrate the relevant concepts, principles and protocols for conducting respectful research with Indigenous Peoples and communities into each stage of the research process. Applicants whose work involves Indigenous communities should demonstrate that they have started building the necessary relationships and partnerships by including

relevant letters of support in their application. As one possible example of guidelines, see NSERC's [CCSIF guide for research involving Indigenous Peoples and communities](#).

(6) A clear plan for collaboration.

Successful applications should demonstrate how graduate students work together, and how goals and milestones for the students will ensure meaningful partnership. The graduate students will be jointly advised by the coPIs and will work together on an interdisciplinary project focusing on an important problem whose solution will unlock a large partnership or innovation opportunity. The proposal should also demonstrate how research planning, use of space, use of infrastructure, and supervision would all be shared and harmonized across the collaborating teams.

(7) Compelling annual milestones.

The project will offer compelling milestones that will form the foundation for continued collaborations and joint funding applications.

(8) A gateway to a major funded partnership.

Successful proposals should indicate how the anticipated results of the project will provide the basis of joint grant applications, to be submitted before the 2nd year anniversary of their Seed project start, to programs such as the CIHR Project Grant, Genome Canada, ORF-Research Excellence (ORF-RE), CIHR Team Grant, Canada Foundation for Innovation (CFI), SSHRC Partnership Grant, New Frontiers in Research Fund (NFRF), major international funding, etc. In addition, coPIs should specify the dates of competitions they intend to apply to.

Equity, Diversity and Inclusion

FASE is strongly committed to diversity in research and especially welcomes applications from racialized persons/persons of colour, women, Indigenous/Aboriginal Peoples of North America, persons with disabilities, LGBTQ+ persons, and others who may contribute to research excellence.

Budget and Support Letters

The budget for each Seed project will be \$60,000 CAD/year for two (2) years, starting September 2025 (PIs may request an early project start of May 1, 2025, subject to approval of the Partner Divisions). In exceptional cases, a no-cost extension for an additional year may be considered.

Typically, each PI's department/institute will contribute \$15,000 CAD/year to the project (a letter of support from each PI's Chair/Director confirming this contribution is required), with FASE and Partner Divisions each contributing a matching \$15,000 CAD/year for a total of \$60,000/year. Letters of support from FASE and the following Partner Divisions – TFoM, TRANSFORM HF, TBEP, and FAS – are not required. UTM applicants should obtain a divisional letter of support confirming a \$30,000/year contribution to the project from the Office of the Vice-Principal, Research and Innovation. A letter of support from the UTM PI's department is not required. PIs from single-department Faculties (e.g., UTSC) should provide a letter confirming divisional support of \$30,000/year. Applicants from any other UofT Division not outlined in this call must provide support letters confirming a \$30,000/year contribution to the project, to be determined with their divisions/units.

Notes:

- 1- The above-mentioned contributions are cash or stipend contributions. In the case of cash contributions, contributors must all explicitly agree to transfer the funds in support of the project into the PI account.
- 2- The above contributions will be conditional on success in the adjudication process.
- 3- Additional in-kind support, on top of and beyond these contributions, may also be expressed in the letters of support and will be taken into consideration in the adjudication process.
- 4- Ethics approval and other regulatory approvals, as required, should be in place ahead of the project start date.

Use of Funds

This funding will prioritize the use of funds to support the stipend and research expenses of one graduate student earning a degree in an Engineering unit and one graduate student in the Partner Division. In exceptional cases, postdoctoral fellows can be supported.

Submission Process

Applications, including all supporting documents, are due by email to myriam.couturier@utoronto.ca **by 12:00pm on Monday, March 10, 2025**. Please include the term “Joint Seed” in the subject line. A list of past EMHSeed and XSeed projects is also available on the [FASE Research Hub](#), which is accessible with your UTORid and password.

Submissions should include the following: 1) [completed application form](#), 2) letters of support confirming contributions from each of the collaborating departments/institutes (and/or, if applicable, Partner Divisions), 3) Short CVs of co-PIs. **Please limit your CV to 3 pages.**

Adjudication Process

An adjudication committee composed of representatives from FASE and Partner Divisions will review proposals against program criteria. Decisions will be reported by the end of April 2025.

Reporting

A final report must be submitted upon the completion of the project.