Thank you for joining us, the session will begin shortly.

You are currently placed on mute.

Reminder: this session will be recorded and transcribed.
NSERC Discovery Grant: Strategies for Success
September 15, 2022 @ 10:30 am-12:00 pm

Claudiu Gradinaru, Professor, Dept. of Chemical & Physical Sciences
Deeba Kundur, Professor & Chair, The Edward S. Rogers Sr. Dept. of Electrical & Computer Engineering


Prof. Deepa Kundur
Professor and Chair, The Edward S. Rogers Sr. Department of Electrical & Computer Engineering

Prof. Claudiu Gradinaru
Professor, Department of Chemical and Physical Sciences, UTM

Jessica Keating
Research Funding Manager, Natural Sciences and Engineering, Research Services Office

Keti Dzamova
Research Funding Officer, Natural Sciences and Engineering, Research Services Office
Turning captions on and off

- Go to your meeting controls
- Select More options > Turn on/off live captions
We wish to acknowledge this land on which the University of Toronto operates.

For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit.

Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.
Housekeeping

- This webinar is being recorded & transcribed
- Please mute your audio and turn off your video
- A link to the recording will be sent to all participants after the session
- Presenter slides will also be shared
- We will hold questions until the end
- Please put questions into the chat box
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:35 am – 11:00 am</td>
<td>Overview of NSERC Discovery Grant with Jessica Keating and Keti Dzamova</td>
</tr>
<tr>
<td>11:00 am – 11:35 am</td>
<td>Faculty Panel with Profs. Dr. Deepa Kundur and Dr. Claudiu Gradinaru</td>
</tr>
<tr>
<td>11:35 am – 11:55 am</td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>11:55 am – 12:00 pm</td>
<td>Closing Remarks</td>
</tr>
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Presenters

Claudiu Gradinaru
Professor, Department of Chemical and Physical Sciences, UTM

Deepa Kundur
Professor and Chair, The Edward S. Rogers Sr. Department of Electrical & Computer Engineering

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Research Funding Manager, Natural Sciences and Engineering, Research Services Office

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2022 NSERC DISCOVERY GRANTS COMPETITION

September 15, 2022
Agenda

- NSERC Updates
- Discovery Grants – Overview
- Discovery Grant - Application
- Application Procedures
- NSERC Resources
Early Career Researchers (ECR) are applicants who have held an independent academic position for five years or less and who meet the NSERC - Eligibility Criteria for Faculty at the time of submitting the Notification of Intent to Apply for a Discovery Grant (NOI).

For example, for the 2022 competition, to be classified as an ECR, a researcher submitting an NOI in August 2022 would have been hired on or after July 2017.

Five-year window adjusted for eligible delays in research

All eligible leaves taken (e.g. parental, bereavement, illnesses of applicant or family) will now be credited twice the amount of time taken

ECRs need to self-identify by completing the Applicant Category on the Research Portal at the full application stage
NSERC Updates
New attachment for 2022 - Leaves of absence

❖ Applicants who report an eligible leave of absence in the CCV are entitled to a new attachment used to list supplemental contributions to research and training beyond the last six year, for period equivalent to the duration of the leave.

❖ Supplemental contributions must be taken from the most recent active research period prior to the last six years.

❖ Eligible leaves of absence (e.g., parental leave, medical leave, bereavement, extraordinary administrative duties) are those taken within the last six years. This attachment may also be used to list supplemental contributions to research and to training for a period equivalent to the duration of delays related to COVID-19.
NSERC Updates
Where to describe the delays in the Discovery Grant application

- Applicants delays are recorded in the CCV under the Employment section
- HQP delays are recorded in HQP section of the application
- Past Contributions to Highly Qualified Personnel Training
- Most Significant Contributions to Research
- Samples of Research Contributions

In all cases applicants need to provide:

- The duration (i.e. start / end dates); and
- To clearly explain the impact of any significant delays in the research activity and training (dissemination of research results ability to recruit or train HQP)

Discovery Grants - Overview

❖ The Discovery Grants program supports ongoing programs of research (with long-term goals) rather than a single short-term project or collection of projects.
  ❖ promote and maintain a diversified base of high-quality research capability in the natural sciences and engineering in Canadian universities
  ❖ foster research excellence
  ❖ provide a stimulating environment for research training
Discovery Grants – Life Cycle

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

**March/April**
Announcement of results
Discovery Grants – Application

Sections of the Application

- Identification
- Summary of the Proposal (3,000 characters)
- Proposed Expenditures (5 year budget)
- Relationship to Other Research Support – Explanation (12,000 characters)
- Highly Qualified Personnel Training Plan
- Past Contributions to Highly Qualified Personnel Training
- Most Significant Contributions to Research (9,000 characters)
- Additional Information on Contributions (3,000 characters)
Discovery Grants – Application

Attachments

- Proposal (5 pages)
  - Recent Progress
  - Objectives
  - Literature Review
  - Methodology
  - Impact
- List of References (2 pages)
- Budget Justification (2 pages)
- Other Support Sources – Supporting Documents (file size limit of 10 MB)
  - If SSHRC and/or CIHR Funding is held or applied for, you are required to include the summary of proposal and budget page for each proposal. Failure to do so may result in NSERC rejecting the application
  - Attestation on confidential research contributions (if applicable)
  - Leaves of absence (if applicable)
- Samples of Research Contributions (max 4 PDF attachments of 10 mb each)
Discovery Grants – Application

Attachments-Presentation Standards

- Acronyms and abbreviations must be spelled out completely on initial appearance in text;
- Pages must be 8 ½" x 11" (216mm x 279mm);
- Pages must be single-spaced, with no more than six lines of type per inch;
- All text must be in 12 pt. Times New Roman font;
- Condensed fonts will not be accepted;
- Colour imagery is acceptable* but the text should be in black;
- All margins must be set at a minimum of ¾" (1.87 cm);
- Do not introduce hyperlinks in your documents;
- If you have supporting documents written in a language other than English or French, you are required to provide a certified translation of the document.
Discovery Grants – Application

Sections of the Application

❖ Relationship to Other Research Support – Explanation (12,000 characters)
  ❖ For CIHR and/or SSHRC funding held or applied for, clearly explain:
    ❖ how ideas, objectives and expenditures of the Discovery Grant application are separate from the CIHR and/or SSHRC grants; and
    ❖ how anticipated contributions to research resulting from the proposed Discovery Grant will be distinct from those resulting from CIHR and/or SSHRC support.

❖ Highly Qualified Personnel Training Plan (9,000 characters)

❖ Training Plan includes two components, Training Philosophy and Research Training Plan.
  ❖ The Training Philosophy should describe your approach to training HQP, detailing the mentoring approach and the type of research training and development opportunities provided.
  ❖ The Research Training Plan should outline how the research program and its anticipated projects are appropriate for HQP training in natural sciences and engineering.
Discovery Grants – Application

Sections of the Application

❖ Highly Qualified Personnel Training Plan (continued)

❖ Focus on quality, suitability and clarity of plan
❖ Define your role in any planned co-supervision
❖ Promote approaches that increase inclusion and advancement of under-represented groups in NSE
❖ Applicants are required to describe EDI consideration in future approaches to recruitment, training and mentoring
  ❖ Do not include demographic information about trainees
Sections of the Application

❖ Past Contributions to Highly Qualified Personnel Training (6,000 characters)
   ❖ Most significant contributions to training of HQP over the last six years.
   ❖ Focus on the quality and impact of training,
   ❖ Describe research training and development opportunities provided for HQP
   ❖ Describe specific actions implemented in support of EDI in past training contribution of HQP (if participated in this way)

❖ Most Significant Contributions to Research (9,000 characters)
   ❖ Describe up to five of your most significant contributions to research and/or to practical applications over the last six years.
   ❖ You may include the full reference to your contributions in this text box or provide the appropriate reference to your NSERC CCV.
   ❖ Explain and provide dates for any significant delays in the research activity

❖ Additional Information on Contributions (3,000 characters)
   ❖ Provide an explanation for the contributions listed in your NSERC CCV.
Discovery Grants – Application

Subject Matter Eligibility
❖ You may have been contacted by NSERC or will be contacted shortly regarding subject matter eligibility

❖ Program of research must be eligible under NSERC’s mandate, which is to promote and assist research in the natural sciences and engineering, other than health.


Application Procedures

Checklist

✓ **Step 1: Eligibility**
  ✓ Ensure that you meet NSERC’s eligibility criteria:
  ✓ Ensure you are eligible to hold a research grant at UofT

✓ **Step 2: My Research Application (MRA)**
  ✓ Internal electronic approval form required for all grant applications submitted through UofT
  ✓ Must be received by Research Services no later than October 26, 2022 5:00pm

✓ **Step 3: Application and CCV**
  ✓ Complete application on the Research Portal
  ✓ Complete CCV on CCV website
  ✓ Link CCV to Research Portal and submit the by 9am November 1, 2022, *if not earlier*
Application Procedures

Step 1: Eligibility

❖ Ensure you are eligible to hold a research grant from NSERC and at the University of Toronto. Consult your Department Chair/Dean/Unit Head/Research Services if you have any concerns.

❖ To be eligible, you must:
  ❖ Hold, or have a firm offer of, an academic appointment at a Canadian Institution (minimum three-year position or tenure track) as of September 1, 2023
  ❖ Be in a position that requires independent research and allows supervision of HQP
  ❖ If your primary position is outside of Canada, you are not eligible to apply or hold NSERC grant
Application Procedures

Step 2: My Research Application (MRA)

❖ Research Services must receive the following on or before the internal deadline of 5:00pm October 26, 2022

❖ Complete My Research Application (MRA)* with all required attachments
  ❖ NOTE: A near-complete version of your application should be attached to the MRA

*The MRA approval process should be started well in advance of the internal deadline as it can take multiple business days to complete the approval process*

**If you have not yet used MRA, please ensure that you have an account established. If you don’t have an account, you will need to work with your department to have an MRA account established**
Application Procedures

Step 2: My Research Application (MRA)

My Research (MR)

The My Research system is the web-enabled gateway for Investigators, Academic Administrators and Staff for research related administrative activities at the University of Toronto. It provides access to the My Research Application (MRA), My Research Human Protocol (MRHP), and My Research Animal Protocol (MRAP) systems, as well as (for faculty only) to My Research On Line (MROL).

System availability: 4:00 AM to 1:00 AM next day.

Bookmark this page using Ctrl + D (Windows) or ⌘ command + D (Mac)

This service utilizes your UTORid credentials.

Ensure pop-ups are enabled. How do I enable?

STUDENTS/POST DOCS with a human research ethics protocol: Please allow 24 hours after your supervisor has designated your role for it to become active.

Login to MR
Application Procedures

Step 3: Application and CCV

❖ Ensure you have completed and finalized your application on NSERC’s Research Portal.

❖ Once finalized and completed, link your CCV to your application and verify.

❖ Submit to Research Services by clicking on the “Submit” button by no later than 9am on November 1, 2022.
  ❖ NOTE: You do not need to wait for Research Services to approve your MRA in order to submit your application on the NSERC Research Portal.

❖ Once received by Research Services, your application will be approved and submitted to NSERC.
Application Procedures

Step 3: Application and CCV
Application Procedures

Step 3: Application and CCV
NSERC Resources

NSERC Resource Videos:

NSERC Discovery Grant Website:

Guide for applicants: Considering equity, diversity and inclusion in your application
## NSERC & Internal Deadlines

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>NSERC DEADLINE (For RSO to submit to NSERC)</th>
<th>INTERNAL DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subatomic Physics (over $500k per year)</td>
<td>October 1, 2022, 8:00pm • Notice of Intent required on August 2</td>
<td>September 26, 2022, 5:00pm</td>
</tr>
<tr>
<td>Discovery Grant (Individual &amp; SAP); Northern Research Supplements; Subatomic Physics (under $500k per year)</td>
<td>November 1, 2022, 8:00 pm * Notice of Intent required August 3</td>
<td>October 26, 2022, 5:00 pm</td>
</tr>
</tbody>
</table>

*Please note that your Faculty/Department may have an earlier internal deadline for approval*
Your Contacts at RSO

❖ Jessica Keating, Research Funding Manager
   jessica.keating@utoronto.ca

❖ Keti Dzamova, Research Funding Officer
   Keti.dzamova@utoronto.ca

❖ Kitishia-Trista Cordner, Research Funding Administrator
   kitishia.cordner@utoronto.ca

Website: www.research.utoronto.ca
Address: 3rd Floor, McMurrich Bldg,
          12 Queen's Park Crescent W.
          Toronto, ON M1S 1S8
NSERC CCV Contact and resources

- If you are having technical trouble with the CCV, please contact:
  - On-line Services Helpdesk
    Telephone: 613-995-4273
    Monday to Friday: 8:30 AM to 4:30 PM (EST)
    Email: webapp@nserc-crsng.gc.ca


- How to Videos: https://ccv-cvc.ca/indexresearcher-eng.frm
NSERC contacts

❖ If you are having technical difficulties using the Research Portal, please contact:

❖ On-line Services Helpdesk
  Telephone: 613-995-4273
  Monday to Friday: 8:30 AM to 4:30 PM (EST)
  Email: webapp@nserc-crsng.gc.ca

❖ If you require more information regarding a specific funding opportunity Consult the Contact list.
What was the overall adjudication process like for you as members of your respective sub-committees?

- What instructions were you provided as reviewers?

- What evaluation criteria were you asked to use?
# NSERC Discovery Session

Deepa Kundur  
Electrical & Computer Engineering, University of Toronto

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>Member, NSERC Review Committee 1510</td>
</tr>
<tr>
<td>2014-2017</td>
<td>Section Chair, NSERC Review Committee 1510</td>
</tr>
<tr>
<td>2017-2020</td>
<td>Group Chair, NSERC Review Committee 1510</td>
</tr>
</tbody>
</table>
Round 1

Describe for attendees what the overall adjudication process was like for you as a member of your respective sub-committees?

• What instructions were you provided as reviewers?
• What evaluation criteria were you asked to use?
The Conference Model for Proposal Evaluation

- Members
- Section Chairs
- Group Chair
The Evaluation Process

- 5 key participants per application.
  - First Internal
  - Second Internal
  - 3 Readers
The Evaluation Process

- 5 key participants per application.
  - First Internal
  - Second Internal
  - 3 Readers
The Evaluation Process

- 5 key participants per application.
  - First Internal
  - Second Internal
  - 3 Readers

Note: Decisions on Joint Reviews made from 1) NOI, 2) consultation with Evaluation Groups, and 3) content of full application.
The Conference Deliberation Process: Overview

**Duration:** 15 minutes

1. Section Chair asks for application ratings from each reviewer
2. First Internal speaks for 3-4 minutes about application evaluation.
3. Second Internal adds new elements to the discussion for 2-3 minutes.
4. Readers add anything different for consideration for another 2-3 minutes.
5. Discussion ensues.
6. Section Chair summarizes points.
7. Five participants vote.
8. Median **rating** for each criteria is taken.
The Conference Deliberation Process

Applications are rated in three equally weighted categories

• Excellence of the Researcher
• Merit of the Proposal
• Contributions to the Training of HQPs

6 possible ratings:

• Insufficient
• Moderate
• Strong
• Very Strong
• Outstanding
• Exceptional
DISCOVERY GRANTS MERIT INDICATORS

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>EXCEPTIONAL</th>
<th>OUTSTANDING</th>
<th>VERY STRONG</th>
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<tr>
<td>Research excellence, accomplishments, and service are superior to others.</td>
<td>Research excellence, accomplishments, and service are superior to others.</td>
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<td>Research excellence, accomplishments, and service are reasonable.</td>
<td>Research excellence, accomplishments, and service are below an acceptable level.</td>
<td>Contributions presented in the application are of high quality. Impact and importance of the work is clearly evident and groundbreaking. Contributions presented in the application are of high quality. Impact and importance of the work is clearly evident and influential. Contributions presented in the application are above average in quality. Impact and importance of the work is not clearly evident. Contributions presented in the application are of good quality. Impact and importance of the work is clearly evident. Contributions presented in the application are of reasonable quality. Impact and importance of the work is not clearly evident. Contributions presented in the application are limited in quality. Impact and importance of the work is clearly evident. Contributions presented in the application are of limited originality and innovation.</td>
</tr>
<tr>
<td>Long-term vision and short-term objectives are clearly defined.</td>
<td>Long-term goals are clearly defined and short-term objectives are well planned.</td>
<td>Long-term goals and short-term objectives are clearly described.</td>
<td>Long-term and short-term objectives are described.</td>
<td>Long-term and short-term objectives are not clearly described and/or likely not attainable.</td>
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</tr>
<tr>
<td>The methodology is clearly defined and appropriate.</td>
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The application clearly demonstrates how the research activities to be supported are distinct from those funded (or applied for) by other sources.

| Training Philosophy and Research Training Plans | 
|---|---|---|---|---|---|
| Past training is at the highest level in terms of the research training environment provided and HQP contributions to research. | Past training is superior to other applicants in terms of the research training environment provided and HQP contributions to research. | Past training is superior to other applicants in terms of the research training environment provided and HQP contributions to research. | Past training is modest relative to other applicants in terms of the research training environment provided and HQP contributions to research. | Past training is below an acceptable level in terms of the research training environment provided and HQP contributions to research. | 
| Most HQP move on to highly impactful positions that require skills gained through the training received. | Most HQP move on to impactful positions that require skills gained through the training received. | Most HQP generally move on to impactful positions that require skills gained through the training received. | Some HQP move on to positions that require skills gained through the training received. | HQP rarely move on to positions that require skills gained through the training received. | 
| Training philosophy and research training plans are of the highest quality: highly appropriate, clearly defined and expected to produce high quality results in terms of the overall approach and specific projects for HQP. | 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 HQP. | 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 HQP. | Training philosophy and research training plans are partially appropriate and clearly defined in terms of the overall approach and specific projects for HQP. | Training philosophy and research training plans are not appropriate and not clearly defined in terms of the overall approach and specific projects for HQP. | 
| Challenges related to equity, diversity and inclusion specific to the institution and field of research are clearly described. | Challenges related to equity, diversity and inclusion specific to the institution and field of research are described. | Challenges related to equity, diversity and inclusion specific to the institution and field of research are described. | Challenges related to equity, diversity and inclusion specific to the institution and field of research are partially described. | Challenges related to equity, diversity and inclusion specific to the institution and field of research are not described. | 
| Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are clearly defined. | Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are defined. | Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are defined. | Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are partially defined. | Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are not appropriate or not defined. | 
| | | | | | |
(New) Merit Indicator Table

Three Significant Changes Have Been Made:

1. Grid format has been modified for greater clarity (and colour!) .

2. Excellence of Researcher description has been updated to match the Peer Review Manual (no change in evaluation criteria).

3. Equity, diversity and inclusion (EDI) requirements have been added in the HQP training plan.

Note: diversity = “the conditions, expressions and experiences of different groups identified by age, education, sexual orientation, parental status/responsibility, immigration status, Indigenous status, religion, disability, language, race, place of origin, ethnicity, culture, socio-economic status and other attributes.”
**Let the Merit Indicator Table be your Guide!**

**DISCOVERY GRANTS MERIT INDICATORS**

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

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<td>The methodology is not clearly described and/or inappropriate.</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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**Past training** is at the highest level in terms of the research training environment provided and HQP contributions to research. Most HQP move on to highly impactful positions that require skills gained through the training received. Training philosophy and research training plans are of the highest quality; highly appropriate, clearly defined and expected to produce high-quality results in the terms of the overall approach and specific projects for HQP. Challenges related to equity, diversity and inclusion specific to the institution and field of research are clearly described.

**Specific actions to support** the recruitment of a diverse group of HQP and an inclusive research training environment are clearly defined.

---

[Table continues with more detailed criteria and indicators for research excellence, accomplishments, and service; contributions in the application; long-term and short-term objectives; methodology; and specific actions to support recruitment and diversity.]
**Merit Indicators**

- Discovery Grant merit indicators are **absolute**.
- Indicators refer to the **entire research community**.
- Merit indicators are expected to be interpreted the same way from one competition year to the next.
- Established Researchers (ERs) and Early Career Researchers (ECRs) are evaluated using the same criteria.
  - However, ECRs are not rated as “**Insufficient**” solely due to lack of past training of HQP (although ERs may be).
  - ECRs typically receive a **Moderate** rating.
  - ECRs are also **funded to a lower bin level** than ERs.
**Merit Indicators**

- 18 possible *bins* for ranking a grant
- Bins represent applications of *comparable merit*
- Extremes: EEE and III
- SSS = VMS = MVS = SVM = SMV
- Grants within *comparable bin* are typically funded at a *comparable value* (Established and Early Career Researchers are treated separately)
Summary of Ratings for ECE Evaluation Group

From EG 1510 2016 Annual Report.
<table>
<thead>
<tr>
<th>Example</th>
<th>Given Competition Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bin A (EEE)</td>
<td>$100,000</td>
</tr>
<tr>
<td>Bin B (EEO, EOE, OEE)</td>
<td>$92,000</td>
</tr>
<tr>
<td>Bin C</td>
<td>$85,000</td>
</tr>
<tr>
<td>Bin D</td>
<td>$77,000</td>
</tr>
<tr>
<td>Bin E</td>
<td>$70,000</td>
</tr>
<tr>
<td>Bin F</td>
<td>$64,000</td>
</tr>
<tr>
<td>Bin G</td>
<td>$50,000</td>
</tr>
<tr>
<td>Bin H</td>
<td>$41,000</td>
</tr>
<tr>
<td>Bin I</td>
<td>$35,000</td>
</tr>
<tr>
<td>Bin J (SSS + equiv)</td>
<td>$31,000</td>
</tr>
<tr>
<td>Bin K (SSM + equiv)</td>
<td>$25,000</td>
</tr>
<tr>
<td>Bin L (SMM + equiv)</td>
<td>$20,000</td>
</tr>
<tr>
<td>Bin M and lower</td>
<td>---</td>
</tr>
<tr>
<td>Total Budget</td>
<td>$6,000,000</td>
</tr>
</tbody>
</table>

Threshold for ER Funding

Threshold for ECR Funding

Note: ECRs typically receive funding top-up
Goal of Grantsmanship
Peer Review Manual


Timeline:

- August 1: Submission of Notification of Intent to Apply (NOI)
- September to October: Initial assignment to EG and contacting of external reviewers
- November 1: Submission of full application
- Mid-November: Applications sent out to external reviewers
- Early December: EG members receive applications
- February: Competition meetings
- March to April: Announcement of results
Page 36 of the 2022-23 Peer review manual has important links that provide guidance to the panel members.
Panel members receive the DG Rating Form (provided in the Appendix of the Peer Review Manual) that they fill in for each proposal they evaluate.

### Appendix 5 – Discovery Grants Rating Form

**Applicant:**

**Applicant status:**

**University:**

**Title of proposal:**

**Selection criteria (See DG Peer Review Manual for complete details):**

<table>
<thead>
<tr>
<th>Excellence of the researcher</th>
<th>Exceptional</th>
<th>Outstanding</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Moderate</th>
<th>Insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge, expertise, and experience of the researcher in the field</td>
<td></td>
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<tr>
<td>Quality and impact of contributions to the proposed research and other areas of research in the field</td>
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<tr>
<td>Importance of contributions to, and use by, other research and end users</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Merit of the proposal</th>
<th>Exceptional</th>
<th>Outstanding</th>
<th>Very Strong</th>
<th>Strong</th>
<th>Moderate</th>
<th>Insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Originality and innovation</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Significance and expected contributions to NISF research potential for policy- and technology-related impact</td>
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<tr>
<td>Clarity and scope of objectives</td>
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<tr>
<td>Clarity and appropriateness of methodology</td>
<td></td>
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<tr>
<td>Feasibility</td>
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<tr>
<td>Explicit to which the scope of the proposal addresses all relevant issues</td>
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<tr>
<td>Consideration of sex, gender and diversity in the research design, where applicable to the field of research</td>
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<tr>
<td>Consideration of interdisciplinary methods or practices in research</td>
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<tr>
<td>Appropriateness of, and justification for, the budget</td>
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<tr>
<td>Demonstration that the DG proposal is distinct conceptually from research supported or submitted for support through NSERC and/or other granting agencies</td>
<td></td>
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</tr>
</tbody>
</table>

**Rationale for rating:**

**Contributions to the training of highly qualified personnel**

<table>
<thead>
<tr>
<th>Exceptional</th>
<th>Outstanding</th>
<th>Very Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale for rating:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality and impact of peer training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSERC awards and research contributions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcomes and skills gained by NSERC</td>
<td></td>
<td></td>
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<tr>
<td>Quality, productivity, and clarity of the planned training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentorship approach and enhancement of the research and training environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges or barriers to inclusion and advancement of under-represented groups</td>
<td></td>
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</tr>
<tr>
<td>Planned approach to promote participation of a diverse group of NSERC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research training plan for individual NSERC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other comments (e.g., eligible delays that were considered, quality of samples of contributions provided, etc.):**

**Comments from external reviewer (please highlight any comments that would be deemed inappropriate for the members to have considered in their discussions, undated/COI reports to be disregarded, etc.):**

**Message from the Evaluation Group:**

This form is provided by NSERC as an aid to members for reviewing applications. Once completed, the form contains personal information, and like all other review materials, would be stored in a secure manner to prevent unauthorized access (refer to Conflict of Interest and Confidentiality Agreement for Review Committee Members, External Reviewers, and Applicants). The rating sheet focuses on the selection criteria and integrates, where appropriate, external reviewer comments and any other relevant information, e.g., delays in research. Using the rating sheet will help ensure that you take all selection criteria into account when formulating your preliminary rating referred to the Peer Review Manual for details. Note that NSERC does not collect these forms, and they would be destroyed in a secure manner after the peer review meetings.
What advice/lessons learned/best practices do you have for researchers and teams exploring this funding opportunity?

What are some things you wish you had known that you learned from your insider perspective as an adjudicator and as a successful applicant?
Round 2

What advice/lessons learned/best practices do you have for researchers and teams exploring this funding opportunity?

• What are some things you wish you had known from your insider perspective as an adjudicator and as a successful applicant?
Goal of Grantsmanship
**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><strong>EXCEPTIONAL</strong></th>
<th><strong>OUTSTANDING</strong></th>
<th><strong>VERY STRONG</strong></th>
<th><strong>STRONG</strong></th>
<th><strong>MODERATE</strong></th>
<th><strong>INSUFFICIENT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research excellence, accomplishments, and service are far superior to others.</strong></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 reasonable.</td>
<td>Research excellence, accomplishments, and service are below an acceptable level.</td>
<td></td>
</tr>
<tr>
<td><strong>Contributions presented in the application are of high quality. Impact and importance of the work is clearly evident and groundbreaking.</strong></td>
<td>Contributions presented in the application are above average in quality. Impact and importance of the work is clearly evident and influential.</td>
<td>Contributions presented in the application are of good quality. Impact and importance of the work is somewhat evident.</td>
<td>Contributions presented in the application are of reasonable quality. Impact and importance of the work is not clearly evident.</td>
<td>Contributions presented in the application are limited in quality. Impact and importance of the work is not clearly evident.</td>
<td></td>
</tr>
<tr>
<td><strong>The methodology is clearly defined and appropriate.</strong></td>
<td>Long-term goals and short-term objectives are well planned. The methodology is clearly described and appropriate.</td>
<td>Long-term goals and short-term objectives are clearly described. Long-term and short-term objectives are described.</td>
<td>The methodology is described and appropriate.</td>
<td>Objectives are not clearly described and/or likely not attainable.</td>
<td></td>
</tr>
<tr>
<td><strong>The application clearly demonstrates how the research activities to be supported are distinct from those funded (or applied for) by other sources.</strong></td>
<td></td>
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</tr>
</tbody>
</table>

**Past training is at the highest level in terms of the research training environment provided and HQP contributions to research.**

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

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

Challenges related to equity, diversity and inclusion specific to the institution and field of research are clearly described.

Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are clearly defined.

---

**Past training is superior to other applicants in terms of the research training environment provided and HQP contributions to research.**

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

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 HQP.

Challenges related to equity, diversity and inclusion specific to the institution and field of research are described.

Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are defined.

---

**Past training is superior to other applicants in terms of the research training environment provided and HQP contributions to research.**

HQP generally move on to impactful positions that require skills gained through the training received.

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 HQP.

Challenges related to equity, diversity and inclusion specific to the institution and field of research are described.

Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are defined.

---

**Past training is modest relative to other applicants in terms of the research training environment provided and HQP contributions to research.**

HQP generally move on to positions that require skills gained through the training received.

Training philosophy and research training plans are appropriate and clearly defined in terms of the overall approach and specific projects for HQP.

Challenges related to equity, diversity and inclusion specific to the institution and field of research are partially described.

Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are partially defined.

---

**Past training is below an acceptable level in terms of the research training environment provided and HQP contributions to research.**

HQP rarely move on to positions that require skills gained through the training received.

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

Challenges related to equity, diversity and inclusion specific to the institution and field of research are inaccurate or not described.

Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are not appropriate or not defined.
**Tips: General**

- Start preparing **early**.
- Treat each section you write as an **opportunity** to convince the panel of the **highest possible ratings for**:
  - Excellence of the Researcher
  - Merit of the Proposal
  - Contributions to the Training of HQPs
- Read the instructions and follow them **carefully**.
Tips: Writing

• Utilize the format (headings) outlined by NSERC exactly; do not skip or add new headings.

• Know your audience – balance depth, breadth and readability based on your knowledge of your research community.

• Be clear, concise and thoughtful in your proposal.

• Make it convenient for the reviewers to identify important components of your grant (with boldface or italics):
  - Long-term goal
  - Short-term goals
  - Objectives and tasks
  - Important conclusions or insights
  - EDI integration into research (get creative)
  - EDI challenge in field of study (find statistics)
  - EDI recruitment and inclusion plan
**Tips: Budget & External reviews**

**Budget**
- NSERC cannot fund you over what you ask for in your budget, but can underfund you (which is what typically happens). Exception: supplements such as Accelerator or DND, etc.
- Funding awarded is typically related to your rating, not your budget.
- Usually an EEE rating results in $100K per year, so budget in over $100K per year in your plan.
- Put significant amount of your budget towards HQP.

**External Reviews**
- Highly positive, overly general or highly negative external reviews are not weighted highly when evaluating the proposal.
Tips: Training of HQPs

Training History

• Reviewer’s focus is often on the number of students trained as well as quality of training.

• Placement after graduation should be appropriate to skills acquired in your research group. Provide details (student name, degree, currently employment).

• Note: impact can be either in NSE or non-NSE domain, but must used skills gained.

• Justify consistency of placement of students.

• Demonstrate publication with students in journal and conference papers.

• Provide details of significant awards received by students.
Tips: Training of HQPs

Research Training Plan
• Explain how students will be engaged in proposed work and provide evidence in the Methodology section and in the Budget Justification.
• Difficulty of student tasks should be consistent with the degree (B.A.Sc., M.A.Sc. or Ph.D.)
• Both larger and smaller groups can be justified effectively by leveraging the unique aspects of the program and strengths of the size.

Training Philosophy
• Discuss approach to HQP interaction/research mentorship.
• Describe intellectual involvement of HQP in research program and skills and knowledge acquired with expected impact on HQP.
• State specific EDI challenges or barriers (find references) and specific actions to implement to promote participation of a diverse HQP group.
Tips: Write for the Reviewers

• Onus is on applicant to provide ALL information. Reviewers cannot give benefit of the doubt or provide additional information.
• Make it easy for the reviewers.
  • Be logical and consistent in your writing.
  • Add repetition of significant motivations/insights.
  • Format in an easy-to-read style.
  • Provide diagrams to break the monotony of large blocks of text.
Sections of the Application

Identification

Summary of the Proposal (3,000 characters)

Proposed Expenditures
  Salaries and Benefits
  Equipment or Facility
  Materials and supplies
  Travel
  Dissemination
  Other expenses
  Contribution from Other Resources (if applicable)

Relationship to Other Research Support – Explanation (12,000 characters)

Highly Qualified Personnel Training Plan (9,000 characters)

Past Contributions to Highly Qualified Personnel Training (6,000 characters)

Most Significant Contributions to Research (9,000 characters)

Additional Information on Contributions (3,000 characters)

Select a DG application title that is distinct enough from or more general than your existing projects, so there is no question of distinctiveness.

Opportunity to be compelling and motivate your problem; frame the technical contributions as having significance and impact to Canada.

Weight HQP salaries heavily in your budget; consider budgeting for HQP training and professional development opportunities as well as EDI recruitment and inclusion initiatives.

Discuss other research support as complementing and supporting NSERC DG and vice versa.

Good opportunity to emphasize high profile/quality publication venues; leadership in publications; PI role in collaborative projects.
Attachments

Proposal (5 pages)
Recent Progress
Objectives
Literature Review
Methodology
Impact

Budget Justification (2 pages)
List of References (2 pages)
Other Support Sources – Supporting Documents (file size limit of 10 MB)
Samples of Research Contributions (max 4 PDF attachments of 10 MB each)

Develop a narrative to motivate your research goals that includes your former work as having influential impact. Build credibility.

Ambitious long-term goals and clearly defined short-term goals. Consider 3, 4, or 5 objectives.

Demonstrate your expert facility within the field. Use timely references.

Can relate to fundamental research, application, tech transfer, impact on Canada.

Ensure that references are current.

Opportunity to demonstrate you have thought about practical issues; provide evidence of feasibility of tasks.

Focus on presenting your best work in strong venues; have some contributions that are recent within the 6-year window.

Can relate to fundamental research, application, tech transfer, impact on Canada.

If you have been detailed enough in the previous sections, this can be relatively high level. Ensure methodology is appropriate and feasible.

Focus on presenting your best work in strong venues; have some contributions that are recent within the 6-year window.

Ensure that references are current.

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Ensure that references are current.

Opportunity to demonstrate you have thought about practical issues; provide evidence of feasibility of tasks.

If you have been detailed enough in the previous sections, this can be relatively high level. Ensure methodology is appropriate and feasible.
CCV

Personal Information (Identification, Language Skills, Address, Telephone, Email)

Degrees

Recognitions

User Profile

Employment

Leaves of Absence and Impacts on Research

Research Funding History

Student/Postdoc Supervision

Activities: Administrative (Event, Editorial), Advisory (Expert Witness), Assessment and Review (Organizational), Knowledge & Tech Translation, International Collaboration

Memberships

Presentations

Broadcast/Text Interviews

Publications

Intellectual Property

Do not forget to flag any leaves of absences.

Demonstrates experience and success relevant to proposed research.

Please DO NOT *ever* use the role of Academic Advisor.

All HQP should be identified by an asterisk.
Final Remarks

After the Decision …
• Things are fair ... really.
• There are excellent applications that come from a diverse set of schools across Canada.

If you are unhappy with your decision:
• Keep calm. It is not personal.
• The Panel members closest to your proposal may not have evaluated your proposal.
• External reviews are uncalibrated and are not taken at face value in all situations.
• You can contact NSERC about options to reconsider the decision if there was a procedural error, but the proposal cannot be re-evaluated.
Questions Received In Advance

Administrative Focused Questions:
What should my budget total to? Suggestion: a little over $100K per year
Is there an online template? This may not be needed. Page and character counts are provided.

Proposal Development Related Questions:
What's the best way to incorporate EDI? Within training and research. Provide references and statistics to identify EDI challenges and then have a variety of approaches that address the challenges. Be creative to try to bring EDI issues into the research. Should you consider impacts on underrepresented groups in your research in some way?

How broad is too broad? The proposal is an overall package. If you are more specific in some places, you can be higher level in others. Too broad is when it sounds like the work is infeasible.
Questions Received In Advance

Proposal Development Related Questions:

For the CCV, should I include my experience as reviewers? If so, where should I mention it? You could if you need to add more items. Under “Activities” under “Editorial”.

Should the proposal be complex or simple? You can balance the two with a complex narrative that results in a simple solution/research gap you address.

How many words are appropriate in HQP? There is a character count. Fill in as much as possible
Q & A – How to ask questions

- Please use the chat

- Click on the icon in the bottom menu to bring up the Meeting Chat pop-out window

- Type your question and hit Enter on your keyboard or click the button to submit.

- We will not be using the “Raise your hand” feature.

Please note: You may be asked to Unmute to clarify your question
Upcoming Event:

Webinar and Discussion – Addressing EDI Considerations in Your NSERC Discovery/RTI Application

Date: Sept. 20, 2022
11:00 am - 12:00 pm

cris.utoronto.ca/rdf/programs/
Upcoming Event:

Webinar – In Conversation: Intro to EDIRI at U of T –

Date: Sept. 21, 2022
10:30 am - 11:30 am

cris.utoronto.ca/rdf/programs/
Thank you!

• A link to the recording, presenter slides, and feedback form will be sent out after the session
• Follow-up questions can be addressed to Keti Dzamova 'keti.dzamova@utoronto.ca'

Claudiu Gradinaru
Deepa Kundur
Jessica Keating
Keti Dzamova