Webinar Information Session
Discovery Grants Program for small universities
2019

Conference number: 1-877-413-4790
Conference ID: 7462843

How to prepare a Discovery Grant (DG) Application

- DG overview, review process and tips
- Questions: ask by chat on AdobeConnect
Life Cycle of a Discovery Grant Application

**August**
Submission of notification of intent to apply (due Aug. 1)

**September**
Internal assignment to EG

**October**
Selection of external reviewers and preliminary joint review discussions

**November**
Submission of application (due Nov. 1)

**December**
Members receive applications and begin reviewing

**January**
Members review applications and external reviewer reports are received

**February**
Grants competition

**April**
Announcement of results
Notification of Intent to Apply (NOI)

Overview

- **Deadline:** August 1\textsuperscript{st} - Mandatory

- **Main components:**
  - Research topics, keywords, title
  - Summary of proposal
  - Suggested external reviewers
  - Canadian Common CV (CCV)

- **Submission:**
  - Research Portal
Notification of Intent to Apply

Purpose

- **Facilitates preliminary assignments:**
  - to an Evaluation Group;
  - of internal reviewers; and
  - of external reviewers

- **First indication of joint review**
  - Informed by research topics, keywords, title and proposal summary

- **First review of subject matter eligibility**
NSERC supports research whose major challenges lie in the natural sciences and engineering (NSE), other than the health sciences.

The intended objective(s) of the research must be to advance knowledge in one or more of the NSE disciplines.

Applicants should refer to:

- Selecting the Appropriate Federal Granting Agency
- *Updated* Addendum to the Guidelines for the Eligibility of Applications Related to Health.

  - The Addendum provides examples that illustrate the eligibility of applications related to human health.
Notification of Intent to Apply
Joint Reviews - Evaluation Groups

- Genes, Cells and Molecules (1501)
- Biological Systems and Functions (1502)
- Evolution and Ecology (1503)
- Chemistry (1504)
- Physics (1505)
- Geosciences (1506)
- Computer Science (1507)
- Mathematics and Statistics (1508)
- Civil, Industrial and Systems Engineering (1509)
- Electrical and Computer Engineering (1510)
- Materials and Chemical Engineering (1511)
- Mechanical Engineering (1512)
Notification of Intent to Apply

Tips

▪ **Select appropriate research topics**
  – First selected must be from suggested EG
  – Helps identify potential joint reviews

▪ **Submit a detailed summary**
  – Helps internal reviewers select appropriate external reviewers
  – Helps identify potential joint reviews
Notification of Intent to Apply

Tips for selecting external reviewers

- **Be mindful of conflicts of interest**
  - Reviewers outside your institution (primary & adjunct)
  - Adhere to [NSERC guidelines](http://www.nserc-crsng.ca) (e.g., six-year window)

- **Identify the best expertise**
  - Ability to comment/review with confidence

- **Consider diversity in your selection**
  - National, International
  - Private, government, public sectors
  - Gender
  - Under-represented groups
  - Established, mid career, early career researchers
Notification of Intent to Apply
Collection of Self-Identification Data

What questions are included in the mandatory self-identification form?
The granting agencies ask for the following information:

1. Age - What is your date of birth?
2. Gender – Select the option that you identify with, i.e. Woman; Man; or Gender-fluid, non-binary; and/or Two-Spirit
3. Indigenous Identity – Do you identify as Indigenous - that is First Nations (North American Indian), Métis, or Inuit?
4. Person with a disability – are you person with a disability?
5. Visible Minority - Do you identify as a member of a visible minority in Canada?

Completing the self-identification form is mandatory, but for each category there is an option for “I prefer not to answer.”
Discovery Grant Application Overview

- **Deadline:** November 1\textsuperscript{st} - Check internal deadlines
- **Main components:**
  - Application for a grant
  - Research proposal
  - Samples of research contributions
  - Budget and justification
  - Canadian Common CV (CCV)
Discovery Grant Application

Evaluation Criteria

- Excellence of Researcher
- Merit of Proposal
- Training of Highly Qualified Personnel (HQP)
# Discovery Grant Application

## Merit Indicators Grid

The Merit indicators should be used in conjunction with the Peer Review Manual, which outlines how reviewers arrive at a rating.

<table>
<thead>
<tr>
<th>EXCEPTIAL</th>
<th>OUTSTANDING</th>
<th>VERY STRONG</th>
<th>STRONG</th>
<th>MODERATE</th>
<th>INSUFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research excellence, accomplishments, and service are far superior to others.</td>
<td>Research excellence, accomplishments, and service are superior to others.</td>
<td>Research excellence, accomplishments, and service are significant.</td>
<td>Research excellence, accomplishments, and service are of high quality.</td>
<td>Contributions presented in the application are of high quality.</td>
<td>Contributions presented in the application are of reasonable quality.</td>
</tr>
<tr>
<td>Contributions presented in the application are at the highest level of quality.</td>
<td>Contributions presented in the application are above average in quality.</td>
<td>Contributions presented in the application are slightly above average.</td>
<td>Contributions presented in the application are of good quality.</td>
<td>Contributions presented in the application are of average quality.</td>
<td>Contributions presented in the application are below an acceptable level.</td>
</tr>
<tr>
<td>Impact and importance of the work is clearly evident and influential.</td>
<td>Impact and importance of the work is clear and influential.</td>
<td>Impact and importance of the work is clearly evident.</td>
<td>Impact and importance of the work is evident.</td>
<td>Impact and importance of the work is somewhat evident.</td>
<td>Impact and importance of the work is not clearly evident.</td>
</tr>
<tr>
<td>Proposed research program is clearly presented, is highly original and innovative and is likely to have impact by leading to groundbreaking advances in the area and/or leading to a technology or policy that addresses socio-economic or environmental needs. Long-term vision and short-term objectives are clearly defined. The methodology is clearly defined and appropriate.</td>
<td>Proposed research program is clearly presented, is original and innovative and is likely to have impact by leading to advancements and/or address socio-economic or environmental needs. Long-term goals and short-term objectives are planned. The methodology is described and appropriate.</td>
<td>Proposed research program is clearly presented, is original and innovative and is likely to have impact and/or address socio-economic or environmental needs. Long-term goals and short-term objectives are described. The methodology is partially described and appropriate.</td>
<td>Proposed research program is clearly presented, has original and innovative aspects and may have impact and/or address socio-economic or environmental needs. Long-term goals and short-term objectives are described. The methodology is described and appropriate.</td>
<td>Proposed research program is not clearly presented and lacks clarity, and/or is of limited originality and innovation.</td>
<td></td>
</tr>
<tr>
<td>The application clearly demonstrates how the research activities to be supported are distinct from those funded (or applied for) by other sources.</td>
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<td>The application does not clearly demonstrate how the research activities to be supported are distinct from those funded (or applied for) by other sources.</td>
<td></td>
</tr>
</tbody>
</table>

### Fast Training

- Most HPQ move on to highly impactful positions that require skills gained through the training received.

- Transformer Stay is at the highest level in terms of the research training environment provided and HPQ contributions to research.

- Most HPQ move on to impactful positions that require skills gained through the training received.

- Training philosophy and research training plans are highly appropriate, clearly defined and expected to produce high quality results in terms of the overall approach and specific projects for HPQ.

- Training philosophy and research training plans are superior; highly appropriate, clearly defined and expected to produce high quality results in terms of the overall approach and specific projects for HPQ.

- Training philosophy and research training plans are partially appropriate and partially defined in terms of the overall approach and specific projects for HPQ.

- Training philosophy and research training plans are not appropriate and not clearly defined in terms of the overall approach and specific projects for HPQ.

- Training philosophy and research training plans are partially appropriate and partially defined in terms of the overall approach and specific projects for HPQ.
Summary - EDI with Evaluation Criteria

- **Excellence of the Researcher**
  - Applicants are asked to describe *(if applicable)* contributions towards the promotion of equity, diversity and inclusion in the research enterprise

- **Merit of the Proposal**
  - Applicants are asked to describe *(if applicable)* consideration of sex, gender and diversity in the research design

- **Contributions to the Training of HQP**
  - Applicants are **required** to describe EDI considerations in their future approaches to recruitment, training and mentoring
  - Applicants are asked to describe specific actions implemented in support of EDI in their past training of HQP *(if applicable)*
Assessment based on achievements demonstrated over the past six years.

- Knowledge, expertise, and experience

- Quality and impact of contributions to natural sciences and engineering (NSE) research

- Importance of contributions to researchers and end-users
Discovery Grant Application
Excellence of the Researcher

Members will assess this using information from:

- **Most significant contributions**
  - Highlighted quality and impact

- **Samples of research contributions**
  - Up to 4 attached with application *within the last 6 years*

- **CCV contributions, recognitions, activities**
  - Additional information on contributions in application
Describe up to five most significant research contributions and highlight quality & impact

List all types of research contributions (from 2013-2019)

Explain your role in collaborative research activities

List all sources of support

Give other evidence of impact

Explain delays in research activity (See Peer Review Manual)
Discovery Grant Application

Excellence of the Researcher

- In **CCV**
  - Recognitions (honors, prizes and awards, etc.)
  - Activities (international collaborations, event administration, editorial activities, organizational review, knowledge and technology transfers, etc.)
  - Memberships (service on committees)
  - Contributions (publications, books, patents, etc.)

- In **Application**
  - Most Significant Contributions (discusses most significant contributions)
  - Additional Information on Contributions (discusses choice of venues, order of authors, etc.)
Discovery Grant Application

Merit of the Proposal

Assessment based on the following elements:

- Originality and innovation
- Significance and expected contributions to research
- Clarity, scope of objectives, and appropriateness of methodology
- Feasibility
- Consideration of sex, gender and diversity in the research design (*if applicable*)
- Appropriateness and justification for the budget
- **Relationship to other research support**
Discovery Grant Application

Merit of the Proposal

Members will assess this using information from:

- **Research proposal (5 pages)**
  - List of references (2 pages)

- **Proposed expenditures and budget justification**

- **Relationship to other research support**
  - Portal section (12000 characters)
  - CIHR and/or SSHRC summary and budget pages
  - CCV research funding history (applied & held)
Discovery Grant Application
Merit of the Proposal

CIHR and SSHRC research support

- Distinct
  - Ideas & Objectives
  - Expenses
  - Anticipated contributions resulting from the proposed DG

CIHR Foundation:

- *New in CY2018* Convincing evidence that support from DG is essential to carry out the work supported by a Foundation Grant
Relationship to research support *other than* CIHR and SSHRC

- Budget requested in DG is for different expenses than the ones supported (or to be supported)
- *NEW in CY2020* No summary and budget page is required
Common mistakes in addressing funds from other sources

- CCV amounts and application information do not match or are missing
- Role in joint funding is not explained
- Funding under review not listed or not explained
- Planned expenses are not explained
- Scanned pages from CIHR and/or SSHRC are missing
- CIHR Foundation grant not addressed in CCV or application
Discovery Grant Application

Merit of the Proposal

- Keep in mind that two audiences read your application: expert and non-expert
- Provide a progress report on related research
- Position the research within the field and state-of-the-art
- Clearly articulate short- and long-term objectives
- Provide a detailed methodology and realistic budget
- Consider comments/recommendations you may have received for previous applications
- Integrate HQP into the proposal
- Follow research portal presentation and attachment standards
Discovery Grant Application

Merit of the Proposal

- **In Application**
  - Proposal
  - List of References
  - Budget Justification
  - Relationship to Other Sources of Support Explanation
  - Other Support Sources – Supporting Documents (if applicable)

- **In CCV**
  - Research Funding History
Why is NSERC asking for information about existing challenges or barriers to inclusion?

“Sound equity, diversity and inclusion practices increase access to the largest pool of qualified potential participants, enhance the integrity of a program’s application and selection processes, strengthen the research outputs, and increase the overall excellence of research.” NSERC EDI Framework
Assessment is based on both:

- the past contributions to training; and
- the future plans for training

Quality research training at all levels are valued, including:

- Undergraduate students involved in research;
- Graduate students and postdoctoral fellows;
- Technicians and research associates; and
- Other trainees from non-academic sectors, i.e. government or industry.
Past contributions to the training of HQP

Assessment based on training over the past six years

**New Instructions since CY2018**

Include three components:

1. Training environment – **Updated Instructions CY2020**
2. HQP awards and research contributions
3. Outcomes and skills gained by HQP

Focus on **quality** and **impact** of training
Past contributions to the training of HQP

- Describe the nature of HQP studies and their level of involvement in your research
- Explain your role in any co-supervision
- Explain any delays in training (e.g., leaves taken by applicant or HQP)
- Include present position in CCV (career, further studies)
- **Use asterisk (*) to identify HQP co-authors in CCV**
- Do not select “academic advisor” in CCV
- Early Career Researchers should not be rated *Insufficient* solely due to the lack of training record.
Discovery Grant Application
Contributions to the training of HQP

Future plans for training

**New Instructions since CY2018**

Include two components:
1. Training Philosophy – **Updated Instructions CY2020**
2. Research Training Plan
   - Focus on **quality, suitability** and **clarity** of plan.
   - Define your role in any planned co-supervision.
   - EDI considerations
Discovery Grant Application
Contributions to the training of HQP

**New Instructions for CY2020**

EDI considerations within Training Philosophy

Describe qualitatively any challenges or barriers encountered in ensuring an inclusive research and training environment.

Describe the planned approach to promoting participation from 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 and trainee growth.

DG applicants 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.
Evaluation Group will assess HQP using information from:

- **Application:**
  - Past contributions to HQP training;
  - HQP training plan (in the NSE).

- **CCV**
  - Supervisory activities
  - Contributions
Discovery Grant Application
Equity, Diversity and Inclusion (EDI)

EDI Resources:

- NSERC’s EDI webpage
- Guide for Applicants: Considering equity, diversity and inclusion in your application
  - Diversity and equity in the research environment, questions 1-4
  - Sex, gender and diversity in research design, questions 5-7
- Equity, Diversity and Inclusion: A Best Practices Guide for Recruitment, Hiring and Retention
- Discovery Grant Peer Review Manual
  - New guidance within Merit of Proposal and Training of HQP Criteria
- Merit Indicators Grid
  - New text within Excellence of Researcher and Training of HQP Criteria
Discovery Grant Application

Delays

- Applicant delays are recorded in the CCV, under the Employment section.

- HQP delays are recorded in the HQP section of the application.

- In both cases, clearly explain:
  - the **duration** (i.e., start/end dates)
  - the **impact** on your research (e.g., dissemination of results, ability to recruit HQP)
More Tips

- Read other successful applications

- Ask colleagues and/or your RGO for comments on your application
  - Ask both experts in your field and non-experts to review

- Plan ahead and check institutional deadlines

- Use the resources available
Discovery Grant Updates
Early Career Researchers (ECR)

- Early career researchers:
  - Applicants who have an independent academic position for 5 years or less at the time of submitting the NOI
  - ECRs need to self-identify on the Research Portal at the Full Application stage by completing the Applicant Category module
Selecting Applicant category

<table>
<thead>
<tr>
<th>Applicant Category</th>
<th>Early Career Researcher (ECR)</th>
</tr>
</thead>
</table>

**Explanation** *(required)*

In addition to explaining how you meet the ECR definition, you must list all positions, found in your CCV, that meet NSERC’s requirements for an independent academic position.

(3000 characters maximum)

If NSERC offers you a Discovery Grant as an Early Career Researcher, would you accept a Discovery Launch Supplement and would you be able to use all of the supplement funds on your Discovery Grant research program?

- Yes
- No
Discovery Grant Application

Available Resources – NSERC WEBSITE

- **Discovery Grants Information Centre**
- **Discovery Grants Program Description**
- **Discovery Grants Resource Video**
- **Peer Review Manual**
  - Includes information on each of the three criteria and the merit indicators
- **HQP FAQ Document**
- **Webinars on how to apply**
## Discovery Grant Application Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Text Box (characters)</th>
<th>Attachment</th>
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</thead>
<tbody>
<tr>
<td>Summary of proposal</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Relationship to other source of support - Explanation</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>HQP training plan</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>Past contributions to HQP</td>
<td>3,000</td>
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<tr>
<td>Most significant contributions</td>
<td>9,000</td>
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<tr>
<td>Additional information on contributions</td>
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<tr>
<td>Discovery Grant</td>
<td>Application Content (cont’d)</td>
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<td><strong>Proposal</strong></td>
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<tr>
<td></td>
<td>5 pages</td>
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</tr>
<tr>
<td><strong>Budget Justification</strong></td>
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<tr>
<td></td>
<td>2 pages</td>
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<tr>
<td><strong>Other Support Sources</strong> (Supporting documents)</td>
<td>Text Box (characters)</td>
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<tr>
<td></td>
<td>Attachment</td>
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<tr>
<td></td>
<td>1 attachment of scanned pages from other applications and grants (file size limit 10 Mb)</td>
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</tr>
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</table>
## Discovery Grant
### Application Content (cont’d)

<table>
<thead>
<tr>
<th></th>
<th>Text Box (characters)</th>
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</thead>
<tbody>
<tr>
<td>List of references</td>
<td></td>
<td>2 pages</td>
</tr>
<tr>
<td>Samples of Research</td>
<td></td>
<td>4 attachments - file size limit of 10Mb each</td>
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<tr>
<td>Contributions</td>
<td></td>
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<tr>
<td>Attestation on Confidential</td>
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</tr>
<tr>
<td>Research Contributions</td>
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<tr>
<td>(if applicable)</td>
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<tr>
<td>CCV</td>
<td></td>
<td>Upload with CCV confirmation number</td>
</tr>
<tr>
<td>Letters of Support</td>
<td></td>
<td>Not required (will be removed)</td>
</tr>
</tbody>
</table>
Discovery Development Grants (DDG)

**Description:**
- No separate application is required – offered according to DG results
- Provide resources to researchers from small universities whose DG applications were deemed to be of appropriate quality to merit research support, but were not funded in the DG Competition.

- **New Value:** $15K/year for 2 years
- **New Eligibility CY2020:** may hold twice throughout their career

**Objective:**
- Promote a diversified base of high-quality research in small universities
- Foster a stimulating environment for research training in small universities
Webinars

- **Sessions for Research Grant Officers**
  - Tuesday, September 17, 2019 from 1 to 2:30 p.m. (ET)

- **Discovery Grant - Submission of an application**
  - Tuesday, August 27, 2019 from 1 to 3 p.m. (ET)
  - Tuesday, September 24, 2019 from 1 to 3 p.m. (ET)
# NSERC Contacts

<table>
<thead>
<tr>
<th>Service</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovery Grants Program (including eligibility)</td>
<td><a href="mailto:resgrant@nserc-crsng.gc.ca">resgrant@nserc-crsng.gc.ca</a></td>
</tr>
<tr>
<td>On-line Services Helpdesk (IT support)</td>
<td><a href="mailto:webapp@nserc-crsng.gc.ca">webapp@nserc-crsng.gc.ca</a></td>
</tr>
<tr>
<td>Use of Grant Funds</td>
<td><a href="mailto:usegrantfunds@nserc-crsng.gc.ca">usegrantfunds@nserc-crsng.gc.ca</a></td>
</tr>
<tr>
<td>Deadlines, acknowledgement of applications and results</td>
<td>Your university Research Grants Office</td>
</tr>
<tr>
<td>Your account, Grants in Aid of Research Statement of Account (Form 300)</td>
<td>Your university Business Officer (BO)</td>
</tr>
</tbody>
</table>
Over to you…

• Questions?
• Comments?
• Advice?

Please feel free to ask your questions in the official language of your choice.