Making Canada a country of Discoverers and Innovators

INNOVATION.CA
CANADA FOUNDATION FOR INNOVATION | FONDATION CANADIENNE POUR L'INNOVATION

NSERC
CRSNG

$3B+ Innovation Support

Social Sciences and Humanities Research Council of Canada
Conseil de recherches en sciences humaines du Canada
Canada

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

NSERC support in Canada

- $1.2 B annual budget
- 11,000+ NSE researchers
- 33,000+ students and fellows
  - 10,000 trained in partnership with industry
- 3,600+ companies
  - Single largest funding source for Industry-Academic R&D partnerships in STEM

People

Talent

- Skills development
- Work Integrated Learning
- Access to Global Talent

- 30,000 students supported (700 in Atlantic)
- Investments in STEM Promotion (K-12)
- Women in Science & Engineering Chairs
- Approximately 50% of companies hire the graduate student under NSERC Partnership programs

From Ideas to Solutions

Promote STEM & Skills at young age

Digital

More Women in Science

Technologies

Innovation

- World Leading Clusters
- Mission Driven Research
- Stronger coordinated partnerships

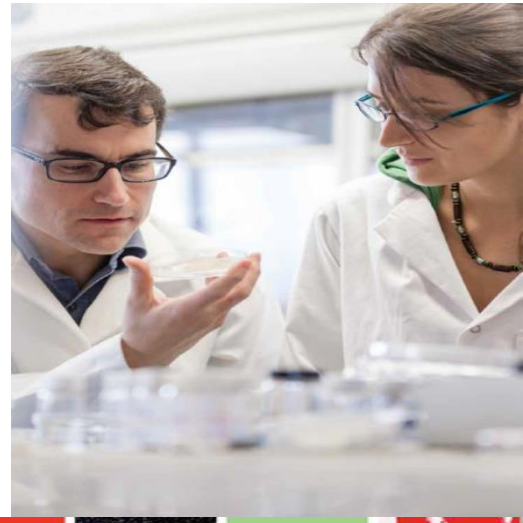
- Tesla IRC,
- Cybersecurity CRC,
- Big Data IRC
- AI CRC & IRC
- 50% of industry partners <u>collaborated 6 times of more</u> with NSERC

Priority Canadian Technologies

From Science to Technologies

Invest in Clean Tech

Support Key Sectors and Clusters



Access to Talent

NSERC Innovation Programs Outcomes

50%

Of partners hired the student from the university.

97%

Of partners indicated the project was a success and would recommend NSERC programs.

81%

Of partners indicated that the project enhanced the knowledge and skills of personnel

NSERC
Alliance Grants

Canada’s research partnership program

Gordon Deveau
Deputy Director
Natural Sciences and Engineering Research Council of Canada

One New Flexible Simplified Enhanced Responsive Partnerships Program

Alliance grants encourage university researchers to collaborate with partner organizations, which can be from the private, public or not-for-profit sectors. These grants support research projects led by strong, complementary, collaborative teams that will generate new knowledge and accelerate the application of research results for the benefit of all Canadians.

The program…

Alliance Grants…

were designed in consultation with the community and create an enabling platform for starting and growing research partnerships, while building on the strengths of our previous Research Partnerships Programs.

Previous Programs

- Engage Grants
- Collaborative Research & Development Grants
- Strategic Grants
- Industrial Research Chairs

Alliance Grants

- more flexible
- more eligible partners
- no restriction on research topic
- no application deadlines
- simpler process
- faster decision times

Alliance Grants support collaborative projects that will…

Generate new knowledge / technology

Create economic / social / environmental benefits

Contribute to Canada's long-term competitiveness

Support public policy

Train new researchers

Draw on diverse perspectives / skill sets

Projects can vary in size and scope

- Smaller short-term projects with one researcher
- Long-term projects involving several researchers
- One-on-one collaborations with one partner organization that actively participates in research
- Projects involving many partners organizations from different sectors

Grant size and project duration

The minimum grant size is **$20,000** per year

The maximum is **$1 million** per year

Alliance Grant projects can range from **1 year** up to **5 years** in duration

Shorter projects can be scaled up or extended within the maximum 5-year period

Research…

Research topics

Alliance Grants can support any R&D project that responds to a research challenge in the natural sciences or engineering

- See: *Selecting the Appropriate Federal Granting Agency*

Applicants may collaborate with academic researchers in fields other than the natural sciences or engineering

- Costs for these collaborations must be identified in the project budget
- Up to a maximum of 30% of the shared project costs

Partners…

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

Role of partner organizations

Every partner organization must do at least one of:

- Play an active role in research activities
- Utilize the research results and achieve desired outcomes
- Play an active role in mobilizing knowledge to generate outcomes

At least one partner organization must demonstrate ability to exploit research results

- Other partners may be chosen for their ability to generate and mobilize knowledge

Partner organizations must collectively support the project through cash and/or in-kind contributions

Cost-sharing…

Cost-sharing

Alliance Grants are calculated based on cost-sharing with the partner organizations

- The portion that can be cost-shared with NSERC includes **only the cash contributions** from partner organizations recognized for cost sharing

In-kind contributions are important for the success of the project

- In-kind contributions are considered as part of the proposal evaluation
- In-kind should not be considered when determining NSERC's contribution to the project costs

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

Cost-sharing options

Option 1

Size of partner organization	Type of partnership	NSERC Contribution to Project costs	Parameters
Large organizations* 500+ employees globally	Sole partner organization or in partnership exclusively with other large organizations	50% (1:1 leverage)	**Applications per year:** no limits **Grant size:** $20,000 to $1 million per year **Duration:** 1 to 5 years
	As a partner with small and medium-sized enterprises such as in value- or supply-chain relationship, or with other sectors*	66% (2:1 leverage)	
Small and medium organizations* Less than 500 employees globally	Sole partner organization or in partnership with other sectors*	66% (2:1 leverage)	

*including private, public and not-for-profit

Cost-sharing options

Option 2

Size of partner organization	Type of partnership	NSERC Contribution to Project costs	Parameters
All partner sizes Partnership must include one organization that is recognized for NSERC cost-sharing	Exclusively not-for-profit and public partner organizations	100%	Applications within a 12-month period: • Two for non-academic partners • Two for applicants (one as the principal investigator, one as co-applicant) **Grant size:** $20,000 to $200, 000 per year **Duration:** 1 to 5 years
	Any private-sector partner organization Requires a 10% cash contribution from the combined partner organizations	90%	

Contributions recognized in cost-sharing calculations

Private Sector

Cash contributions can be recognized*	Cash contributions *cannot* be recognized
• Canadian private companies • Multinationals with a presence in Canada • Foreign companies (but not as the sole partner organization)	• Venture capital / Angel investors / Seed companies • Holding companies • Companies with less than two full-time employees

*if NSERC cost-sharing requirements are met

Contributions recognized in cost-sharing calculations

Canadian Public Sector

Cash contributions can be recognized*	Cash contributions *cannot* 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	• 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

*if NSERC cost-sharing requirements are met

Contributions recognized in cost-sharing calculations

Canadian Not-for-Profit Sector

Cash contributions can be recognized*	Cash contributions *cannot* 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	• 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

*if NSERC cost-sharing requirements are met

Examples of cost-sharing scenarios…

Cost-sharing example

OPTION 1

Large partner organization(s)* only

**within the same sector*

50% cost-sharing (1:1 ratio)

Total project cost: $180,000

- **Partner(s) cash contribution**: $90,000**
- **NSERC contribution: $90,000**

***Contributions recognized in cost-sharing calculation*

OPTION 1

Large partner organization(s) with not-for-profit and/or public sector organizations

**public, private, or not-for-profit*

66% cost-sharing (2:1 ratio)

Total project cost: $180,000

- **Partner(s) cash contribution**: $60,000**
- **NSERC contribution: $120,000**

***Contributions recognized in cost-sharing calculation*

Cost-sharing example

OPTION 1

Small / medium-sized organizations*

**public, private, or not-for-profit*

66% cost-sharing (2:1 ratio)

Total project cost: $180,000

- **Partner(s) cash contribution**: $60,000**
- **NSERC contribution: $120,000**

***Contributions recognized in cost-sharing calculation*

OPTION 1

Small / medium-sized organizations*

**public, private, or not-for-profit*

66% cost-sharing (2:1 ratio)

Total project cost: $200,000

- **Partner(s) cash contribution**: $60,000**
- **Partner(s) cash contribution *NOT considered* for cost sharing: $20,000**
- **NSERC contribution: $120,000**

***Contributions recognized in cost-sharing calculation*

Other sources of funding…

Project Budget

Projects can be supported by additional sources of funding that are not recognized for cost sharing

- Such funds can be listed in the project budget, but are not considered as part of the NSERC cost-sharing calculation
- These additional funds must be described in the proposal and will be considered in the assessment of a proposal's overall merit

How to complete the proposal…

Proposal Sections & Length

	Average annual request Suggested number of pages per section			
Section	**Up to $30,000/year**	**Up to $300,000/year**	**More than $300,000/year**	**More than $750,000/year**
Background and Expected Outcomes	1	2	3	3
Partnership	1	2	3	5
Proposal	2	4	5	10-15
Team	0.5	1	2	4
Training Plan	0.5	1	2	3
	Total number of pages including NSERC template text			
Total	5	10	15	25-30

Assessment of applications…

How applications are reviewed

NSERC has adopted a financial risk-based approach that includes various assessment tools

- Reduces burden and delays
- Recognizes risk as a function of project complexity and funds requested

Review of the application

Project Size	Small	Medium	Large
Approximate thresholds	Average annual request of $20,000 to $30,000 for 1-5 years	Average annual request of more than $30,000 up to $300,000 for 1-5 years	Average annual request of more than $300,000 up to $1,000,000 for 1-5 years
Review mechanism	**NSERC File Managers** • Evaluation supported by existing NSERC peer review (i.e. Discovery Grant rating, active Canada Research Chair holders, prior Partnership grants) • If no existing NSERC peer review evidence is available, external reviewers will be used	**External Referees** • With expertise directly related to the proposal • Provide review based on all evaluation criteria	**Ad hoc committee members** • With expertise directly related to the proposal • Provide review based on all evaluation criteria
Funding decisions	NSERC assigns merit indicators to determine priority for funding		
Expected decision time	4 weeks	8-12 weeks	12-16 weeks

Evaluation Criteria…

Evaluation criteria

Applications are evaluated using the following criteria:

- Relevance and outcomes
- Partnership
- Quality of the proposal
- Training

Evaluation criteria

Relevance and outcomes

25%

- Significance of the intended outcomes and of the economic, social and/or environmental benefits for Canada
- Originality of research and production of new scientific knowledge
- Strategy to apply the results

Partnership

25%

- Relevance to achieve the expected results; leveraging of different types of partner organizations and the integration of their unique perspectives and knowledge in the project, as appropriate
- Role in 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

Evaluation criteria

Quality of the proposal

25%

- 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

25%

- 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 diversity and gender equity in the training plan

Equity, diversity and inclusion

You are asked to consider sex, gender and diversity in the project's research design and to consider how to promote and support a variety of forms of mentoring to ensure trainees' equitable participation and growth.

- In large proposals, you must strive for equity, diversity and inclusion when developing your group of co-applicants, partners and trainees
- See Guide for Applicants: *Considering equity, diversity, and inclusion in your application*

Funding Decisions

Financing decisions will be made on a competitive basis

Definition of given budget periods

- Assessment using the evaluation criteria
- Merit indicators
- Ranking according to overall merit
- Applications with the highest merit will be funded until the budget of the period in question is exhausted

When the request is funded...

Scaling-up successful research collaborations

NSERC will support the growth of a project as the partnership progresses by providing options to expand successful projects

- Additional funds can be awarded within the original timeframe or during additional years of the project
- Maximum project duration (including any time extension) is five years
- Procedure for expanding projects will be detailed at a later date

Alliance Grants timeline…

Transition

TBD	90% to 100% (Option 2)
TBD	SMALL applications < $30k / year
TBD	MEDIUM applications > $30k / year
May 21	LARGE applications >$150k / year
April 24	Official launch

Alliance Grants

Lastly…

Alliance… in summary

- Single point of entry for university research partnerships
- Opening up to multisectoral partnerships
- Several levels of cost sharing
- Simplified processes
- Flexible
- Competitive
- Focus on project outcomes

Alliance… Tips and Reminders

- Scientific Merit, Excellence of the Research Team, Training
- Increased focus on: Outcomes, Partnerships and EDI
- Competitive Process: Merit Indicators

- Use the Template
- Strictly Observe the Page Limits (by funding level)
- Partner Form 183A and letters of support no longer required
- Form 100A + CCV replace Form 100

Visit **nserc.ca/alliance** to learn more about the new Alliance grants.

Thank you!

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