

OFFICE OF THE VICE PRESIDENT, RESEARCH AND GRADUATE STUDIES

NSERC Alliance Grant

Information Session

Tuesday, December 1st, 2020

Agenda

Alliance Grants

Overview of the program

Option 1

Partner Organizations: Eligibility and responsibilities

Program-specific information and tips

Option 2

Program-specific information and tips

Submission Process

Review and approval workflow

Contacts



Program Overview

- Replaces prior partnership programs
- Support research in the natural sciences and engineering (NSE) led by strong, complementary, collaborative teams.
- Enable collaborations with a broader set of partner organizations: private, public, not-for-profit sectors
- Remove barriers and provide more flexibility in building partnerships that will effectively generate new knowledge and accelerate the application of research results for the benefit of Canadians.



Eligibility to apply

- A tenured, tenure-track or lifetime professor emeritus position; or
- A term or contract position of no less than three years.
- The position must require you to engage in research that is not under the direction of another individual and must authorize you to supervise or co-supervise the research of students registered in an undergraduate or graduate degree program, or postdoctoral fellows (e.g., thesis supervision and not supervision of regular course or laboratory assignments).



Eligibility to apply

• Note on Adjunct professors: Adjunct professors who meet NSERC's eligibility criteria and whose primary place of employment is at an eligible Canadian university may apply to NSERC grants programs. Those whose primary place of employment is outside the university sector (e.g., government, industry or colleges) are eligible to apply to other NSERC grants as co-applicants. NSERC awards funds to adjunct professors working outside the university sector only for the direct support of students (salaries or stipends and student travel costs); all other costs must be covered through other sources of funding.



Option 1

- \$20K-\$1million per year for 1 to 5 years
- Amount represents minimum and maximum request from NSERC, does not include company cash contribution
- Can apply as many times as you want
- Cost sharing: 50%-66.67% (1:1 or 2:1) depending on size of partner organizations recognized for cost sharing



Partner Organizations

- Partner(s) can be from private, public, or not-for-profit sector and at least ONE partner must be recognized for cost sharing
- Partners MUST be shown to have active role in project. You must justify and explain in detail their involvement
- SME (less than or equal to 500 employees) cost sharing is 2:1
- Large organizations (more than 500 employees) cost sharing is
 1:1
- If you partner with 1 SME AND 1 large, the funding model conforms to SME ratio (2:1)



Partner Organizations

- Partner organizations MUST provide minimum cash contributions per year, \$10k for SMEs and \$20k for large organizations
- They must also provide VALID In-kind contributions, however the in-kind contributions are not leveraged for NSERC funding
- If you partner with an SME and a large company, but the SME is not able to provide cash, you can STILL request the 2:1 cost sharing model IF:
 - The SME is shown to be active in, and essential for, the completion of the project
 - The SME is shown to be capable of fully implementing the results of the project
 - The companies are in agreement regarding the transfer of technology



Partner Organizations: Who can participate

Guillermo Mendoza Suarez



Partner Organizations

Examples of partner organizations with contributions recognized in cost-sharing calculations

Private Sector	Public Sector	Not-for-profit Sector
 Canadian private companies Multinationals with presence in Canada Foreign companies (not as sole partner) 	 Municipalities, local/regional governments Federal/provincial/ territorial government departments (not funding agencies) Public utilities Crown corporations Indigenous governments 	 Producer groups Industrial associations Registered charities with a research mandate Museums/libraries Indigenous groups Community groups

Cost-sharing options

Alliance Grants incorporate a three-tiered cost-sharing structure

NSERC will provide:

OPTION 1

50% (a 1:1 leverage ratio),

66% (a 2:1 leverage ratio), or

OPTION 2

90% to 100% of the shareable costs, depending on the size of the partner organizations and the type of partnership



Private Sector

Cash contributions can be recognized*

- Canadian private companies
- Multinationals with a presence in Canada
- Foreign companies (but not as the sole partner organization)

Cash contributions cannot be recognized

- Venture capital / Angel investors / Seed companies
- · Holding companies
- Companies with less than two full-time employees

Canadian Public Sector

Cash contributions can be recognized*

- Municipalities and local or regional governments established by or under provincial or territorial statute
- Provincial/territorial government departments
- Federal government departments
- Indigenous organizations
- Public utilities
- Crown corporations

Cash contributions cannot be recognized

- Funding organizations (federal, provincial, territorial, international) whose primary mission is to fund R&D
- Organizations whose primary mission is to perform R&D and are funded or controlled primarily by government
- · Foreign governments



Not-for-Profit Sector

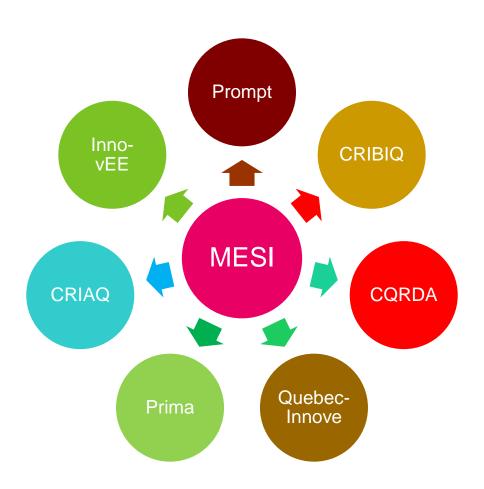
Cash contributions can be recognized*

- Producer groups
- Industrial associations
- Registered charities that have a mandate to carry out and apply research (within natural sciences and engineering)
- Organizations whose primary mission is to maintain collections (e.g., historical, scientific, artistic, or cultural) for the public good, such as libraries, museums, zoos or aquariums
- Community organizations

Cash contributions cannot be recognized

- Not-for-profit organizations whose primary mission is to fund R&D and are funded or controlled primarily by government
- · Post-secondary institutions
- Incubators and accelerators
- Other registered charities
- Hospitals and medical/clinical research institutes
- Philanthropic organizations
- Consortia with the majority of their funding originating from government sources
- Foreign not-for-profit organizations
- Individuals

Quebec Research Consortia





Services provided by OOR

Help finding an partner by:

- Reaching out to companies
- Working closely with Quebec industrial research consortia
- Organizing networking events
- Connecting with potential partners

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Thank You!

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How to Complete an Application

- Required:
 - Form 101
 - Form100A for PI and co-applicants
 - CCV for PI and co-applicants
 - Partner Organization Form



Form 101: Instructions for completing a Form 101 can be found here

- Cover letter
- Co-applicants
- Collaborators and collaborator bio sketches
 - Max 2 pages
- Summary
- Proposal
- Budget/budget justification
- Partner Organization contributions
- Justification of in-kind contributions



Cover letter (optional)

Attach a cover letter if you wish to provide NSERC
with information that will not be shared with external
reviewers, such as an explanation of how the project
has changed since a previous submission (optional).
Include in your cover letter your name, the NSERC
program to which you are applying and the title of
your application.



Collaborator

- Indicate any collaborators. Examples of collaborators are government scientists, academic researchers or company staff members.
 Collaborators contribute to the overall intellectual direction of the research project and bring their own resources to the collaboration. The collaborator will not have access to the grant funds and must be qualified to undertake research independently.
- For the definition of a collaborator, consult the <u>eligibility criteria for</u> <u>faculty</u>
- On behalf of your collaborators, you may attach a biographical sketch or CV for collaborators and key staff of partner organizations whose role in the project is similar to that of a co-applicant (optional). In a maximum of two pages for each person, provide the individual's name/affiliation, education/training, employment/affiliations, research funding and up to five significant contributions related to the project.
- Note: For upload purposes, all collaborator biographical sketches or CVs must be saved as a single PDF file.



Proposal

- No longer free-form
- Template with specific questions
- Enter your text below the questions, and DO NOT delete the questions
- Treat EACH bullet point as a question that must be answered, almost like an exam
- Proposal length varies according to budget



Proposal (template found <u>here</u>)

Proposal sections and length

The number of suggested, maximum or additional pages always includes the NSERC tena ate text.

NSERC term ate text.					
		Average annual request			
		Up to \$30,000/ year <u>*</u>	Up to \$300,000/ year	More than \$300,000/ year	
Section	Percentage of evaluation	Suggested number of pages per section			
Background and expected outcomes	25%	1	2	3	
Partnership	25%	1	2	5	
Proposal	25%	1.5	4	10	
Team		0.75	1	4 <u>**</u>	
Training plan	25%	0.75	1	3	
		Maximum total number of pages			
		5	10	25	
Public impact proposition (P cost-sharing a only	IVP): option 2	Add 3 pages to (see proposal te		ove for the PIVP	



Partner Organization Contribution

- Partner Form, replaces the Form 183A and Letter of support
- Identify partner and whether or not they are recognized for cost sharing.
- Invitation will be generated and issued to identified contact at Partner organization
- Partner will also need to provide a Company profile, as in the past. Since there is no longer a Support Letter, the Partner can use the Profile to emphasize that they have the capacity and necessary expertise to a) contribute to the project and b) implement the findings



Justification of In-kind contributions

- Provide a detailed explanation of all in-kind contributions. This information will be used to assess the level and nature of the partner organization's involvement and the importance of their contribution to the success of the project.
- Salaries for scientific and technical staff: list the name of each staff member, their role at the partner organization and their specific expertise, details as to what they will be providing to the project (link to milestones if possible), the number of hours they will devote to the project and their hourly rate
- Salaries of managerial and administrative staff: list the name of each staff
 member, their role at the company, details as to what they will be providing to
 the project, the number of hours they will devote to the project and their hourly
 rate
- Donation of equipment, software: list each item of equipment and/or software being donated to the project, explaining how it will be used and its importance to the success of the project; provide details on how the cost of the equipment/software was calculated
- Other contributions: describe the contributions to be provided (e.g., travel expenditures for staff), their importance to the project and how their cost was calculated
- Note: For upload purposes, explanation of contributions from all partner organizations must be saved as a single PDF file.



Evaluation

- Merit assessment: evaluation criteria (each with multiple subcriteria for a total of 11)
 - relevance and outcomes
 - partnership
 - quality of the proposal
 - training
- Merit Indicators used to evaluate the above
- Nature and length of evaluation depends on the budget
- First goes to File Manager to assess compliance. If it passes this stage, is forwarded for peer review



Small (\$20k-\$30k)	Medium (\$30k- \$300K)	Large (\$300k-\$1million)
NSERC file managers Evaluation supported by existing NSERC peer review (the applicant and each co- applicant must hold an active peer-reviewed grant from NSERC as primary applicant at the time of application) External reviewers If there is no existing NSERC peer review for the applicant or one of the co-applicants, external reviewers with expertise directly related to the proposal will be used	External reviewers With expertise directly related to the proposal Provide review based on the evaluation criteria	Ad hoc committee of external reviewers With expertise directly related to the proposal Provide review based on the evaluation criteria
4 weeks in the case of peer review 8 weeks if no peer review exists	8-12 weeks	12-16 weeks



Relevance and Outcomes

- significance of the intended outcomes and of the economic, social and/or environmental benefits for Canada
- originality of the research to address the topic and the potential for generating new scientific knowledge
- extent to which the strategy to apply the research results is likely to achieve the intended outcomes



Partnership

- appropriateness of the partnership to achieve the intended outcomes; leveraging of different types of partner organizations and the integration of their unique perspectives and knowledge in the project, as appropriate
- clarity of each partner organization's role in the collaboration with respect to defining the challenge, co-designing and implementing the research, and using the results to achieve the desired outcomes
- appropriateness of the level of cash and in-kind contributions from each partner organization



Quality of the Proposal

- clarity of the objectives and deliverables;
 appropriateness of the scope and size of planned activities to achieve the expected outcomes;
 justification for the planned expenditures
- appropriateness of the identified indicators and methods for monitoring progress during the project and for assessing outcomes afterwards
- appropriateness of academic researchers' expertise, and that found within the partner organizations, both for carrying out the planned research activities and in mentoring trainees



Training

- opportunities for enriched training experiences for research trainees (undergraduates, graduates, postdoctoral fellows) to develop relevant research skills as well as professional skills such as leadership, communication, collaboration and entrepreneurship
- consideration of equity, diversity and inclusion in the training plan (for guidance, consult the <u>Equity</u>, <u>diversity and inclusion in the training plan</u> document)



Scaling-up a successful research collaboration

- NSERC recognizes that when collaboration on a research project is achieving results, there should be a straightforward way to continue supporting it.
- NSERC will support the growth of a project as the research partnership progresses by providing options to expand some successful projects.
- Additional funds can be awarded within the original timeframe or during the additional years of the project. The maximum duration of a project, including a time extension, is five years. Establishing this maximum period allows the project to be reassessed to ensure continued excellence. The procedure for expanding projects will be detailed at a later date.



Why Some Alliances Fail

- Non compliance!
 - Do not respect proposal template instructions
 - Not addressing EACH POINT in the Proposal instructions
 - Incorrect number of pages
 - EDI not appropriately addressed
 - Inadequate cost-sharing ratio
 - Partner Organization issues
 - Your Advisor can help you contact NSERC to discuss applications beforehand. Every situation is different and can potentially be accommodated



Option 2

- \$30k-\$100k per year for up to 5 years
- Can submit two within a 12-month period for partner organizations
- Can submit* one within a 12-month period for researchers as applicant or as co-applicant
- Cost sharing 90%-100% depending on partner

* Even if a submission is unsuccessful, it counts toward your allowable 1



Cost sharing

Exclusively notfor-profit and public partner organizations 100%

Any privatesector partner organization; this option requires a 10% cash contribution from the combined partner organizations that are recognized for cost-sharing

90%



Option 2

- 3 specific characteristics:
 - societal impact
 - making connections
 - broad outcomes



Societal Impact

- generates societal benefits (e.g., improving quality of life, health and safety, public goods and resources, prosperity, sustainability)
- tackles national or regional priorities or global issues where Canada is involved
- builds capacity to transform a sector and its practices
- provides evidence for new policies or regulations
- solves an issue affecting a whole business area or creates a new area of the economy

results in new technical knowledge and societal impact • more than improving a product/service for increased profit • impacts beyond near-term economic success • outcomes beyond the partner organizations



Making Connections

- meaningful partnership
- working with end users and implementers: needs-driven
- societal perspectives/skill sets: merge ideas, overcome barriers and find creative solutions
- creates new relationships or builds on existing efforts, and integrates solutions with decision-makers within and across sectors

Despite a limited financial contribution: • partners are active and highly committed • valuable opportunity to connect with others • partners are committed to sharing results beyond their own organizations



Broad Outcomes

- outcomes benefit beyond the partner organizations
- results accessible by all stakeholders in society
- strategy to raise awareness on the resulting products, services or policies among potential users
- intellectual property management not a barrier



Option 2 Characteristics

- When to consider option 2:
 - challenge in the NSE
 - important unmet societal need
 - expected societal impact
 - barriers preventing the research from happening
 - financial support scarce or not available AND
 - A viable solution can be envisioned to significantly contribute to long-term societal benefits.
 - Higher NSERC support is key to enabling these advances.



Option 2 is not

- Engage grants or Strategic Partnership grants
- a means to provide a test ground to establish new partnerships
- a means to offset the cost of research where investments are available
- a means to address research challenges for the strict benefit of the partner organizations
- If you think you are eligible for Option 2, please notify your Advisor. We can work with you to determine eligibility.



Form 100A



Most significant contributions to research (9000 characters)

- Describe up to five of your most significant contributions to research and/or to practical applications over the last six years. Contributions made more than six years ago but for which the impact is being felt now (e.g., exploitation of patent, inclusion in a code, etc.) may be described in this section only.
- For each contribution, describe its impact and significance to, and use by, other researchers and end-users. For collaborative contributions, describe your role.
- Impact can be seen as, but is not limited to, advancing knowledge, developing technology, addressing socio-economic or environmental needs or contributing to increased equity, diversity and inclusion in research.
- A contribution does not have to be a single publication or report.
 For example, a group of publications on a specific subject could be discussed as one contribution.



Additional information on contributions (3000 characters)

Provide an explanation concerning the contributions listed in your NSERC CCV:

- the nature of collaborations with other researchers
- the rationale or practice used for the order of authors in the publications listed, and the inclusion of students in the list of authors
- your role in joint publications
- the reason for selecting certain venues (journals, conferences) for publications and particular features of the venues (e.g., target audiences, review procedures)



Additional information on contributions, cont'd

- the impact or potential impact of patents and technology transfer
- the nature of industrially relevant R&D activities
- the significance of technical reports
- attestation to the nature and the significance of confidential technical and internal reports
- original research reported in books or technical reports



Past contributions to highly qualified personnel training (6000 characters)

- Discuss your most significant contributions to the training of HQP over the last six years.
- 3 sections: Training Environment, Awards and Research Contributions, and Outcomes and Skills gained by HQP



Training environment

- Describe the research training and development opportunities provided for HQP (e.g., HQP science outreach and engagement, interdisciplinary research, promoting equity, diversity and inclusion [EDI] in the natural sciences and engineering [NSE], collaborations, interaction with the private and public sectors). Describe qualitatively any challenges or barriers encountered in ensuring an equitable, diverse and inclusive research and training environment, and describe specific actions implemented to address them.
- Important: trainee demographic data is not requested nor required to assess impacts resulting from consideration of EDI in the research and training environment.



Training environment, cont'd

For more information on equitable, diverse and inclusive research and training environments, refer to NSERC's <u>Guide for applicants: Considering equity, diversity and inclusion in your application</u> (questions 1 to 4). For more information on equitable and inclusive recruitment practices, refer to the Canada Research Chairs' <u>Equity, diversity and inclusion: A best practice guide for recruitment, hiring and retention</u>



Awards and Research Contributions

 Describe research contributions by HQP (e.g., publications, patents, key presentations) and highlight awards, scholarships and fellowships won by HQP.

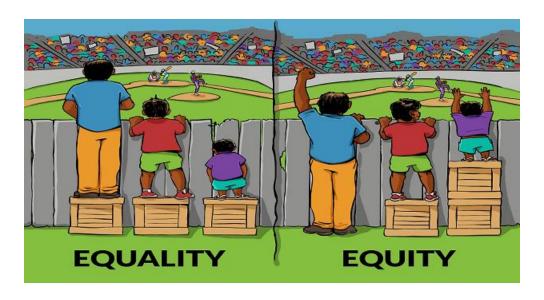


Outcomes and Skills gained by HQP

- Describe your most significant examples of HQP outcomes and explain how your training contributed to their success (e.g., skills and experiences gained, outcomes such as further studies or career). A successful outcome can be broadly defined as any outcome (in natural sciences, engineering or other fields) in which the HQP has an impact using the skills gained in your research training environment.
- Cases of HQP delays (e.g., parental, medical or bereavement leaves) that are beyond your control can be considered. A pattern of delays in graduation time or frequent student withdrawal from programs should be explained, providing the minimal amount of personal information necessary.



Equality vs Equity: Individual accommodation to achieve the same level of success



Interaction Institute for Social Change | Artist: Angus Maguire.



EDI and Alliance

- You are asked to address EDI in 4 separate sections:
 - Sex and gender and diversity considerations in research design
 - Team composition
 - HQP training plan
 - CV attachment



- In 2018, Concordia University convened an EDI Advisory Committee (EAC) to examine shortfalls in current practices and identify priority areas for improvement.
- In consultation with a representative cross-section of the Concordia community and experts in the assessment and implementation of EDI best practices, the EAC produced a report that recommended specific measures be put into place to ensure compliance with EDI principles.
- University is crafting an Institutional best practices plan based on the report <u>recommendations</u>



- EDI is about more than just hiring. It is important to note the distinction between "equal" treatment and "equitable" treatment:
 EDI is about retaining and promoting trainees by providing an environment in which all people can succeed. More information can be found in the NSERC EDI Guide for applicants.
- Do not list number of females/people of colour. NSERC does not want a demographic breakdown
- Components to consider:
 - Recruitment
 - Retention
 - Environment
 - Accommodation



Recruitment Practices

- Non-gendered language in recruitment ads
- Aligning with organizations for under-represented groups to promote training opportunities: National Society for Black Engineers, Women in Engineering, Indigenous Student Association
- QUALITATIVE assessments of potential students: Instead of just looking at CVs, allow space for an applicant to explain any delays, absences, or comparative lack in success and/or experience



Environment

- You may want to have a Lab Orientation session each year for existing and incoming students where you talk about the concept of EDI, make it clear that if anyone has any personal requirements or needs accommodation they should speak to you, but where you also make them aware of on campus resources such as mental health help, sexual assault support, students with disabilities center,
- You and your HQP are encouraged to participate in EDI training workshops



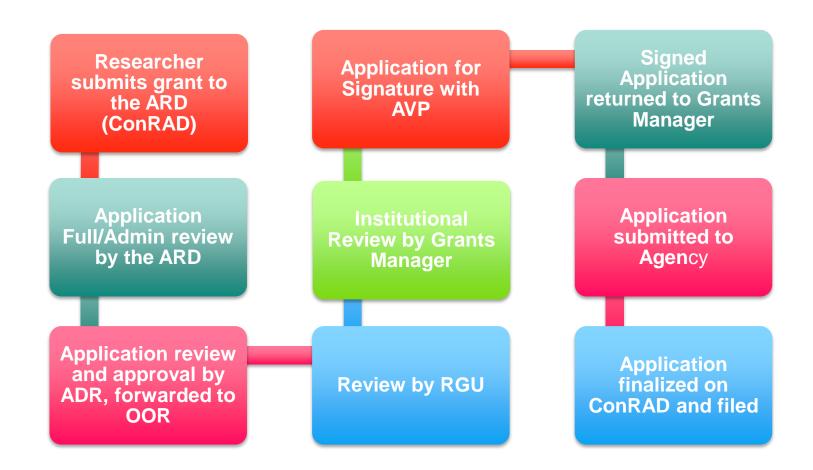
Accommodation Practices

- Applicants are encouraged to consider how to promote and support a variety of forms of mentoring that recognize barriers to trainees' equitable participation and growth.
- DESCRIBE planned approach to promoting the participation of a diverse group of HQP, taking into account equity and inclusion in recruitment practices, mentorship approaches and initiatives aimed at ensuring an inclusive research and training environment
 - Accommodating single parents with flexible hours
 - · Accommodating maternity/paternity leave
 - Accommodating disabilities with flexible lab set-up, flexible hours/location, additional support by techs, etc.
 - Seek out local long-term industrial internships to accommodate families and caregivers of family members, or anyone with local commitments that would preclude long-term non-local internships
 - Accommodate cultural and religious holidays and practices



Submission Process







SECTOR	ADVISOR	CONTACT INFORMATION	
Business & Social Sciences	Arlene Segal		arlene.segal@concordia.ca
Engineering & Computer Science	Shoghig Mikaelian	ECE, CSSE, CIISE, CES	shoghig.mikaelian@concordia.ca
	Lauren Segall	MIAE, BCEE, CME	lauren.segall@concordia.ca
Fine Arts, Humanities & Education	Michele Kaplan		michele.kaplan@concordia.ca
Sciences	Jessica Safarian		jessica.safarian@concordia.ca





Private Sector

Recognized for cost sharing	Not recognized for cost sharing
 Canadian private companies Multinationals with business operations in Canada Foreign companies (only if they are partnering with a Canadian partner organization that is recognized in NSERC's costsharing calculations) 	 Venture capital/angel investors Holding companies Companies with fewer than two full-time employees



Public Sector

Recognized for cost sharing Not recognized for cost sharing Municipalities and local or Funding organizations (federal, regional governments established provincial, territorial, international) whose primary by or under provincial or territorial statute

- Provincial/territorial government departments
- Federal government departments
- Indigenous organizations
- Public utilities
- Crown corporations

- mission is to fund R&D
- Organizations whose primary mission is to perform R&D
- Foreign governments



Not for Profit Sector

Recognized for cost sharing

- Producer groups
- Industrial associations
- Registered charities that have a mandate to carry out and apply research (within natural sciences and engineering)
- Organizations whose primary mission is to maintain collections (e.g., historical, scientific, artistic or cultural) for the public good, such as libraries, museums, zoos or aquariums
- Community organizations

Not recognized for cost sharing

- Not-for-profit organizations whose primary mission is to fund R&D and are funded or controlled primarily by government
- Post-secondary institutions
- Incubators and accelerators
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- Philanthropic organizations
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