

## NSERC Collaborative Research and Training Experience (CREATE) General Notes and Tips

### Training program concept:

- The proposed CREATE has to be different from existing ones, including CREATE projects led by other universities. <u>Check the list of all active and completed CREATE projects</u> to avoid duplication (and to explain how yours is different).
- The main objective is "value-added" training. Emphasize what your program will add to the training of the students beyond what they receive from existing graduate student programs. Such as:
  - o improved job readiness,
  - o collaborative/interdisciplinary training,
  - increased student mobility (to other Canadian universities, to companies and to other countries),
  - o mentoring,
  - **mandatory internships or other immersive, 'real-world' experiences** for all participating graduate students.
- **Professional skills and soft skills training** are a "core required element" of any CREATE project, you must include explicit training (courses, workshops).
- Make a very convincing case that there is **demand/industry pull** for the kind of graduates your program will produce, e.g. using compelling statistics or quotes from industry.
- The focus should be on training graduate students (master's and doctoral students). PDFs and undergrad training need to be justified.
- The committee expects to see innovative pedagogy or **interestingly different methods of training**, e.g., immersive experiences.

### Team:

- The lead applicant (PI) must be from an NSERC-supported field at an NSERC-eligible university and fulfill the <u>NSERC eligibility criteria</u>.
- Proposals can involve more than 1 university but don't have to involve multiple universities.
- All universities who will be involved in the application must have at least one <u>co-applicant</u> listed in the proposal.
- Researchers can participate in a maximum of two CREATE grants and/or LOIs at the same time as either an applicant or co-applicant.
- At least 70% of the team must be from NSE fields, but co-applicants at the interdisciplinary frontier between NSE and the areas covered under the umbrella of SSHRC and CIHR may be incorporated into proposals.
- The committee expects applicant teams to be gender balanced and diverse.
- Collaborators (e.g., international colleagues) cannot receive funding, not even for travel.

### Common elements of successful CREATE grants:

- Multi-institutional
- Partners (Industry, government, community groups):
  - o Host students,
  - o Demonstrate need for training in the sector,
  - o Opportunities for future career paths,
  - Serve on program committee.
- Experiential learning opportunities
- New course development
- New professional skills training
- Involvement and support from Graduate Studies, and Departments such as:
  - New training development,
    - o Program Coordinator,
    - o Website development,
    - o Access to unique facilities.

### **External Reviewer suggestions:**

- External reviewers will only review the full application.
- External reviewer suggestions must include two from Canada and one from abroad.
- Consider EDI (e.g. include individuals from under-represented groups and different types of organizations).
- Not within your university or a co-applicant university.
- No former professor/supervisor/collaborators/colleagues.

### Resources:

- <u>CREATE LOI Guidelines (Form 187)</u>
- <u>CREATE Program Committee Guidelines</u>
- <u>CREATE Full Application Guidelines (Form 102)</u>
- <u>Eligibility requirements for applicants, co-applicants and collaborators</u>
- <u>NSERC's equity, diversity and inclusion considerations at each stage of the research process</u>
- Best Practices in Equity, Diversity and Inclusion in Research
- Guide for applicants: Considering equity, diversity and inclusion in your application
- Frequently Asked Questions (FAQ)
- List of active and complete CREATE grants



# NSERC CREATE Internal LOI Tips

### **General Tips:**

- Only Form 100 of the lead applicant is required at the LOI stage. Make sure to include a strong section about the quality and extent of past contributions to HQP training.
- The research training experience should focus on providing an enriched training and mentoring experience for graduate (master's and doctoral) students. A proposal that is focused solely on support of undergraduate students will not be considered. If postdoctoral fellows are included, the application must clearly elaborate on their contributions to the training program and the enhanced benefits this group can realize by being involved.
- Student mobility experiences (nationally or internationally, between individual universities and between universities and other sectors) are mandatory for all master and doctoral trainees, with a minimum duration of one month at the master level and two months at the doctoral level.
- Indicating the time in hours/month that each co-applicant will devote to the proposed training program is mandatory. It is possible to make changes to the co-applicants' time between LOI and the application, but NSERC should be contacted if that's the case. Don't choose hours that are too low, the committee will consider the time commitments.

### **Budget:**

Although no budget is required for the LOI, the LOI (Outline of Training Program section) must include a table of how many trainees of which degree type will be trained. To figure out how many students you will be able to support, consider to create a preliminary budget.

- Requested amounts per year can vary by up to ±50K from the default value (\$150K in Year 1 and \$300K/y for Year 2-Year 6), as long as the total does not surpass \$1.65M.
- At least 70% of the CREATE grant must be used for trainees' stipends. Up to 30% of this portion can be distributed to trainees who are not enrolled in the NSE.
- The salary of the program coordinator can be funded or co-funded from the NSERC
- CREATE initiatives are expected to be self-sustaining by the end of six years.
- Partners may contribute additional funds.
- Postdoctoral fellows: CREATE stipends to PDFs are normally limited to two years of support.
  - Three years of support is acceptable, when justified, to attract exceptional foreign candidates.
  - **NOTE:** the three-year appointment must be offered up front and reported to NSERC with a written justification within one month of an offer being accepted.

## **Outline of Training Program (maximum 2 pages):**

- The committee expects a wide range of soft and professional skills training to be a significant component. For example: communication, commercialization and IP, leadership, business management, entrepreneurship, marketing skills, etc.
- Internships or at least other types of immersive experiences are required but should not extend the duration of the degree.
- Each program has to include a mentoring component.
- **Participation of the partners must be confirmed** (e.g. number and duration of internships). Describe how the supporting organizations and universities will contribute and how they will be involved in the training and mentorship of the students as future employers.
- Originality and Novelty and expected significance: Explicitly describe the skills that the CREATE students will receive and your innovative approach to training. The skills your program provides should be highly sought after.
- Specific EDI recruiting strategies and actions for HQP must be discussed in the LOI. CREATE initiatives are expected to increase the inclusion and advancement of under-represented and disadvantaged groups in the NSE. Describe concrete actions you will include in the proposed program! See the recruitment section in the <u>Best Practices in</u> <u>Equity, Diversity and Inclusion in Research (sshrc-crsh.gc.ca)</u> for examples.
- Where applicable, consideration of sex, gender and diversity in the research design should be addressed in the proposal. Please refer to NSERC's equity, diversity and inclusion considerations at each stage of the research process for guidance.
- A table of number of trainees to be trained (funded or not funded by CREATE) is required. Be careful in distinguishing the total number of student years funded vs. the total number of students expected to graduate from the program.
- Be as detailed about the proposed components as possible.
- The committee prefers new courses and training components, preferably with innovative pedagogy.
- Show how the CREATE would facilitate trainee's transition to the Canadian workforce (and to a lesser degree, academia).
- The list of training plan components should be clear as to which type/level of students that will take part in which aspects, when and how many times.
- Be clear in which training components are mandatory or optional.
- To the extent possible, all components should be open to all participants.
- Be specific: describe how long each component will be (e.g., 1 day workshop vs. semester-long workshop), and who will teach it, using what innovative teaching methodology.
- Consider having a common course or component to align the vision of the overall program.
- Consider to offer all or most trainees an option for increased mobility (e.g. internship at a company, work with a co-applicant at another Canadian university, etc.).

## Excellence of Proposed Team (maximum 3 pages)

- Explain the complementarity of expertise, rational for team composition, and how the team will collaborate.
- Mix of junior, mid-career and senior team member is desired.
- Indication/evidence about existing collaborations amongst team members or supporting organizations is an asset.
- Committees also want to see new collaborations.
- EDI considerations should be developed into the rationale of the composition of the program committee, group of trainees and in their supervisors, role models and mentors. Describe how they have implemented and/or will implement policies and practices to support equity, diversity and inclusion within the team (e.g., recruitment of team members, management of the team, mentorship).
- Refer to the <u>Guide for applicants: Considering equity, diversity and inclusion in your</u> <u>application</u> (questions 1 to 4).
- Only the lead applicant can attach their CV, for the other team members, the committee will only have these 3 pages about the team to determine their "excellence". Include a short paragraph for each team member that outlines:
  - Expertise (especially expertise that is relevant to the CREATE topic).
  - CV highlights to demonstrate the individual's stature.
  - Roles and responsibilities within the training program and its management (e.g. "HQP recruitment lead").
  - Past contributions to training (including indicators of past training successes and mentorship experience).
  - If applicable, team members who currently hold or participate in an active CREATE grant must clearly describe their distinct contribution and justification for their participation in the proposed training program.