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Les gens. La découverte. L'innovation.

NSERC
CRSNG

Strategic Partnership Grants for Projects
SPG-P
2018 Competition

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Agenda

- SPG-P program overview
- International Collaborations
- Timelines
- What’s new for 2018
- LOI Phase Overview and Evaluation
- Full Application Phase Overview and Evaluation
- Tips

Strategic Partnership Grants for Projects (SPG-P)

Objective

To increase research and training in **targeted areas** that could strongly influence Canada's economy, society and/or environment **within the next 10 years.**

Strategic Partnership Grants for Projects

- Early stage university research with the potential to lead to breakthrough discoveries in the future (5-10 yrs)
- Active involvement of non-academic participants (government or industry) - no cash required
- Target areas of national importance and emerging areas of potential significance

Expected Results

- ✓ New knowledge/technology with strong potential to strengthen Canada's industrial base, generate wealth, create employment and/or Canadian public policy
- ✓ Highly qualified personnel trained in the target areas
- ✓ Transfer of knowledge/technology to Canadian-based organizations that are well positioned to apply the results

Four Target Areas

Priority research topics within:

- Advanced Manufacturing
- Environment and Agriculture
- Information and Communications Technologies
- Natural Resources and Energy

Exceptional Opportunities (EO)

- Projects that make a compelling case for research within the Context section of a target area description, but are outside the research topics, will be considered “exceptional” and may be funded subject to the availability of funds
- No more than 20 percent of the competition budget will be allocated to exceptional opportunities

Supporting Organizations

Private sector

- Canadian-based companies or multi-nationals with Canadian operations (R&D or manufacturing) that can apply the research results for economic gain.

Public sector

- Canadian government organizations that can apply the research results to strengthen policies (the proposal must clearly show how the project relates to their public policy responsibilities).

Supporting Organizations - Con’t

A supporting organization must also:

- Have a demonstrated interest in the project (letters of support, in-kind contributions)
- Be involved in all stages of the research (help to develop the proposal, interact with researchers and students, provide input to the project)
- Validate the results of the research
- Provide guidance concerning exploitation of results

Typical Strategic Project Grant

- Maximum duration: 3 years
- Average grant: $187,000/year
- Teams of 3-4 members, often multidisciplinary
- 2018 competition budget is expected to be $15 million (16 to 20 awards per target area)

Competition Statistics

Competition Year	# of Applications	# of Awards	Success Rate
2017	198	80	40.0%
	(525 LOIs)	*(205 Invited)*	*(39.0%)*
2016	338	83	24.6%
2015	330	74	22.4%
2014	298	78	26.2%
2013	314	75	23.5%
2012	314	81	25.8%

International Collaborations - Concurrent Call for Joint Research Projects

- Agence Nationale de la Recherche (ANR), France and Ministry of Science and Technology (MOST) in Taiwan
- Two separate but linked proposals: one submitted to each agency
- Canadian applications must meet all Strategic Partnership Grants for Projects requirements
- There is no joint review for full application
- International agency will fund its scientists
- NSERC has not reserved funds for applications related to international concurrent calls

International Collaborations - Concurrent Call for Joint Research Projects

- A joint project will be supported if it is positively reviewed by both NSERC and the corresponding international agency.
- Letter of Intent **must** be submitted on February 1st, 2018
- LOIs falling under concurrent call for joint international collaboration will automatically be invited to submit a full application provided that all the requirements for an SPG-P grant have been met.
- Up to 3 additional pages are allowed at full application. **See Detailed Instructions.**

Competition Schedule

- **February 1** – deadline to submit Letter of Intent (LOI)
- **February to March** – evaluation of LOIs by Strategic panels
- **April 1** – invitation to submit full application
- **June 7** – deadline to submit full application
- **June to August** – external review process
- **August 20 to 31** – Strategic selection panel meetings
- **September 30 –** results announced

What’s New for 2018

- LOI applications are submitted to NSERC through the university research grants office
- LOI Proposals are 3 page free-form (no template)
- Form 183A for each supporting organization is required at LOI phase
- Equity, Diversity and Inclusion

Letter of Intent (LOI) Overview

- Form 189 - SPG-P Letter of Intent
  - Proposal – 3 pages free-form (no template)
  - References – 1 page maximum
  - Appendix C – reviewer suggestions
- Personal Data Form (Form 100) for applicant only
- Form 183A and Letter of Support - New
- Cover letter – International agreements/reviewer exceptions

LOI – Proposal Format

- 3 pages total (free-form) with the following headings:
  - Objective and Expected Outcomes
  - Fit to Target Area
  - Originality of the Research
  - Quality of the Researchers as Applicants
  - Training Potential
  - Relevance of the Proposed Research to the Supporting Organizations

LOI - Form 183A and Letter of Support

- New for the 2018 competition: **Form 183A is required**;
- A Form 183A for SPG-P LOI (STPLI) **must** be linked to the LOI for each supporting organization and **must** include a dated, signed letter of support on letterhead providing the following information:
  - a concise statement describing the nature of their Canadian operations
  - support for and agreement with the proposal
  - the potential benefit arising from the research and the relevant timeframe
  - potential interactions between the organization's personnel and the research team
- Letters of support from government organizations must be signed by Director General or equivalent level

LOI - Cover Letter

Cover letter only required for:

• LOIs submitted under an international agreement (ANR in France or MOST in Taiwan) **must** use the cover letter to provide the name and institution of the collaborating principal investigator

• To request that certain individuals not be used in the evaluation of the application

LOI – Evaluation Process

- Letters of intent will be assigned and evaluated by 3 members of a Strategic target area selection panel.
- Each reviewer will rate the LOI on the following scale: *outstanding, excellent, very strong, strong, acceptable, inadequate*.
- Evaluation is independent (offline)- no consultation or discussion.
- The highest rated LOIs in each target area will be invited to submit a full application. The number of invitations will be approximately twice the number of anticipated awards.
- Comments from LOI will be provided to applicants.
- **Appeals of the LOI results will not be accepted.**

Evaluation of LOIs

Fit to target area

•The project must support the goal of Strategic Partnership Grants and fall within one of the target areas.

•The proposal must address all parts of the target area description – context and description of the research topic.

•For “exceptional opportunities”, the proposal must provide a compelling case for research within the Context section of a target area description.

Evaluation of LOIs – Con’t

Originality of the research

The project must promise to generate new knowledge or apply existing knowledge in an innovative manner. Consideration will be given to the following points:

- ✓ the novelty of the overall concepts and approach;
- ✓ how the research relates to the current scientific and/or technical developments in the field with references to the current literature and patents;
- ✓ the potential for developing new knowledge or technology, including innovative techniques, processes or products;
- ✓ the extent to which new knowledge or technology is expected to impact on the field of research; and
- ✓ the significance of the scientific issues and technical challenges.

Evaluation of LOIs – Con’t

Quality of the applicants as researchers

The research team must have the expertise required to address the defined objectives competently and to complete the project successfully. Consideration will be given to the following points:

- ✓ the breadth and complementarity of expertise available for the project; and
- ✓ the appropriateness of their expertise in the proposed research areas of the project.

Evaluation of LOIs – Con't

Training potential

The project must provide opportunities to train students and other highly qualified personnel with skills relevant to the needs of Canadian organizations. Consideration will be given to the following points:

- ✓ the potential to provide highly qualified personnel with skills relevant to the needs of Canadian organizations;
- ✓ the roles of the students, postdoctoral fellows, research associates, technicians and, if applicable, the research staff of the supporting participants; and
- ✓ the extent to which all participants, including the supporting organizations, are involved in the training.

Invitation for Full Application

- Invitations will be sent by **April 1** with full applications due **June 7**
- Some information from LOI will be transferred to the Form 101 application and cannot be changed
  - Principal investigator
  - Title of proposal
  - Target area and research topic
- It is expected that the research team will be the same but additions and deletions are allowed.
- It is expected that the supporting organizations will be the same but additions and deletions are allowed.
- International agreements: if the collaboration does not materialize, a stand-alone proposal will not be accepted

The SPG-P Application

- Application for a Grant (Form 101)
- Personal Data Forms (Form 100) for applicants and co-applicants and CVs of collaborators (6 pages max)
- Form 183A (partner's information and contributions)
- Letter of support describing partner's involvement (see instructions for specific items to be addressed)
  - **Note:** Letter of support and accompanying Form 183A from government organizations **must** be signed by the Director General (or equivalent level)

The SPG-P Application – Con’t

Modules in Form 101

- Research Proposal (11 pages total)
- Activity Schedule
- Budget/Proposed Expenditures
- Contributions from Supporting Organizations
- Budget Justification
- References (2 pages max)
- Relationship to Other Research Support
- Cover Letter (reviewer exclusion)

Selection Criteria – Equal Weighting

1. Originality of the research
2. Quality of the research
3. Project work plan
4. Quality of the applicants as researchers
5. Training potential
6. Interactions with the supporting organizations
7. Benefits to Canada and the supporting organizations

Guidelines for Writing the Proposal

Section 1 – addressing criteria 1-4 (~7 pages)

- Objectives – clear goals *(where you want to be)*
- Current state of the art *(where you are now)*
- Methodology *(how you're going to get there)*
- Roles and timelines *(who is doing what when)* – consider using a Gantt chart
- Beware of technical jargon, ensure that someone outside your field can understand the proposal.

Guidelines for Writing the Proposal Con't

Section 2 – (~1 page) addressing criterion 5

- Outline clearly HQP interaction(s) with the partner(s)
- Relate the training of students and other research personnel provided to the needs of Canada
- Focus on the value added by the opportunities for students to interact with the group (in particular, the partner) and gain skills

Guidelines for Writing the Proposal Con't

Section 3 – (~1 page) addressing criterion 6

- Canadian based company that can apply the results to generate wealth or employment
- Government organization that can apply the results in a way that strengthens public policy
- Quality of letter of support can vary greatly and influence funding outcome; avoid generic letters
- Clearly demonstrate the interactions and that the partner is involved in all aspects of the project
  - remember, in-kind is required

Guidelines for Writing the Proposal Con't

Section 4 – (~1 page) addressing criterion 7

Benefits to the supporting organizations and to Canada

- Be as specific as possible – what kind of benefits and the time frame for realization
- For Industry partners – economic benefit
- For Government partners – strengthening public policy

Evaluation of Full Proposal

- Review by external referees (aim for 3)
- Review by Panel
  - Application discussed for 15 min
  - Consensus ratings given for each criterion (1-6)
  - Rank list
- External reviewers and the Selection Panel will use the same criteria and statement sets to evaluate the proposals

Note on Resubmissions

- Proposals are not required to be identified as a resubmission;
- The outcome of a resubmitted proposal may be different from previous LOI or full application competitions as every year is a new competition;
- Applicants are encouraged to take any comments from previous competitions into consideration in preparing LOIs and full applications

Tips for Full Proposal

- Take full advantage of the Research Office and NSERC staff.
- Position your project within the current literature.
- Self-evaluate your proposal
  - All criteria are equal
  - Each criterion has a statement set and an evaluation scale from 1 to 6 (available in the Instructions)
  - Competitive competition; only proposals that score highly in all criteria are successful

Final tips for Full Proposal - Con’t

- All aspects of the application are critical including:

  -Budget justification: required for each line item; show how the budget numbers and in-kind contributions were calculated

  - Activity Schedule: clear milestones; take October announcement of funding into account

  -Relationship to other support: not enough information could affect panel decision

- Read and follow instructions.

Useful Links

Instructions F189 (LOI) and Evaluation Criteria: http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/instructions/189/SPGP-SPSP_eng.asp

Instructions F101 (Full Proposal) and Evaluation Criteria: http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/instructions/101/e.asp?prog=spg

SPG Objectives / Program Description: http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/SPG-SPS_eng.asp

Target Area Descriptions: http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/SPGTargetAreas-SPSDomainesCibles_eng.asp;

Useful Links

Guidelines for Organizations Participating in Research Partnerships: http://www.nserc-crsng.gc.ca/NSERC-CRSNG/policies-politiques/orgpartners-orgpartenaires_eng.asp;

International Collaborations: http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/NSERCANR-CRSNGANR_eng.asp;

Framework on Equity, Diversity and Inclusion: http://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/framework_cadre-de-reference_eng.asp

Use of Grant funds: http://www.nserc-crsng.gc.ca/Professors-Professeurs/FinancialAdminGuide-GuideAdminFinancier/FundsUse-UtilisationSubventions_eng.asp

Contact

For general inquiries, fit to target area, eligibility of partners or applicants:

STRGR@nserc-crsng.gc.ca

For on-line support :

Helpdesk (613) 995-4273
webapp@nserc-crsng.gc.ca

Questions?

How NSERC Establishes Updated Target Areas and Research Topics

- Review of target areas and research topics undertaken every 5 years in order to align with current national priorities;
- Available budget requires supporting focused challenges (SPG is the only Partnerships program with defined target areas)
- Review process established in consultation with and approved by Committee on Research Partnerships and NSERC Council
- Broad consultation of research community within industry, academia and government
- Expert panel for each target area to define key research challenges

Updated Target Areas and Research Topics

- 4 national priorities aligned with NSERC mandate were selected as the target areas:
  - **Environment and Agriculture**
  - **Natural Resources and Energy**
  - **Information and Communications Technologies**
  - **Advanced Manufacturing**
- 4 to 6 research topics selected within each target area
- Refinement of research topics and challenges over the course of the next five years, as required, to ensure that they stay relevant in the context of Canada's important research challenges

Advanced Manufacturing

Priority research topics:

1. Automation (Including Robotics)
2. Lightweight Materials and Technologies
3. Additive Manufacturing
4. Nanotechnology
5. Quantum Materials

Environment and Agriculture

Priority research topics:

1. Water: Health, Energy, Security
2. Biotechnology
3. Aquaculture
4. Food and Food Systems
5. Climate Change Research and Technology
6. Disaster Mitigation

Information and Communications Technologies

Priority research topics:

1. Communications Networks and Services
2. Internet of Things/Machine-to-Machine Systems
3. Advanced Data Management and Analytics
4. Cybersecurity
5. Human Interaction with Digital Media
6. Quantum Computing

Natural Resources and Energy

Priority research topics:

1. Bioenergy and Bioproducts
2. Sustainable Methods of Accessing Mineral and Unconventional Energy Resources
3. Arctic: Responsible Development and Monitoring
4. Understanding Sources of Supply and Improving Environmental Performance for Key Natural Resources (Forest, Fisheries, Mineral sectors)