NSERC News &
How to prepare a
Discovery Grant Application

Kenn Rankine – NSERC Program Officer
Environmental Sciences
Research Grants and Scholarships
June 5, 2019
NSERC News

Overview

NSERC’s vision is to make Canada a country of discoverers and innovators for the benefit of all Canadians.

- Supports more than 34,000 students and postdoctoral fellows.
- Funds more than 11,700 professors for their research programs.
- Supports university and college-industry research partnerships with over 3,600 Canadian companies.
- Business invests more than $250 million in university and college researchers.

NSERC Budget 2018-2019
Total: $1.26 billion

- $890M (70%)
- $374M (30%)

NSERC News
Overview

Excludes administration, 4% of total budget.
NSERC News

Federal Budget 2019 Investing in the Middle Class

$151.4 million over five years, starting in 2019/20, to the agencies

<table>
<thead>
<tr>
<th>Agency</th>
<th>Programs</th>
<th>Over five years</th>
<th>Ongoing/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSERC/CIHR/SSHRC</td>
<td>Canada Graduate Scholarship</td>
<td>$114 million</td>
<td>$26.5 million</td>
</tr>
<tr>
<td></td>
<td>(CGS) Master’s (CGS-M) and Doctoral (CGS-D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSERC/CIHR/SSHRC</td>
<td>Paid parental leave for student researchers</td>
<td>$37.4 million</td>
<td>$8.6 million</td>
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</tbody>
</table>
### NSERC News

**Federal Budget 2018** Investing in Canadian Scientists and Researchers

<table>
<thead>
<tr>
<th>Agency</th>
<th>Programs</th>
<th>Over five years</th>
<th>Ongoing/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSERC</td>
<td></td>
<td>$354.7 million</td>
<td>$90.1 million</td>
</tr>
<tr>
<td>CIHR</td>
<td></td>
<td>$354.7 million</td>
<td>$90.1 million</td>
</tr>
<tr>
<td>SSHRC</td>
<td></td>
<td>$215.5 million</td>
<td>$54.8 million</td>
</tr>
<tr>
<td>Tri-councils</td>
<td>New EDI initiatives</td>
<td>$21 million</td>
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</tr>
<tr>
<td>Tri-councils</td>
<td>New research fund</td>
<td>$275 million</td>
<td>$65 million</td>
</tr>
<tr>
<td>Tri-councils</td>
<td>Colleges (CCI)</td>
<td>$140 million</td>
<td>--</td>
</tr>
<tr>
<td>Tri-councils</td>
<td>CRC (early career)</td>
<td>$210 million</td>
<td>$50 million</td>
</tr>
<tr>
<td>Tri-councils</td>
<td>Research support fund</td>
<td>$231.3 million</td>
<td>$58.8 million</td>
</tr>
</tbody>
</table>
Federal Investment in Fundamental Research

- 25% increase in Discovery Program budget
  - Tied to “clear objectives and conditions so that Canada’s next generation of researchers – including students, trainees and early-career researchers – is larger, more diverse and better supported”

- $44M in 2018-19 includes new funds for:
  - **Discovery Grants**
  - Early Career Researchers
  - Discovery Development Grants
  - Research Tools and Instruments
  - Scholarships and Fellowships

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</thead>
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<tr>
<td></td>
<td>$44M</td>
<td>$59M</td>
<td>$71M</td>
<td>$90M</td>
<td>$90M</td>
<td>$90M</td>
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</tbody>
</table>
NSERC News

Collection of Self-Identification Data

Why is self-identification data collection important?

• Driven by the Government of Canada’s commitment to equity, diversity and inclusion (EDI) in the federal research enterprise.

• Also guided by:
  – Canada Research Coordinating Committee’s work plan includes “removing barriers faced by under-represented and disadvantaged groups to ensure equitable access across the granting agencies and establish Canada as a world leader in equity, diversity and inclusion in research”;
  – Budget 2018 which requires the granting agencies “to publish an annual report for Canadians on progress in addressing challenges in the research system, including equity and diversity, and support for researchers at various career stages”; and
  – Canada’s Fundamental Science Review’s recommendation that federal funding agencies “should collaborate to improve data collection and analysis”.


NSERC News
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.”
NSERC News
Collection of Self-Identification Data

Progress to date:
- Summer 2018: An open letter from Tri-Agency Presidents to the research community
- May-December 2018, collection of self-identification information from applicants and co-applicants to all funding opportunities
  - Questions focussed on age, gender, Indigenous identity, and status as a member of a visible minority group or person with a disability
  - Over 10,000 forms collected over this period (NSERC data)
  - High response rates (over 90%, all fields combined)

Upcoming data collection:
- Implementing self-identification data collection from members of panels and reviewers;
- Including members of governance committees in self-identification data collection.
NSERC News

Canada Research Coordinating Committee

• Created to provide a focal point for expanding existing coordination and harmonization efforts amongst Canada's granting agencies —the Social Sciences and Humanities Research Council of Canada, the Natural Sciences and Engineering Research Council of Canada, and the Canadian Institutes of Health Research—as well as the Canada Foundation for Innovation, Health Canada (HC), Innovation, Science and Economic Development Canada (ISED), the National Research Council (NRC) and the Office of the Chief Science Advisor

• Priority areas:
  • international, multidisciplinary, high-risk and rapid-response research
  • emerging areas of research
  • equity, diversity and inclusion
  • indigenous research and researchers
  • support through the research career life cycle
NSERC News
New Frontiers in Research Fund (NFRF)

- Announced in Budget 2018; launched December 6
- Initial budget of $275M over five years; $65M ongoing, with additional investments in the upcoming years for a total of $130M per year
- Administered by SSHRC on behalf of the tri-agencies with the Canada Research Coordinating Committee acting as the steering committee
- Fund will support research that is international, interdisciplinary, fast-breaking and higher-risk
  - **Exploration** will generate opportunities for Canada to build strength in high-risk / high-reward and interdisciplinary research.
  - **Transformation** will provide large-scale support for Canada to build strength and leadership in interdisciplinary and transformative research.
  - **International** will enhance opportunities for Canadian researchers to participate in research with international partners.
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<sup>st</sup> - 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
  - of external reviewers

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

- First review of subject matter eligibility
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

### Joint Reviews - Conference Model in Action

<table>
<thead>
<tr>
<th>Participating (Visiting) Evaluation Group</th>
<th>GCM</th>
<th>BSF</th>
<th>EE</th>
<th>Chem</th>
<th>Phys</th>
<th>Geo</th>
<th>CS</th>
<th>MS</th>
<th>CISE</th>
<th>ECE</th>
<th>MCE</th>
<th>ME</th>
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<td>43</td>
<td>40</td>
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</tr>
</tbody>
</table>

Notes:
Applications involving members from more than one other EG (i.e. more than 2 EGs participating in the review) appear more than once.
Joint reviews involving more than one member from the same EG appear only once.
Reviews involving different streams of the same EG, without participation from other EGs, do not appear.
EG1508 provided a JR for EG 19 (SAP).
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](#) (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 stage researchers
Discovery Grant Application
Overview

- **Deadline:** November 1st - internal deadlines are earlier

- **Main components:**
  - Application for a grant
  - Research proposal
  - Samples of research contributions
  - Budget and justification
  - Canadian Common CV (CCV)

- **Submission:**
  - Research Portal
Step 1: Merit Assessment

- Three equally weighted criteria:
  - Excellence of the Researcher
  - Merit of the Proposal
  - Contribution to Training of Highly Qualified Personnel (HQP)

- Uses six-point scale
  - From exceptional to insufficient
## Grants Competition Review Process

<table>
<thead>
<tr>
<th>DISCOVERY GRANTS MERIT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXCEPTIONAL</strong></td>
</tr>
<tr>
<td>The accomplishments presented in the application were deemed to be of superior quality, impact and/or importance.</td>
</tr>
</tbody>
</table>

| **OUTSTANDING**                   |
| The accomplishments presented in the application were deemed to be of superior quality, impact and/or importance. |

| **VERY STRONG**                   |
| The accomplishments presented in the application were deemed to be of significant quality, impact and/or importance. |

| **STRONG**                        |
| The accomplishments presented in the application were deemed to be of reasonable quality, impact and/or importance. |

| **MODERATE**                      |
| The accomplishments presented in the application were deemed to be of acceptable level of quality, impact and/or importance. |

| **INSUFFICIENT**                  |
| The accomplishments presented in the application were deemed to be of insufficient quality, impact and/or importance. |

### Evidence of Merit

<table>
<thead>
<tr>
<th>Evidence of Merit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledged as a leader who has continued to make, over the last six years, influential accomplishments at the highest level of quality, impact and/or importance to a broad community.</td>
</tr>
</tbody>
</table>

| Proposed research program is clearly presented, is extremely 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. |

| Proposed research program is clearly presented, is highly original and innovative and is likely to have impact by leading to advancements and/or addressing socio-economic or environmental needs. |

| Proposed research program is clearly presented, is original and innovative and is likely to have impact by leading to advancements and/or addressing socio-economic or environmental needs. |

| Proposed research program as clearly presented, has original and innovative aspects and may have impact and/or address socio-economic or environmental needs. |

| Proposed research program as presented lacks clarity and/or is of limited originality and innovation. |

### Merit of the Proposal

<table>
<thead>
<tr>
<th>Merit of the Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term vision and short-term objectives are clearly defined.</td>
</tr>
</tbody>
</table>

| Long-term goals are clearly defined and short-term objectives are well planned. |

| Long-term goals are defined and short-term objectives are well planned. |

| Long-term goals and short-term objectives are clearly described. |

| Long-term and short-term objectives are described. |

| Objectives are not clearly described and/or likely not attainable. |

| The methodology is clearly defined and appropriate. |

| The methodology is described and appropriate. |

| The methodology is described and/or appropriate. |

| The methodology is not clearly described and/or appropriate. |

The application clearly demonstrates how the research activities to be supported are distinct from those funded (or applied for) by other sources.

### Training of Highly Qualified Personnel

<table>
<thead>
<tr>
<th>Training of Highly Qualified Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past training is at the highest level in terms of the research training environment provided and HQP contributions to research.</td>
</tr>
</tbody>
</table>

| Past training is far superior to other applicants in terms of 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 compares favourably with 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.

HQP generally 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 top quality results in terms of the overall approach and specific projects for HQP.

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

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.

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

| The Discovery Grants Merit Indicators should be used in conjunction with the Peer Review Manual which outlines how reviewers arrive at a rating. |
Grants Competition
Conference Model

Reader
Non-participating member

Second Internal
Reader

Conflicts?

Excellence
Exceptional
Exceptional
Outstanding
Outstanding
Very Strong

Merit
Outstanding
Outstanding
Very Strong
Very Strong

HQP
Outstanding
Outstanding
Very Strong
Very Strong
Moderate

COR Factor: N N N

First Internal
Reader

Program Officer

Section Chair
## Grants Competition

### Review Process

#### Step 1: Merit assessment

<table>
<thead>
<tr>
<th></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>Excellence of the researcher</td>
<td>X X</td>
<td>X X</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Merit of the proposal</td>
<td>X X</td>
<td>X X X</td>
<td></td>
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<tr>
<td>Contribution to the training of HQP</td>
<td>X X</td>
<td>X X</td>
<td>X</td>
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</table>

**Outstanding – Very Strong – Very Strong**

#### Step 2: Funding Recommendation

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<tr>
<th>Funding Bin</th>
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<th>B</th>
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</table>
Grants Competition
Review Process

Step 2: Funding Recommendations

- Applications grouped into ‘bins’ of comparable merit

- Similar overall ratings within an EG receive comparable funding

- Possible adjustment related to the cost of research
Discovery Grant Application

Excellence of the Researcher

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
Assessment based on the following elements:

- Originality and innovation
- Significance and expected contributions to research
- Clarity, scope of objectives, and appropriateness of methodology
- Feasibility
- Appropriateness and justification for the budget
- Relationship to other research support
Discovery Grant Application

Merit of the Proposal

Relationship to other research support

– Budget requested in DG is for different expenses than the ones supported (or to be supported) by other sources.

– The DG proposal is distinct conceptually from research supported (or to be supported) by CIHR and/or SSHRC.

– *New in CY2018* For CIHR Foundation Grant holders only: convincing evidence that support from DG is essential to carry out the work proposed.
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**
  - CIHR and/or SSHRC summary and budget pages
  - CCV research funding history
Discovery Grant Application
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 primarily 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.
Discovery Grant Application
Contributions to the training of HQP

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
- Other research personnel from non-academic sectors i.e. government, or industry
Discovery Grant Application
Contributions to the training of HQP

Past contributions to the training of HQP
Assessment based on training over the past six years

**New Instructions in CY2018 **
Include three components:

1. Training environment
2. HQP awards and research contributions
3. Outcomes and skills gained by HQP
Discovery Grant Application

Contributions to the training of HQP

Past contributions to the training of HQP

Other items to consider:

- Explain the level, context, and role in supervision and co-supervision
- Note impact of delays in training (those taken by the applicant or HQP)
- Focus on quality and impact of training

Members are instructed not to rate Early Career Researchers (ECRs) as *Insufficient* solely due to a limited past record of contributions to the training of HQP.
Discovery Grant Application
Contributions to the training of HQP

Future plans for training

**New Instructions in CY2018**

Include two components:

1. Training Philosophy
   - Describe approaches that promote increased inclusion and advancement of under-represented and disadvantaged groups in NSE

2. Research Training Plan
   - Focus on quality, suitability and clarity of plan
   - Must be planned training in the NSE
   - Define your role in any planned co-supervision
Discovery Grant Application
Contributions to the training of HQP

Evaluation Group will assess HQP using information from:

- **Application:**
  - Past contributions to HQP training
  - HQP training plan

- **CCV**
  - Supervisory activities and contributions
  - Trained HQP who co-authored should be identified with an asterisk “*”
  - Do not use “academic advisor”
Discovery Grant Application

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 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)
Discovery Grant Application
Equity, Diversity and Inclusion (EDI)

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 they commit to in their future approach to recruitment, training and mentoring
  - Applicants are asked to describe EDI measures implemented in the past training of HQP (if applicable)
**Additional requirement - CY2020**

- **HQP Plan**
  - Beginning CY2020, as part of the *Training Philosophy* element, applicants *are expected* to describe the active measures they commit to implementing in order to promote equity, diversity and inclusion in the training environment.
  
  - Additional text will appear in the *Merit Indicators Grid* describing EDI considerations within the *Training Philosophy* element.
**Privacy Considerations**

### Past Contributions to HQP Training

- If describing a record of training a diverse group of trainees, any HQP demographic information should be clearly linked to the practices which achieved the equity, diversity and inclusion, and should be in **aggregate format**.

- Due to privacy and confidentiality concerns, do not include personal identification data linked to individuals.
Discovery Grant Application
Available Resources

- Discovery Grants Information Centre
- Resource Videos
- Peer Review Manual
  - Includes information on each of the three criteria and the merit indicators
- HQP FAQ Document
- Webinars on how to apply
  - NOI and full application stages (French and English)
2019 Competition Results
Peer Review-Thank you

- 3400+ Discovery Grants Applications =
  - 430+ Evaluation Group Members
  - 17 000+ Reviews by EG members
  - 9100+ External Reviewers Reports

“NSERC is extremely grateful for your significant contribution of time and effort in this process. We would not be able to operate the Discovery Grants Program – our flagship program – without your dedicated efforts. Your insights and informed feedback are essential to ensure quality in Canada’s discovery research enterprise.”

Danika L. Goosney, Vice-President, Research Grants and Scholarships
2019 Competition Results

NSERC Discovery Grants Funding

(millions of dollars)

$69.2 million or 19% increase

*Includes Discovery Grants (Individual and Team) and Subatomic Physics Discovery Grants (Individual, Team and Project)

** Includes additional funding received resulting from Federal Budget 2016 & 2018
2019 Competition Results

Overall – Distribution of merit indicator ratings

* Results presented are not official
# 2019 Competition Results
## Overall – Discovery Grants

<table>
<thead>
<tr>
<th></th>
<th>Early Career Researchers</th>
<th>Established Researchers</th>
<th>Established Researchers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Returning</td>
<td>Not Holding a Grant</td>
<td></td>
</tr>
<tr>
<td># of applications</td>
<td>882</td>
<td>1736</td>
<td>786</td>
<td>2522</td>
</tr>
<tr>
<td># of awards</td>
<td>499</td>
<td>1462</td>
<td>318</td>
<td>1780</td>
</tr>
<tr>
<td>Success Rate</td>
<td>57%</td>
<td>84%</td>
<td>40%</td>
<td>71%</td>
</tr>
<tr>
<td>Average Grant (yearly)</td>
<td>$30,018</td>
<td>$41,554</td>
<td>$33,287</td>
<td>$40,077</td>
</tr>
</tbody>
</table>

*Results presented are not official*
2019 Competition Results
Equity, Diversity and Inclusion (EDI)
% of applicants by gender

* Results presented are not official
# 2019 Competition Results

## Equity, Diversity and Inclusion (EDI)

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
<th>Other Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Career Researchers (ECR)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of awards</td>
<td>166</td>
<td>320</td>
<td>13</td>
</tr>
<tr>
<td>Success rate</td>
<td>56%</td>
<td>57%</td>
<td>54%</td>
</tr>
<tr>
<td><strong>Established Researchers (ER)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of awards</td>
<td>334</td>
<td>1297</td>
<td>149</td>
</tr>
<tr>
<td>Success rate</td>
<td>73%</td>
<td>70%</td>
<td>70%</td>
</tr>
</tbody>
</table>

* Results presented are not official
# 2019 Competition Results

## Research Tools and Instruments (RTI)

RTI grants foster and enhance the discovery, innovation and training capability of university researchers in the NSE by supporting the purchase of research equipment.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget</strong></td>
<td>$19.5M</td>
<td>$25M</td>
<td>$26M</td>
<td>$30.5M</td>
<td>$25.1M</td>
<td>$25.3M</td>
</tr>
<tr>
<td><strong># Appl.</strong></td>
<td>468</td>
<td>666</td>
<td>657</td>
<td>748</td>
<td>1043</td>
<td>1005</td>
</tr>
<tr>
<td><strong># Funded</strong></td>
<td>176</td>
<td>218</td>
<td>215</td>
<td>241</td>
<td>208</td>
<td>210</td>
</tr>
<tr>
<td><strong>Success Rate</strong></td>
<td>38%</td>
<td>33%</td>
<td>33%</td>
<td>32%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Funding Rate</strong></td>
<td>38%</td>
<td>34%</td>
<td>33%</td>
<td>33%</td>
<td>21%</td>
<td>22%</td>
</tr>
</tbody>
</table>

*Results presented are not official*
Objective:
- To augment and promote Canadian university-based northern research, training, and outreach by recognizing the added costs unique to conducting research in the Canadian North.

Description:
- **NEW: Selection Criteria updated**: weighted scoring applied by NRS committee and more feedback to be provided to applicants
- **NEW: Application Process**: apply as part of DG application within Research Portal - no longer separate through On-Line System
- Up to $25,000/year for duration of the DG award
- NRS award amounts based on peer-review consideration of logistical cost and recognizing outstanding contributions to outreach, engagement, collaboration, & communication initiatives w/ northerners

Contact: [EnviroSciences-SciencesEnviro@nserc-crsng.gc.ca](mailto:EnviroSciences-SciencesEnviro@nserc-crsng.gc.ca)
## 2019 Competition Results
### Northern Research Supplements (NRS)

<table>
<thead>
<tr>
<th>Competition Year</th>
<th>Pre-Competition A</th>
<th></th>
<th>Competition B</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Apps Received Nov 1st</td>
<td>Success Rate (overall)</td>
<td>$ Requested (overall)</td>
<td>Funding Rate (overall)</td>
<td># Apps Reviewed by Ctte</td>
</tr>
<tr>
<td>2019</td>
<td>69</td>
<td>44.9%</td>
<td>$1,569,697</td>
<td>33.5%</td>
<td>46</td>
</tr>
<tr>
<td>2018</td>
<td>49</td>
<td>61.2%</td>
<td>$1,100,054</td>
<td>41.0%</td>
<td>40</td>
</tr>
<tr>
<td>2017</td>
<td>49</td>
<td>63.3%</td>
<td>$1,166,021</td>
<td>44.4%</td>
<td>44</td>
</tr>
<tr>
<td>2016</td>
<td>36</td>
<td>50.0%</td>
<td>$749,221</td>
<td>39.4%</td>
<td>28</td>
</tr>
<tr>
<td>2015</td>
<td>41</td>
<td>65.9%</td>
<td>$877,995</td>
<td>48.6%</td>
<td>34</td>
</tr>
<tr>
<td>2014</td>
<td>48</td>
<td>56.3%</td>
<td>$1,027,478</td>
<td>41.4%</td>
<td>36</td>
</tr>
<tr>
<td>2013</td>
<td>55</td>
<td>56.4%</td>
<td>$1,194,504</td>
<td>45.2%</td>
<td>39</td>
</tr>
<tr>
<td>2012</td>
<td>44</td>
<td>63.6%</td>
<td>$939,935</td>
<td>50.0%</td>
<td>36</td>
</tr>
<tr>
<td>7-yr Average</td>
<td>46.0</td>
<td>59.5%</td>
<td>$1,007,887</td>
<td>44.3%</td>
<td>36.7</td>
</tr>
</tbody>
</table>

A - these data represent information BEFORE the NRS Competition and BEFORE unsuccessful DG applicants were removed from consideration

B - these data represent information DURING the NRS Competition and AFTER the unsuccessful DG applicants were removed

* Results presented are not official
Objective:
- Assists with the high costs associated with chartering research vessels in Canada and abroad, in support of on-going Discovery research programs

Description:
- **NEW: Selection Criteria updated:** weighted scoring applied by committee and more feedback to be provided to applicants
- Applicants must hold a Discovery Grant *(or be successful in current DG competition)*
- Duration usually one year *(potential 2 years of funding, if justified)*
- Deadline: September 3rd

Contact: [EnviroSciences-SciencesEnviro@nserc-crsng.gc.ca](mailto:EnviroSciences-SciencesEnviro@nserc-crsng.gc.ca)
### 2019 Competition Results
#### Ship Time Program

<table>
<thead>
<tr>
<th>Competition Year</th>
<th># of apps reviewed</th>
<th># of apps awarded</th>
<th>Success rate</th>
<th>Funding rate</th>
<th>Total Requested in Competition</th>
<th>Total Amount Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>11</td>
<td>7</td>
<td>63.6%</td>
<td>68.8%</td>
<td>$1,544,392</td>
<td>$1,061,899</td>
</tr>
<tr>
<td>2018</td>
<td>9</td>
<td>7</td>
<td>77.8%</td>
<td>55.0%</td>
<td>$1,697,547</td>
<td>$933,172</td>
</tr>
<tr>
<td>2017</td>
<td>7</td>
<td>5</td>
<td>71.4%</td>
<td>74.6%</td>
<td>$1,288,647</td>
<td>$961,217</td>
</tr>
<tr>
<td>2016</td>
<td>11</td>
<td>8</td>
<td>72.7%</td>
<td>72.9%</td>
<td>$1,359,841</td>
<td>$991,279</td>
</tr>
<tr>
<td>2015</td>
<td>10</td>
<td>6</td>
<td>60.0%</td>
<td>65.4%</td>
<td>$1,643,194</td>
<td>$1,075,433</td>
</tr>
<tr>
<td>2014</td>
<td>9</td>
<td>8</td>
<td>88.9%</td>
<td>67.7%</td>
<td>$1,034,292</td>
<td>$700,378</td>
</tr>
<tr>
<td>2013</td>
<td>13</td>
<td>10</td>
<td>76.9%</td>
<td>49.4%</td>
<td>$2,024,427</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>2012</td>
<td>8</td>
<td>6</td>
<td>75.0%</td>
<td>70.1%</td>
<td>$738,548</td>
<td>$517,688</td>
</tr>
<tr>
<td>2011</td>
<td>13</td>
<td>11</td>
<td>84.6%</td>
<td>75.0%</td>
<td>$1,098,163</td>
<td>$824,169</td>
</tr>
<tr>
<td><strong>8-yr Average</strong></td>
<td>10.0</td>
<td>7.6</td>
<td>75.9%</td>
<td>66.3%</td>
<td><strong>$ 1,360,582</strong></td>
<td><strong>$ 875,417</strong></td>
</tr>
</tbody>
</table>

* does not include current year’s statistics

* Results presented are not official
2019 Competition Results
Discovery Accelerator Supplements

- DAS provides resources to researchers who:
  - Have highly original and innovative research programs
  - Show strong potential to become international leaders within their field

- $120,000 - over three years

- **New CY2019** - Up to 130 Supplements per year

- Each EG will receive a quota of DAS nominations to recommend

- EG members nominate candidates and members vote during competition. Executive Committee makes the final recommendation to NSERC
## 2019 Competition Results

### Discovery Accelerator Supplements

<table>
<thead>
<tr>
<th>Evaluation Group</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genes, Cells and Molecules (1501)</td>
<td>17</td>
</tr>
<tr>
<td>Biological Systems and Functions (1502)</td>
<td>18</td>
</tr>
<tr>
<td>Evolution and Ecology (1503)</td>
<td>10</td>
</tr>
<tr>
<td>Chemistry (1504)</td>
<td>7</td>
</tr>
<tr>
<td>Physics (1505)</td>
<td>8</td>
</tr>
<tr>
<td>Geosciences (1506)</td>
<td>9</td>
</tr>
<tr>
<td>Computer Science (1507)</td>
<td>13</td>
</tr>
<tr>
<td>Mathematics and Statistics (1508)</td>
<td>10</td>
</tr>
<tr>
<td>Civil, Industrial and Systems Engineering (1509)</td>
<td>12</td>
</tr>
<tr>
<td>Electrical and Computer Engineering (1510)</td>
<td>9</td>
</tr>
<tr>
<td>Materials and Chemical Engineering (1511)</td>
<td>7</td>
</tr>
<tr>
<td>Mechanical Engineering (1512)</td>
<td>8</td>
</tr>
<tr>
<td>Subatomic Physics (19)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>129</strong></td>
</tr>
</tbody>
</table>

*Results presented are not official*
2019 Competition Results
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
2019 Competition Results
Discovery Development Grants (DDG)

Results:

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awarded</td>
<td>57</td>
<td>43</td>
<td>54</td>
<td>34</td>
<td>24*</td>
</tr>
<tr>
<td>Accepted</td>
<td>54</td>
<td>42</td>
<td>46</td>
<td>28</td>
<td>TBD</td>
</tr>
<tr>
<td>Declined</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>TBD</td>
</tr>
</tbody>
</table>

* Results presented are not official
RGS Program Updates
Support for Early Career Researchers

- The ECR eligibility window is now 5 years (previously 3 years) to harmonize with the other agencies (*New!*)

- NSERC devotes additional funds to support ECRs through
  - increases to Discovery Grants
  - Discovery Launch Supplement (*New!*)

- ECRs re-applying for the first time have the option of extending their DG by one year with funds
RGS Program Updates
DND/NSERC Discovery Grant supplement

- Supporting discovery-based research
- Up to 20 supplements at $40,000 per year for 3 years
- Eligibility
  - Researchers applying to current DG competition
  - Proposed research must fit within DND defence and security target areas
- Internal DND committee will select recipients
- Results will be announced in the spring
- Contact: dndsuppmdn@nserc-crsng.gc.ca
RGS Program Updates
Discovery Frontiers

These project grants address national research priorities and global challenges by supporting major new transformative and integrative activities led by world-class Canadian researchers and comprised of multi-institutional teams and international collaborators.

Calls for proposal:
- 2011 – Northern Research Systems
- 2013 – Exploring Big Data
- 2015 – New Materials for Clean Energy and Energy Efficiency
- 2017 – Biodiversity and Adaptation of Biosystems
- 2019 – AntiMicrobial Resistance (Launched in January)
RGS Program Updates
Belmont Forum
(http://www.belmontforum.org)

- The **Belmont Forum** is a group of the world’s major and emerging funders of global environmental change research and international science councils.
- Scientist and stakeholder support is made possible through Collaborative Research Actions (CRAs)

**NSERC’s participation:**
- 2014 – Arctic I – Arctic observing and research
- 2018 – Biodiversity II – Scenarios of biodiversity and ecosystem services
- 2019 – Arctic II – Sustainability and resilience
RGS Program Updates

RTI Program Update

- Application deadline date remains **Oct 25**
- RTI selection criteria
  - Selection criteria reduced from five to three
  - Each criterion is weighted
  - The weighted scoring method will better guide Selection Committee members during review
  - Provides applicants more detailed scoring on their proposals to help improve subsequent applications
- Research Portal opens in August
RGS Program Updates

PromoScience

2018 Grants: $3,000 - $266,600/yr up to 3yrs; avg. $49,100 in Year 1

Objectives:

- To inspire young Canadians especially girls & Indigenous youth to study & plan careers in STEM

Youth: Kindergarten to high school (including 1st year college in Quebec), and activities that encourage Indigenous undergraduate students to pursue graduate STEM studies

Eligible Activities: Ongoing, interactive learning activities in STEM

CONTACT: promoscience@nserc-crsng.gc.ca
RGS Program Updates
NSERC Student Ambassadors

- Promotion of STEM to Canadian youth by Canadian youth
- To encourage post-secondary students and fellows to share their NSE experience with youth (K-12) from groups underrepresented in STEM
- Outreach activity must be organized independently by the applicant
- NSERC pays $1,000 in support of event costs
Do you have Aboriginal students or PDFs who might enjoy visiting an Aboriginal community and/or school?

- AANSE pays travel costs up to $5,000
- AANSE holder participates in science promotion events or shares their NSE research & education experience
- Eligibility: Students registered full-time in NSE degree with B or B- average, or PDF in NSE
- No deadlines: apply 2 months before visit

Contact: ambassadors@nserc-crsng.gc.ca
RGS Program Updates

NSERC Leave Policies

Primary Caregivers (Pilot)

- Researchers who become primary caregivers following the birth or adoption of a child and who are eligible for maternity or parental leave but decline the leave, may be eligible to receive a one-year grant extension with funds.

Family and Medical Leave

- Grant holders who plan to take family-related leave or medical leave may be eligible for a grant extension with funds for up to two years.

Paid Maternity / Parental Leave for Students and Postdoctoral Fellows paid from Grants

- Students and Postdoctoral fellows who are supported by NSERC grants and are eligible may receive up to 6 months of paid maternity / parental leave.
- The leave supplement will be paid by NSERC.
RGS Program Updates: 
Upcoming Deadlines for 2019

Notification/Letter of Intent Deadlines

- Discovery Grants - (August 1st)
- Subatomic Physics Major Resources Support Program (August 1st)
- Subatomic Physics – RTI (Category 2 & 3) (August 1st)
RGS Program Updates:
Upcoming Deadlines for 2019

Application Deadlines

- E.W.R. Steacie Memorial Fellowships (June 7th)
- Ship Time Program (September 3rd)
- PromoScience (September 15th)
- Research Tools & Instruments (and Subatomic Physics Category 1) (October 25th)
- Discovery Grants - (November 1st)
- Northern Research Supplements Program (November 1st)
- NSERC Awards for Science Promotion (November 25th)
In conclusion...

• Questions?
• Comments?
• Advice?