

2023/24 NSERC Collaborative Research and Training Experience Program (CREATE)

CREATE Information Session

February 28, 2023



UNIVERSITY OF
TORONTO



NSERC
CRSNG

Land Acknowledgement

We wish to acknowledge this land on which the University of Toronto operates.

For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit.



Today this meeting place is still the home to many Indigenous people from across Turtle Island, and we are grateful to have the opportunity to work on this land.




Speakers

- ▶ **Professor Luis Seco**, Professor in the Department of Mathematics, Director, Mathematical Finance Program, President and C.E.O, Sigma Analysis & Management and the Director of RiskLab Toronto
- ▶ **Andrea Gill**, Research Equity & Diversity Strategist, Research Services Office
- ▶ **Jessica Keating**, Research Funding Manager, Natural Sciences and Engineering, Research Services Office

Today's Session

How to Ask Questions

By chat: Click on the  icon in the bottom menu to bring up the Meeting Chat pop-out window. Type your question and hit Enter on your keyboard or click the  button to submit.

By voice: Click on the  icon in the bottom menu to “raise your hand” and be added to the queue. When your name is called, un-mute your microphone by clicking on  and ask your question. Once you are done, please remember to mute your microphone again and click  to lower your hand.

- ▶ Supports the training of teams of highly qualified students and postdoctoral fellows from Canada and abroad through the development of innovative training programs that:
 - ▶ encourage collaborative and integrative approaches that address significant scientific challenges
 - ▶ facilitate the transition of new researchers from trainees to productive employees in the Canadian workforce

CREATE

CREATE Encourages

Interdisciplinary
Research

Student Mobility

Professional Skills
Development

Industrial
Collaborations

CREATE Expectations



Led by a group of accomplished researchers



Provide a defined and enriched training program



Experience should be relevant to both academic and non-academic careers



Promote collaboration and international awareness

CREATE Program should be:

Innovative in nature

Capacity to raise the standard for best practices in training in the niche area

Promote the excellence of the researchers and their training success

CREATE Award

6 years in length

Year 1 - Normally, \$150,000 (\pm \$50,000)

Year 2-6 - Normally, \$300,000 (\pm \$50,000) per year

Total Funding \$1,650,000 over 6 years

- Year 3-6 funding is dependent on positive performance evaluations by NSERC
 - 2 progress reports and a final report
- Demonstrate that initiative is meeting proposed objectives, training elements, HQP targets, EDI actions etc.
- Applicants are expected to follow through with what is promised in the approved proposal

80% must be allocated to stipends

- Up to 30% may go towards non-NSE students
- No minimum or maximum stipend level
- Support can be complemented by other sources
 - Supervisors
 - Collaborators
 - Scholarships
- A stipend from CREATE is not a requirement for trainee participation in the initiative
- Initiative must focus on graduate students, but undergraduate and postdoctoral trainees may also be supported

20% Other

- Training program structure (Coordinator salary for duration of grant)
- books, equipment, advertising, travel (for students, guest speakers)
- dissemination of training materials and research results
- miscellaneous

CREATE Award

CREATE Award

Typical grant

- Progress reports
- Maintain objectives outlined in the proposal

Not a typical grant-CREATE

- Non renewable
- NSERC provides seed funding
- Business plan
- Held accountable for achieving the targets you outline in the proposal
- Program Committee including various stakeholders
 - Potential future employers, Collaborators, Curriculum developers, trainees

- ▶ Lead Applicant must be from an NSERC supported field at an eligible institution
- ▶ Co-applicants may be from either NSERC, SSHRC and CIHR supported fields
 - ▶ At least 70% of the group must be from the NSE Fields
- ▶ Applicants and co-applicants can only participate in a maximum of two CREATE programs
- ▶ Committees must be setup to oversee the program (applicant cannot be the committee Chair)
- ▶ Supporting EDI, Gender Representation and Advancement
- ▶ Applicants should discuss the Covid-19 impacts and mitigation strategies (Letter of Intent and application)
 - ▶ A couple of sentences, focused on specific strategies your team will implement
- ▶ Please refer to *NSERC's Impacts of the COVID-19 pandemic on research*: [NEW guidelines for NSERC's community webpage](#) for more information.

CREATE Eligibility Requirements

CREATE Equity, Diversity and Inclusion

- ▶ CREATE initiatives are expected to increase the advancement and inclusion of under-represented and disadvantaged groups in the natural sciences and engineering as one way to enhance excellence in research and training
 - ▶ Team (Self-ID questionnaire to be completed)
 - ▶ Program Committee
 - ▶ HQP
 - ▶ Research design
- ▶ Resource: NSERC Guide for Applicants: Considering equity, diversity and inclusion in your application https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/index_eng.asp

CREATE Mentoring (New as of 2020-21)

- ▶ Increased focus on providing mentoring as part of the training program
 - ▶ **Outline of the training program**
 - ▶ Proposal must describe how the proposed approach, including the role of mentoring, would better prepare trainees for future careers in industry, government or, to a lesser extent, in academia.
 - ▶ **Excellence of the proposed team of researchers**
 - ▶ Provide information on the team's past contributions to the training and mentoring of HQP
 - ▶ Describe specific EDI measures: implemented in recruitment process, and research and training environment

CREATE Application Process

- ▶ 2 Phase Application Process
 - ▶ Phase 1: Letter of Intent (Quota based)
 - ▶ Phase 2: Application (invited)

CREATE - Application Phase 1

Letter of intent (Form 187)

- Will be available in early March on NSERC Online System
- Fillable PDF available on RSO Funding Opportunity page

Personal data form (Form 100) for lead applicant

Letter from VP Research

Additional Material Required for Other Streams

- **Industrial stream** - Letter or e-mail from industrial collaborator
- **International Collaboration** - Collaborating German researcher(s) must submit a pre-proposal to DFG
 - Applicants with successful DFG IRTC pre-proposal can proceed to full NSERC application stage without submitting a full NOI

CREATE - Form 187

Co-applicants (min 1, max 10)

Collaborators - no letters required at LOI(except industrial)

Outline of Training Program (2 pages)

- Objectives, novelty, how trainees would be better prepared for careers, involvement of stakeholders, description of potential future employers, assessment of job prospects for trainees, and Covid-19
- 1 additional page to address the follow exceptions:
 - Previous CREATE grantees/co-grantees must describe how this application differs from those previously funded
 - Applications in a research area already supported by another active CREATE must describe how this application differs

Excellence of Proposed Team of Researchers (3 pages)

External Reviewers suggestions (8)

- minimum two from Canada and minimum one from abroad
- LOIs will not be sent for external review

CREATE - Form 187

- ▶ Outline of Training Program (2 pages)
 - ▶ Objectives
 - ▶ Novelty
 - ▶ How trainees would be better prepared for careers
 - ▶ Involvement of stakeholders
 - ▶ Description of potential future employers, assessment of job prospects for trainees

	No. in Year 1	No. in Year 2	No. in Year 3	No. in Year 4	No. in Year 5	No. in Year 6	Total*
Natural Science and Engineering (NSE)							
Undergraduates							
Graduates							
Postdoctoral							
Non-NSE							
Undergraduates							
Graduates							
Postdoctoral							
Total							

* Provide an estimate of the total number of students that are expected to graduate, by category.

CREATE - Form 187

- ▶ Excellence of Proposed Team of Researchers (3 pages)

- ▶ Complementarities
- ▶ Expertise
- ▶ Roles, responsibilities

EDI should be considered in the rationale for team composition. Applicants need to outline how EDI will be incorporated into the management of the team.

- ▶ Training and mentoring experience

CREATE - Evaluation

▶ Letter of Intent:

▶ Merit of proposed training program (60%)

- ▶ Description of potential employers and qualitative assessment of job prospects for trainees
- ▶ Relationship to current Scientific/Technical Developments
- ▶ Trainees' development of Professional Skills and transition to the workforce
- ▶ Value-added experience
- ▶ Novel approaches to training
- ▶ Training objectives or Milestones
- ▶ COVID-19 impacts on mentoring, training and research activities

▶ Excellence of the research team (40%)

- ▶ Quality & Impact of Team members past contributions
- ▶ Expertise of the group to deliver training program proposed
- ▶ Quality & past track record of HQP training

***Full evaluation criteria available on NSERC's program page**

CREATE - Streams

Regular stream

- may involve any collaborations: academic, government, industry, NGO, Canadian/international collaboration, etc.

Industrial stream

- Requires industrial participation
- Requires internships for every participant

International Collaboration:

- Germany's DFG - IRTG

CREATE - Industrial Stream

- ▶ Industrial Stream (up to 50% of all grants in program)
- ▶ Internships in the private sector (mandatory):
Emphasis on preparing trainees for non-academic careers
- ▶ Industrial financial contribution is encouraged, but not required
- ▶ Program committee must include the industrial partner(s) as committee members
- ▶ 20% of a student's time should be spent with the industry partner (eg. 3-4 months for M.Sc. And 7-8 months for Ph.D.)
- ▶ Completion of the student's degree (MSc or PhD) should not be delayed

- ▶ Industrial Collaborators can be:
 - ▶ Canadian-based businesses, can exploit research results for the economic benefit of Canada
 - ▶ International companies if activities related to proposed research take place in Canada and their participation will benefit Canada

CREATE - Industrial Stream

	Program Committee (PC)	Internships	Confirmation from Industrial Collaborators
<u>PHASE 1</u> Letter of Intent	Confirmation of willingness to participate in the PC If no confirmed name, indicate the position of the person	Intent of the industrial collaborator to host internships should be indicated	E-mail or letter must be included
<u>PHASE 2</u> Application	One or more confirmed and named industrial member(s) on the PC	Confirmation that all the CREATE trainees will hold at least one (industrial) internship	Letter(s) confirming commitment to both conditions must be included

CREATE - Industrial Stream

CREATE - International Collaborations - DFG-IRTG

- ▶ Pre-proposal at DFG-IRTG
- ▶ LOI at NSERC (basic info)
- ▶ Full Application
- ▶ Funding Decision
- ▶ Funding from both Agencies

CREATE Deadlines

- ▶ **Internal Deadline - Monday March 6, 2023**
 - ▶ Completed LOI package, which includes Form 100 (applicant) and Form 187 (Combined as a single PDF) submitted to Research Services by email to jessica.keating@utoronto.ca
 - ** Firm: Your LOI MUST be received no later than: 12 pm (Noon) Monday March 6, 2023**
 - ▶ During this time frame, we will have all proposals reviewed by an internal review panel. The panel will rate each proposal based on NSERC's criteria for this program.

CREATE Deadlines



Internal Deadline and Internal Review



Comments/Suggestions from the internal review panel - Successful/Unsuccessful



Editorial and EDI Review for successful LOI's



Administrative Review and VPRI Letter



Sponsor Deadline



May 1, 2023- Sponsor Deadline

***Note - LOI's must be submitted on NSERC Online System.**

A close-up photograph of a person's hand pointing at a table covered with various documents, including forms and colorful sticky notes. The scene suggests a collaborative workspace or a meeting where ideas are being discussed and organized.

CREATE - Tips

- ▶ Start Early
- ▶ Take full advantage of the Research Office and NSERC staff
- ▶ Make the LOI and application comprehensible to people outside your field
- ▶ Pay full attention to all aspects of the LOI and application, ensure you review the evaluation criteria
- ▶ Understand how your proposal will be evaluated
- ▶ Tailor your Form 100 to the Program you are applying
- ▶ If applicable: Get industry partners involved early on to help develop the project strategy
- ▶ Ensure that you have outlined the funding to continue the program after the grant expires
- ▶ Review past grant recipients list on NSERC's site. NSERC will not fund initiatives that are too similar to past/current initiatives

Contacts

- ▶ NSERC CREATE Program
 - ▶ Tel: 613-996-3769
 - ▶ Manager: Teresa Jurewicz
 - ▶ Program Officers:
 - ▶ Guy Faubert (pre-award)
 - ▶ Samantha Gollop(post-award)
 - ▶ Program Assistants:
 - ▶ Valerie Bloom
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