

Natural Sciences and Engineering Research Council of Canada

Conseil de recherches en sciences naturelles et en génie du Canada



Collaborative Research and Training Experience (CREATE) Program

February 6, 2020







Welcome

- Team Leader: Teresa Jurewicz
- Program Officers:
 - Guy Faubert (pre-award)
 - Mwamba Chibamba & Naomi Boisvert (post-award)
- Program Assistants:
 - Valerie Bloom & Jenna Reeve

CREATE@NSERC-CRSNG.GC.CA







- Program overview
- Application process
- Selection criteria

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





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





CREATE encourages

- Enriched training and mentoring experiences
- Improved job readiness
- Professional skills development
- Industrial collaboration
- Student mobility
- Interdisciplinary research





Qualities of successful CREATE initiatives

- Innovative nature

Natural Sciences and Engineering

lesearch Council of Canada

- Rich training and mentoring environment
- Excellence of the researchers and their training success
- Capacity to raise the standard for best practices in training and mentoring
- Promoting collaboration and international awareness





Value of the Grant

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

Conseil de recherches en sciences

naturelles et en génie du Canada

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





Expectations

Year 4-6 funding is dependent on positive performance evaluations by NSERC.

Regular progress reports are required.

Must demonstrate that proposed objectives, training elements, 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.







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





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







Teams leading CREATE initiatives

- Lead applicant must be from an NSERC-supported field at an NSERC-eligible university
- At least **70%** of the group must be in NSE (co-applicants may be from other fields)
- Can an applicant or co-applicant be involved in an existing CREATE grant at the time of application?





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





NEW THIS YEAR: Mentoring

Increased focus on providing mentoring as part of the training program

- Outline of the training program
 - Your proposal must describe how the proposed approach, including the role of mentoring, would better prepare trainees for their future careers in industry, government or, to a lesser extent, in academia.

• Excellence of proposed team of researchers

 Provide information on the team's past contributions to the training and mentoring of Highly Qualified Personnel (HQP).





Equity, diversity and inclusion

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

- Team
- Program Committee
- HQP





Streams

Regular stream CREATE 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 CREATE: requires industrial participation

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



Natural Sciences and Engineering

lesearch Council of Canada



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 industrial collaborators on the program committee
- Requires industrial internships for trainees of 3-4 months for M.Sc. and 7-8 months for Ph.D.





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.





Application Procedures

Phase 1: Letter of Intent (LOI) Phase 2: Application (if invited)

Conseil de recherches en sciences





Phase 1: Letter of Intent Selection process & criteria

- 1. Internal selection at university (quota based)
- 2. CREATE Selection Committee

Conseil de recherches en sciences

- Merit of proposed training program (60%)
- Excellence of the research team (40%)





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

• List co-applicants (min 1, max 10)

Conseil de recherches en sciences

- Collaborators
- External Reviewers suggestions (8)
 - New this year: 8 external reviewer suggestions including 2 from Canada and at least one from abroad
 - •LOIs are NOT sent for external review







- □ Personal Data Form (Form 100)
- □ Letter from VP Research of the lead university





Outline of Training Program (max 2 pages)

Conseil de recherches en sciences

- Objectives
- Novelty
- How trainees would be better prepared for careers
- Involvement of stakeholders
- Description of potential future employers, assessment of job prospects for trainees





- Excellence of Proposed Team (New: max 3 pages)
- Complementarities
- Expertise
- Roles, responsibilities
- Training and mentoring experience

EDI should be considered





Phase 2: Full application Selection process & criteria

Only if invited

Criteria:

- Merit of proposed training program (50%)
- Excellence of the research team (25%)

naturelles et en génie du Canada

Program management and sustainability (25%)





- □ Personal data form (Form 100) for the applicant
- Personal data form (Form 100) or CCV for all coapplicants (max 10)
- □ One letter from the lead applicant's university
 - Support, financial commitments
- □ Up to 3 letters from collaborators, if applicable
 - Nature of support





□ Form 102 – Application for a CREATE grant

- Application profile
- Plain language summary of proposal
- Co-applicants and collaborators
- Proposed expenditures





Research training program proposal

(free-form, 13 pages + 1 for references)

Conseil de recherches en sciences

- Objectives
- Elements of the training program
- Estimated number of trainees
- Job prospects
- Program Committee
- List of deliverables





- 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



Natural Sciences and Engineering

Research Council of Canada



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





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 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).





Competition statistics

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|------------------------|------|------|------|------|------|
| LOIs received: | 114 | 109 | 108 | 128 | 123 |
| Candidates invited: | 52 | 53 | 55 | 50 | 55 |
| Applications received: | 52 | 51 | 53 | 50 | 53 |
| Grants awarded: | 13 | 17 | 18 | 18 | TBD |







Important Dates

March/April:Letter of Intent deadline (Univ.)May 1:Letter of Intent deadline (NSERC)June 30:Invitation to submit an applicationSeptember 22:Application deadline (NSERC)March:Notification of results



Natural Sciences and Engineering Research Council of Canada

Program description:

http://www.nserccrsng.gc.ca/professor s-professeurs/grantssubs/createfoncer_eng.asp Francais Home Contact Us

Home > Professors > Grants Programs Overview > Collaborative Research and Training Experience Program

Professors

Conseil de recherches en sciences

naturelles et en génie du Canada

🔄 Back 🚦 Print 🥝 Bookmark 🗚 Larger 🗛 Smaller 🔯 Share

Help

NSERC

canada.ca

Search

Grants Programs Collaborative Research and Training Experience Overview Program Innovation Chairs and Faculty Overview Support Overview Duration Up to six years Research Tools and Instruments and Up to \$150,000 in the first year and up to \$300,000 for up Infrastructure Value to five subsequent years, for a maximum of \$1.65M over 6 Programs years. Direct Deposit May 1 (Letter of Intent) **Application Deadline** September 22 (Application if invited to apply) Resource Videos Contact Newsletter Letter of Intent Frequently Asked Form 100 (Personal Data Form) for the applicant Questions Form 187 - Letter of Intent to apply for a Collaborative Eligibility Research and Training Experience Program Application Deadlines and Application (if invited to apply) Notification of Decision Application Form 100 (Personal Data Form) for the applicant Procedures Policies and Form 100 or Canadian Common CV (CCV) for up to Guidelines 10 co-applicants Tri-Agency Financial Form 102 – Application for a Collaborative Research Administration Guide and Training Experience Program Grant Summary of To create or access an application, select On-line System Changes Login, To view forms and instructions, select PDF Forms **Discovery Grants** and Instructions. Information Centre How to Apply See below Grants Information For More Information Consult the Contact List Sessions A World of Important Information Discoveries Site Tools 35 Frequently Asked Questions RSS RSS Competition Results Site Man





More Information

• Program description:

<u>www.nserc-crsng.gc.ca/Professors-</u> <u>Professeurs/Grants-Subs/CREATE-FONCER_eng.asp</u>

- Your university's research grant office
- The NSERC CREATE Team
 - E-mail: <u>CREATE@nserc-crsng.gc.ca</u>

