NSERC
CRSNG

Breakthrough answers
to timeless questions

Des réponses innovantes
à de grandes questions

Natural Sciences and Engineering
Research Council of Canada

Conseil de recherches en sciences
naturelles et en génie du Canada

Canada

NSERC CRSNG

Collaborative Research and Training Experience (CREATE) Program

Information session for prospective applicants

February 9, 2023

Welcome

- Manager: Teresa Jurewicz
- Program Officers:
    - Guy Faubert (pre-award)
    - Samantha Gollop (post-award)
- Program Assistant:
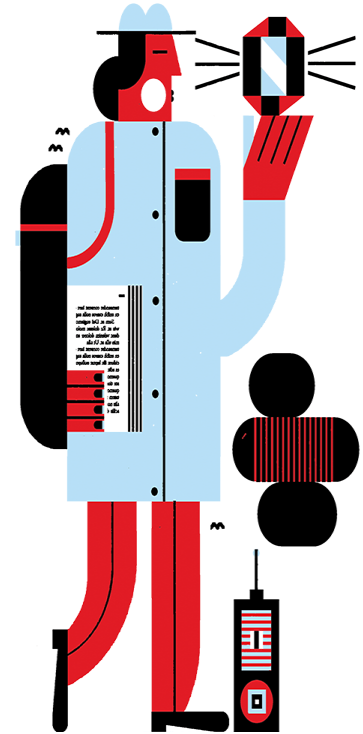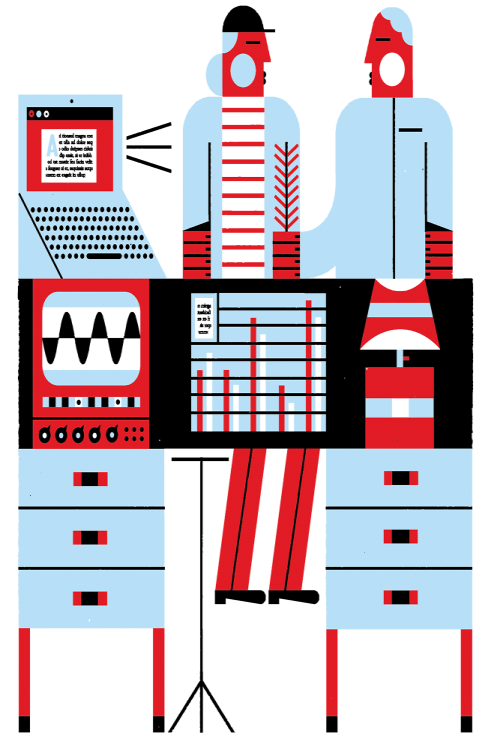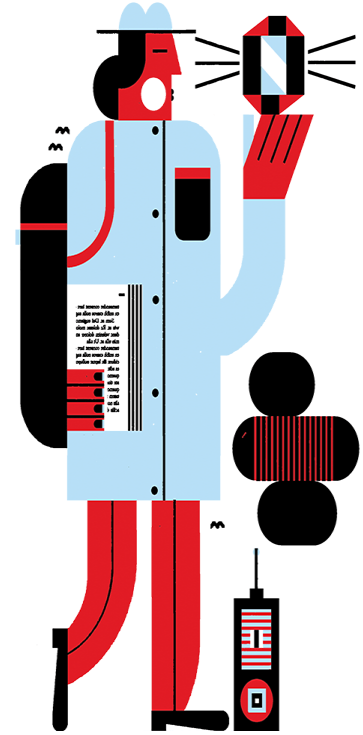   - Valerie Bloom

CREATE@NSERC-CRSNG.GC.CA

Table of contents

1. Program Overview

Program overview

Program objectives

CREATE supports the training and mentoring of 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

Program objectives

CREATE encourages

- Enriched training and mentoring experiences

- Improved job readiness

- Professional skills development

- Industrial collaboration

- Student mobility

- Interdisciplinary research

Program overview

Program objectives

Qualities of successful CREATE Initiatives

- Innovative nature

- Rich training and mentoring environment

- Strong delivery of professional skills along with mechanisms to ensure all trainees fully benefit and participate

- Capacity to raise the standard for best practices in training and mentoring

- Equity, diversity and inclusiveness of research team and trainees

- Promoting collaboration and international awareness

Program overview

Value of grant

- Year 1:   Normally, $150,000 (± $50,000)

- Years 2 – 6:   Normally, $300,000 (± $50,000) per year

- Total: up to $1,650,000 over 6 years

- Non-renewable

- Start Date: April 1 default or Sep 1 by request

Program overview

Expectations

- **Year 3-6 funding is dependent on positive performance evaluations by NSERC.**

- 2 progress reports and a final report are required.

- Must demonstrate that proposed objectives, training elements (especially professional skills), HQP targets, EDI actions, etc., are being met.

- **i.e., applicants are held accountable and must follow through on what is promised in the proposals.**

Allowable expenses

- At least 80% to trainee stipends
  - Up to 30% of this may go toward non-NSE trainees
- Remaining 20% may be used for…
  - Trainee travel (conferences, exchanges, internships, etc).
  - Training program administration (e.g., salary of program coordinator)
  - Dissemination of training materials
  - etc.
- Note that travel costs of the applicants, co-applicants, collaborators, program committee members, and project coordinators are not eligible.

Program overview

Trainee stipends

- No minimum or maximum

- May be complemented by other sources
  - Supervisors
  - Collaborators
  - Scholarships

- A stipend from CREATE is not a requirement for trainee participation in the initiative

- Emphasis of the initiative must be on graduate students, but undergraduate and postdoctoral trainees may also be supported

Program overview

Teams leading CREATE Initiatives

- A complementary group of researchers

- From eligible Canadian universities

- For multi-university applications: must have at least one co-applicant involved for trainees at that institution to be eligible to receive CREATE stipends

- Work collaboratively to offer a defined training program to a group of trainees

Program overview

Teams leading CREATE Initiatives

- Lead applicant must be from an NSERC-supported field at an NSERC-eligible university

- At least **70%** of the group of co-applicants must be in NSE (co-applicants may be from other fields)

- A researcher can be involved in a maximum of two initiatives at any given time and a maximum of one as an applicant

- **If you are in doubt about the eligibility of a researcher/team/institution, please contact the CREATE team!**

Program overview

Program committee

- Program committee (PC) consists of a variety of stake holders, e.g.

    - Potential future employers of graduates, collaborators, curriculum developers, trainees

- Program evaluation and guidance

- Refer to the program committee guidelines webpage for more information

Program overview

Covid-19

- Applicants should discuss the Covid-19 impacts and mitigation strategies (Letter of Intent and application).

- Please refer to *NSERC's Impacts of the COVID-19 pandemic on research: NEW guidelines for NSERC's community* webpage for more information.

Program Overview

Equity, diversity and inclusion (EDI)

CREATE initiatives are expected to increase the inclusion and advancement of under-represented groups in the natural sciences and engineering as one way to enhance excellence in research and training.

- Team (self-ID questionnaire)

- Program Committee

- HQP

- NSERC guide on integrating equity, diversity and inclusion considerations in research

Program overview

New this year

- <u>Security provisions</u>: Research and establishing and/or continuing partnerships with national, international and multinational organizations

- <u>LOI quotas:</u> Adjusted for a very small number of universities

- <u>Bullet points</u> under the Merit of the proposed training program have been consolidated

Program overview

Merit of the proposed training program

- Extent to which the program will provide opportunities for the trainees to develop professional and technical skills
- Extent to which the program will provide opportunities for the trainees to receive mentorship, participate in academic exchanges either within Canada or abroad, and conduct internships*
- Description of the potential employers and a qualitative assessment of the job prospects for trainees. Extent to which the research training program will facilitate the transition of the trainees to the Canadian workforce and will promote interaction of the trainees with non-academic sectors, such as private companies, industry associations, not-for-profit organizations, government departments, etc.
- Extent to which the program uses novel and interesting approaches to provide trainees with training and mentorship that go above and beyond the traditional graduate school experience
- Focus and clarity of objectives of the research training program and how it relates to current developments, with reference to the literature
- As appropriate to the subject matter of the proposal, the degree to which the training program, while focused mainly in the NSE, also fosters research studies at the interface between NSE and health or social sciences and humanities.
- COVID-19 impacts on training, mentoring and research activities: for guidance on describing the impacts of the pandemic on the proposed training program, please refer to the NSERC guidelines relating to COVID-19
- Notes:

-A financial contribution from industry is not a requirement but would be viewed as an asset.

-*For the industrial stream, internships are mandatory for graduate trainees and must occur at industrial locations.

Program overview

Streams

- **Regular stream** may involve any collaborations: academic/government/industry/NGO, Canadian/international

- **International Stream** Germany's DFG-IRTG for collaboration with German researchers. Funding aligned with DFG-IRTG program duration: up to 9 years instead of 6 years for regular or industrial stream CREATE (same grant value). Contact NSERC for more information.

- **Industrial stream** requires industrial participation

- Applications to the DFG-IRTG and Industrial streams are not evaluated separately from the regular stream applications

Program overview

Industrial Stream

Up to 50% of the CREATE grants will be awarded to industrial stream applications.

- Increased emphasis on preparing trainees for non-academic careers; enhanced academic-industrial collaboration

- Requires participation of at least one industrial collaborator on the program committee

- Requires industrial internships for all trainees of 3-4 months for M.Sc. and 7-8 months for Ph.D.

- The industrial internship is not mandatory for postdoctoral fellows; however, it is encouraged. The recommended duration is a minimum of 20% of their fellowship (e.g., 4 months).

Program overview

Industrial collaborators

- Canadian-based businesses, able to exploit the research results for the economic benefit of Canada.

- International companies eligible if activities related to the proposed research take place in Canada (e.g. R&D, manufacturing); if their participation will result in a benefit to Canada.

- Due to conflict of interest considerations, trainee internships at companies owned wholly or in part by the applicant or by a co-applicant are prohibited.

2. Application Procedures

Phase 1: **Letter of Intent (LOI)**

Phase 2: **Application** (if invited)
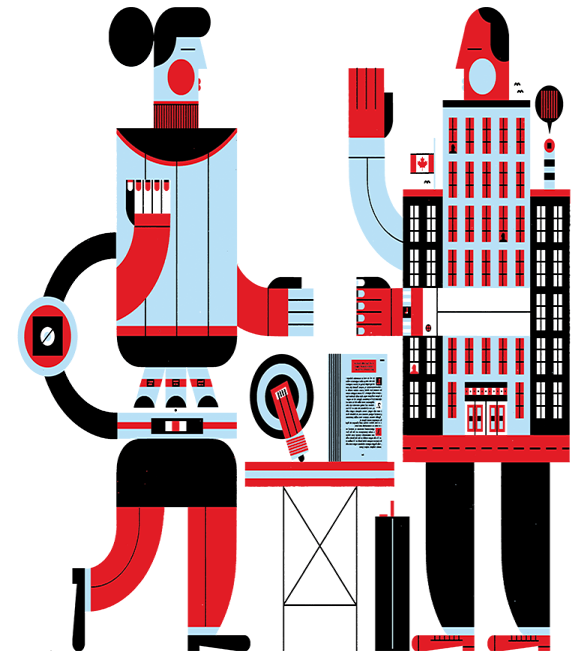
Application procedures

Phase 1: Letter of Intent

Selection process & criteria

1. Internal selection at university (quota based)

2. CREATE Selection Committee

- Merit of proposed training program (60%)

- Excellence of the team of researchers (40%)

Phase 1: Letter of Intent

Form 187: Letter of Intent to Apply for a CREATE grant

- List co-applicants (min 1, max 10): All must complete the self-ID questionnaire.

- Collaborators

- External Reviewers suggestions (8)

  - Including 2 from Canada and at least one from abroad

  - LOIs are NOT sent for external review

Application procedures

Phase 1: Letter of Intent

- Personal Data Form (Form 100) – applicant only

- Letter from VP Research of the lead university

Phase 1: Letter of Intent

Outline of Training Program (max 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

- One additonal page for:

  - Previous CREATE grantees and co-grantees must clearly describe how this application differs from those previously funded.

  - Researchers who are applying in a research area already supported by other active CREATE grants must clearly describe how this application differs from those already funded.

Application procedures

Phase 1: Letter of Intent

Excellence of Proposed Team (max 3 pages)

- Complementarities

- Expertise

- Roles, responsibilities

EDI should be considered

- Training and mentoring experience

Application procedures

Phase 2: Full application (only if invited)

Selection process & criteria

- Merit of proposed training program (50%)
- Excellence of the research team (25%)
- Program management and sustainability (25%)

Application procedures

Phase 2: full application

- Personal data form (Form 100) for the applicant

- Personal data form (Form 100) or CCV for all co-applicants (max 10)

- One letter from the lead applicant's university

  - Support, financial commitments

- Up to 3 letters from collaborators, if applicable

  - Nature of support

Application procedures

Phase 2: Full application

Form 102 – Application for a CREATE grant

- Application profile

- Plain language summary of proposal

- Co-applicants and collaborators

- Proposed expenditures

nserc-crsng.gc.ca

Phase 2: Full application

Research training program proposal

- Free-form, 14 pages + 1 page for references

- Objectives

- Elements of the training program

- Estimated number of trainees

- Job prospects

- Program Committee

- List of deliverables

- Covid-19

Phase 2: Full application

- Budget justification (free form, 2 pages)

- Support from other sources (free form, 2 pages)

- Maximum 1 Letter of support from lead university:

  - List of all contributions from the university

  - Describe the details of support

  - Involvement in the training program

  - Plans to ensure sustainability

Application procedures

Additional requirements for industrial stream applications

- Skills identified as needed for a career in industry

- Description of improved job-readiness for industry sector

- Details about trainee internships

- Confirmation that **<u>all</u>** graduate trainees will complete an **<u>industrial</u>** internship of the minimum duration

Application procedures

Additional application requirements for industrial stream

Letter of Intent (phase 1)

- ONE e-mail/letter from industry partner confirming:
  - Willingness to participate on the program committee
  - Intent to host internships
  - A support letter can come from an industry consortium, but it is preferable that one or two companies confirm their support. A formal commitment from individual companies will be required at the application phase.

Additional application requirements for industrial stream

Application (phase 2)

- Max 3 letter(s) from industry partner(s) confirming
  - Commitment to participate on the program committee, with confirmed name of the industrial member
  - Commitment to host trainee internships of at least 3-4 months for M.Sc. And 7-8 months for Ph.D. Agreements must be in place and should be guaranteed (may be dependent on success of application).

3. Competition statistics and other information
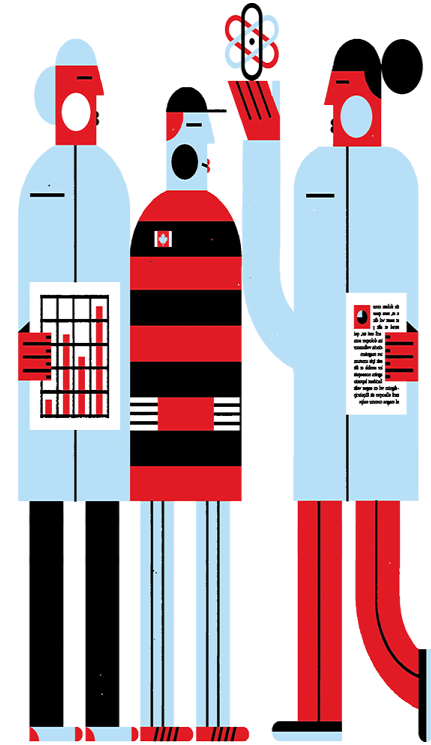
Competition Statistics

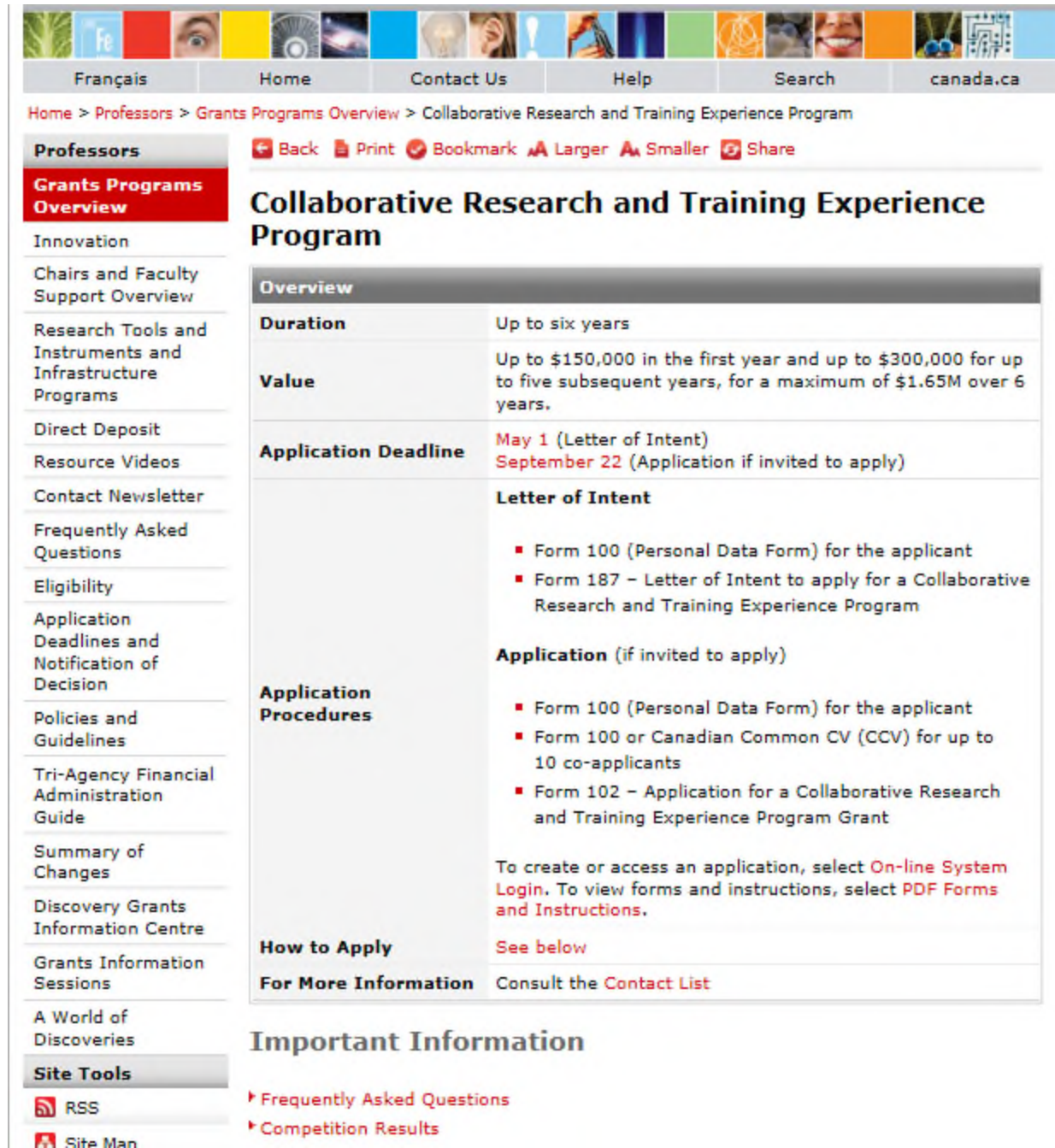|	2018	2019	2020	2021	2022	2023	2023 Quantum call
LOIs received	112	126	125	118	123	123	17
Candidates invited	55	50	55	38	43	51	9
Applications received	53	50	53	37	42	49	9
Grants awarded	18	18	15	13	13	TBD	3

Other information

Important Dates

- March/April 2023:   Letter of Intent deadline (Univ.)

- May 1, 2023:   Letter of Intent deadline (NSERC)

- June 30, 2023:   Invitation to submit an application

- September 22, 2023:   Application deadline (NSERC)

- March 2024:   Notification of results

CREATE Program description:

http://www.nserc-crsng.gc.ca/professors-professeurs/grants-subs/create-foncer_eng.asp

Back   Print   Bookmark   Larger   Smaller   Share

Professors

Grants Programs Overview

Innovation

Chairs and Faculty Support Overview

Research Tools and Instruments and Infrastructure Programs

Direct Deposit

Resource Videos

Contact Newsletter

Frequently Asked Questions

Eligibility

Application Deadlines and Notification of Decision

Policies and Guidelines

Tri-Agency Financial Administration Guide

Summary of Changes

Discovery Grants Information Centre

Grants Information Sessions

A World of Discoveries

Site Tools

RSS

Site Map

Collaborative Research and Training Experience Program

Overview	
Duration	Up to six years
Value	Up to $150,000 in the first year and up to $300,000 for up to five subsequent years, for a maximum of $1.65M over 6 years.
Application Deadline	May 1 (Letter of Intent) September 22 (Application if invited to apply)
Application Procedures	**Letter of Intent** ■ Form 100 (Personal Data Form) for the applicant ■ Form 187 – Letter of Intent to apply for a Collaborative Research and Training Experience Program **Application** (if invited to apply) ■ Form 100 (Personal Data Form) for the applicant ■ Form 100 or Canadian Common CV (CCV) for up to 10 co-applicants ■ Form 102 – Application for a Collaborative Research and Training Experience Program Grant To create or access an application, select On-line System Login. To view forms and instructions, select PDF Forms and Instructions.
How to Apply	See below
For More Information	Consult the Contact List

Important Information

▶ Frequently Asked Questions

▶ Competition Results

Other information

More Information

- Program description

- FAQ

- Your university's research grant office

- The CREATE Team
  - E-mail: CREATE@nserc-crsng.gc.ca