NSERC Updates and Research Grants
2020 Competition Results
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Discovery Grant

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Discovery Grant

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2020 Discovery Grants Results
Thank You

3 300+ Discovery Grants (DG) Applications =

430+ Evaluation Group (EG) Members
16 800+ Reviews by EG members
9 300+ External Reviewers Reports

Let me offer my sincere thanks to all external and internal reviewers. Your hard work is key to the success of our Discovery Grants program.

This year, let me also acknowledge the special efforts you are making to keep Canada’s research enterprise functioning given the unprecedented challenges we are facing. I hope that you, your families, and your colleagues are safe and healthy, and remain so in the future.

– Alejandro Adem, NSERC President
2020 Discovery Grants Results
NSERC DG Funding

$69 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
2020 Discovery Grants Results
Overall DG – Distribution of merit indicator ratings

Distribution of Merit Indicators by Percent of Total n=3372
2020 Discovery Grants Results by EG EG1507 – Computer Science

Distribution of Merit Indicators by Percent of Total n=369

- Excellence of the Researcher
- Merit of the Proposal
- HQP Training

Exceptional
Outstanding
Very Strong
Strong
Moderate
Insufficient
## 2020 Discovery Grants Results

### Overall DG – Results by Applicant Category

<table>
<thead>
<tr>
<th></th>
<th>Early Career Researcher (ECR)</th>
<th>Established Researchers (ER)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of applications</td>
<td># of awards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>889</td>
<td>543</td>
<td>3372</td>
</tr>
<tr>
<td></td>
<td>762</td>
<td>279</td>
<td></td>
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<tr>
<td></td>
<td>1721</td>
<td>1387</td>
<td></td>
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<tr>
<td></td>
<td>2483</td>
<td>1666</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3372</td>
<td>2209</td>
<td></td>
</tr>
<tr>
<td></td>
<td># of applications</td>
<td># of awards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>61%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>81%</td>
<td>67%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>66%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Grant (yearly)</td>
<td>$29,007</td>
<td>$34,640</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$42,317</td>
<td>$41,032</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$38,076</td>
<td></td>
<td></td>
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</tbody>
</table>
2020 Discovery Grants Results

Overall DG – Results by Applicant Category
### 2020 Discovery Grants Results by EG EG1507 – Computer Science

<table>
<thead>
<tr>
<th>Success Rate</th>
<th>Early Career Researcher (ECR)</th>
<th>Established Researchers (ER)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not Holding a Grant (ER-NHG)</td>
<td>Returning (ER-R)</td>
</tr>
<tr>
<td></td>
<td>Success Rate</td>
<td>67%</td>
<td>39%</td>
</tr>
</tbody>
</table>

#### % of Applicants by Quality Bin

- **Quality Bin**: A-C, D, E, F, G, H, I, J, K, L, M, N-P
- **Categories**: ECR, ER-NHG, ER-R

### Diagram

- The diagram displays the distribution of grants by quality bin for different categories: ECR, ER-NHG, and ER-R. Each bin is color-coded and corresponds to the percentage of applicants in each category.
2020 Discovery Grants Results
Overall DG – Equity, Diversity and Inclusion (EDI)
# 2020 Discovery Grants Results

Overall DG – 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>189</td>
<td>339</td>
<td>15</td>
</tr>
<tr>
<td>Success rate</td>
<td>61%</td>
<td>62%</td>
<td>52%</td>
</tr>
<tr>
<td><strong>Established Researchers (ER)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of awards</td>
<td>339</td>
<td>1185</td>
<td>142</td>
</tr>
<tr>
<td>Success rate</td>
<td>70%</td>
<td>66%</td>
<td>72%</td>
</tr>
</tbody>
</table>
## Other Research Grants Results

### Research Tools and Instruments (RTI)


<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
<th># Appl.</th>
<th># Funded</th>
<th>Success Rate</th>
<th>Funding Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$26M</td>
<td>657</td>
<td>215</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>2017</td>
<td>$30.5M</td>
<td>748</td>
<td>241</td>
<td>32%</td>
<td>33%</td>
</tr>
<tr>
<td>2018</td>
<td>$25.1M</td>
<td>1043</td>
<td>208</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>2019</td>
<td>$25.3M</td>
<td>1005</td>
<td>210</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td>2020</td>
<td>$30.7M</td>
<td>893</td>
<td>248</td>
<td>28%</td>
<td>29%</td>
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</tbody>
</table>
## Research Tools and Instruments (RTI)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>CS, Math, and Stats (Selection Cttee. 1607)</th>
</tr>
</thead>
<tbody>
<tr>
<td># Application</td>
<td>893</td>
<td>25</td>
</tr>
<tr>
<td># Funded</td>
<td>248</td>
<td>7</td>
</tr>
<tr>
<td>Success Rate</td>
<td>27.9%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Funding Rate</td>
<td>28.7%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>
Other Research Grants Results
Discovery Accelerator Supplements

Program webpage:
https://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/DGAS-SGSA_eng.asp

<table>
<thead>
<tr>
<th>Evaluation Group</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genes, Cells and Molecules (1501)</td>
<td>18</td>
</tr>
<tr>
<td>Biological Systems and Functions (1502)</td>
<td>20</td>
</tr>
<tr>
<td>Evolution and Ecology (1503)</td>
<td>7</td>
</tr>
<tr>
<td>Chemistry (1504)</td>
<td>8</td>
</tr>
<tr>
<td>Physics (1505)</td>
<td>10</td>
</tr>
<tr>
<td>Geosciences (1506)</td>
<td>7</td>
</tr>
<tr>
<td>Computer Science (1507)</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics and Statistics (1508)</td>
<td>9</td>
</tr>
<tr>
<td>Civil, Industrial and Systems Engineering (1509)</td>
<td>7</td>
</tr>
<tr>
<td>Electrical and Computer Engineering (1510)</td>
<td>9</td>
</tr>
<tr>
<td>Materials and Chemical Engineering (1511)</td>
<td>6</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>127</strong></td>
</tr>
</tbody>
</table>

2020 DAS Recipients
Years from PhD

- 0-12: 46.5%
- 13-20: 41.7%
- 20+: 11.8%
Other Research Grants Results
Discovery Development Grants (DDG)

Program web page:

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awarded</td>
<td>43</td>
<td>54</td>
<td>34</td>
<td>24</td>
<td>47</td>
</tr>
<tr>
<td>Accepted</td>
<td>42</td>
<td>46</td>
<td>28</td>
<td>20</td>
<td>44</td>
</tr>
<tr>
<td>Declined</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>
2020 Competition Results
Statistics Package

• For more information on DG and other Research Grants results:

  – The 2020 competition statistics package is available here:

• Contact resgrant@nserc-crsng.gc.ca if you have any questions.
Discovery Grants News
Peer review meetings for 2021 Discovery Grants competition will take place by videoconference

- The Peer review meetings for the 2021 Discovery Grants competition will take place by videoconference in February
- Focused on maintaining the same high quality standards of peer review
- Actively seeking out best practices across funding agencies on “virtual peer review”
- NSERC peer review processes owe their success to the dedicated members of the research community who volunteer their time as committee members

https://www.nserc-crsng.gc.ca/Media-Media/NewsDetail-DetailNouvelles_eng.asp?ID=1175
ECR delays: New for CY2021

• The ECR definition was changed for which all eligible delays in research are doubled when calculating candidate status.

• For example, an applicant who took a 7-month parental leave will be credited 14 months and the ECR eligibility window will be adjusted accordingly.

• Eligible delays include delays in research activity related to COVID-19.

“Early career researchers (ECR) are applicants who have held an independent academic position for five years or less. For example, to be classified as an ECR, a researcher submitting an NOI in August 2020 would have been hired on or after July 1, 2015. The five-year window for being considered an ECR is adjusted to take into account instances where a researcher has had an eligible delay in research. All eligible leaves (for example, maternity, paternity, medical, bereavement) are credited as twice the amount of time taken.”
Delays in research: New for CY2021

- Applicants who report an eligible leave of absence are entitled to list contributions to research and to training beyond the last six years, for a period equivalent to the duration of the leave.

- Contributions prior to the last six years can be found in:
  - A new 2-page attachment
  - Past contributions to the training of HQP section
  - Most significant contributions to research section
  - Samples of research contributions section

**Definition of eligible leaves of absence now includes COVID-related delays**
Delays in research: New for CY2021

• NSERC recognizes that the COVID-19 pandemic is affecting researchers’ and students’ capacity to conduct their regular research and training activities.

• NSERC has developed general guidelines for the consideration of COVID-19-related impacts on research aiming to provide direction on how to describe these impacts in an application and information on how to consider these impacts when reviewing applications.
Dr. Alejandro Adem

- Joined NSERC in October 2019 as new President of NSERC
- Highly accomplished researcher in the field of mathematics and a faculty member at the University of British Columbia
- Formerly the Chief Executive Officer and Scientific Director of Mitacs
- Also held director and deputy director position within the Pacific Institute for the Mathematical Sciences
Research Grants and Scholarships - Updates

Evaluation of Discovery Research Program

- Evaluation main conclusions about the Discovery Research Program:
  - Central component of Canada’s research funding ecosystem
  - Provides the opportunity to undertake curiosity-driven, long-term research programs with the required flexibility to pursue promising research avenues

- The following recommendations are detailed in the report:
  1. Maintain the Discovery Research Program
  2. Explain the rationale for DG funding differences across disciplines
  3. Clarify the objectives with respect to the nature and level of support provided for research tools and instruments (RTI)
  4. Consider separating the management of funding for individual DGs in math and statistics from the management of funding for institutes in this field
  5. Clarify NSERC intentions for ongoing support to research institutes
  6. Pursue the implementation of equity, diversity and inclusion (EDI) principles

- Management actions and program refinements are in development as described in the Management Action Plan (MAP).

- NSERC would like to extend its thanks to the research community for its valuable participation!
Tri-Agency EDI Action Plan
Tri-Agency EDI Action Plan

Tri-Agency Statement on Equity, Diversity and Inclusion (EDI)


CIHR, NSERC, and SSHRC are committed to excellence in research and research training. Achieving a more equitable, diverse and inclusive Canadian research enterprise is essential to creating the excellent, innovative and impactful research necessary to advance knowledge and understanding, and to respond to local, national and global challenges.
Tri-Agency EDI Action Plan

- **Objective 1: Fair access to tri-agency research support**
  - 1.1 **Comprehensive data** is available to help identify equity, diversity and inclusion (EDI)-related barriers and inform decision-making in granting agency funding programs
  - 1.2 All policies, plans, programs and processes related to allocating granting agency support are equitable and inclusive, and mitigate bias against researchers from underrepresented groups
  - 1.3 **Diverse participants** are included in peer review/selection committee and advisory/governance board decision making.
  - 1.4 Equity, diversity and inclusion (EDI) considerations are integral to criteria used to assess excellence of researchers, research design and practices, and approaches to team-based research and training.

- **Objective 2: Equitable participation in the research system**
  - 2.1 Tri-agency helps drive systemic and research culture change within Canada’s post-secondary system.
  - 2.2 The number of researchers from underrepresented groups entering, participating and remaining in the research ecosystem is more representative of the Canadian population.
EDI in Action at NSERC
EDI in Action at NSERC

Program actions

Program requirements
Integration of EDI into selection criteria across NSERC programs

Program policies
Consideration of delays in research activity, impacts of COVID-19

Training for staff and reviewers
GBA+, Bias in Peer Review

Continuous improvement based on GBA+
e.g., Changes to Steacie Fellowship
EDI in Action at NSERC

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 12 months of paid maternity / parental leave.
- The leave supplement will be paid by NSERC.
EDI in Action at NSERC

Data and reporting

- Discovery Grants

<table>
<thead>
<tr>
<th>Designated group</th>
<th>% of applications</th>
<th>% of awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>23.6%</td>
<td>23.9%</td>
</tr>
<tr>
<td>Visible Minorities</td>
<td>25.3%</td>
<td>23.3%</td>
</tr>
<tr>
<td>People with disabilities</td>
<td>1.8%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Indigenous</td>
<td>0.6%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Competition / concours de 2020
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.

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
San Francisco Declaration on Research Assessment (DORA)

The tri-agencies (NSERC, CIHR and SSHRC) as well as CFI and Genome Canada joined over 1600 organizations worldwide by signing on to DORA.

Recommendations for Funding Agencies

- Do not use journal-based metrics (Journal Impact Factor) as a surrogate measure of the quality of research
- Be explicit about the criteria used in evaluation of applicants
- Clearly highlight importance of scientific content of a paper vs. publication metrics or journal identity
- Consider the value and impact of all research outputs (including datasets and software) in research assessment

NSERC’s commitment

- Promote tri-agency initiatives that already align with DORA recommendations for evaluating research excellence
- Ensure excellence in research funding and assess a wide range of research results and outcomes as part of the review process
- Review and update NSERC policies and processes to incorporate DORA recommendations in a more consistent manner across NSERC

COVID-19 Response
Program Updates

- NSERC continues to monitor and make adjustments to program application deadlines and the reporting of due dates as necessary
- See website for regular updates:
Support for students and new grads affected by COVID-19

- Extend expiring federal graduate research scholarships and postdoctoral fellowships, and supplement existing federal research grants, to support students and post-doctoral fellows, by providing $291.6 million to the federal granting councils.
Direct Support (Announced May 29, 2020)

- For eligible students and postdoctoral researchers whose research scholarship or fellowship ended between March and August 2020, support was extended for an additional four (4) months and fully funded.

Indirect Support (Announced June 4, 2020)

- Additional funding was provided to research grant holders to continue supporting trainee and research support personnel.
- The value of the supplement is commensurate with the average level of support provided to trainees and research support personnel over a three-month period.

- Contact: supplements@nserc-crsng.gc.ca
Discovery Grants one-year extension with funds

• All active Discovery Grants can elect to receive a one-year extension with funds at their current funding level.
• Eligible programs: Discovery Grants, Discovery Grants – Subatomic Physics (Individual, Project and Major Resources), Discovery Grants – Northern Research Supplements and Discovery Development Grants.
• FAQs: https://www.nserc-crsng.gc.ca/Professors-Professeurs/FAQ-FAQ/DG-SD_eng.asp
• Contact: resgrant@nserc-crsng.gc.ca
NSERC / SSHRC Grants one-year extensions in time

- Academic institutions can immediately approve extensions requests up to 12 months for Agency grants with an end date between February 1, 2020 and March 31, 2021 inclusively
- Applies to all grants, regardless of whether they have received a previous time extension of any length for any reason
- Allows grantees to continue spending grant funds, and institutions to delay the processing of residual grant funds
Funding opportunities

• Emerging Infectious Diseases Modelling (EIDM) Initiative *NEW*

• *(Closed)* Canadian 2019 Novel Coronavirus (COVID-19) Rapid Research Funding Opportunity ($52.6M)
  • [https://cihr-irsc.gc.ca/e/51908.html](https://cihr-irsc.gc.ca/e/51908.html)

• *(Closed)* College and Community Innovation Program – Applied Research Rapid Response to COVID-19 (approx. $3M)

• *(Closed)* Alliance COVID-19 grants
Federal support for research staff: Canada Research Continuity Emergency Fund (CRCEF)

- $450 million in federal funding to help Canada’s academic research community during the pandemic.
  - Provide wage support to universities and health research institutes
  - Maintain essential research-related activities
  - Ramp back up to full research operations once physical distancing measures are lifted

- Universities will receive funding as block grants.
- CRCEF is overseen by the Canada Research Coordinating Committee and administered by the Tri-Agency Institutional Programs Secretariat (TIPS)
Questions?

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