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Breakthrough answers to timeless questions

Des réponses innovantes à de grandes questions



Natural Sciences and Engineering Research Council of Canada Conseil de recherches en sciences naturelles et en génie du Canada Canada



# **Council of Chairs of Canadian Earth Science Departments – CCCESD Meeting**

Breanna Gricken, Program Officer, RTI, Ship Time, NRS, NSERC Elizabeth Boston, Director, NSERC, Mathematical, Environmental and Physical Sciences

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### Research Grants and Scholarships

# **Highlights**

#### **Personnel Changes and Updates:**

- Marc Fortin is the new Vice-President, Research Grants and Scholarships, effective August 22, 2022.
- Robin Craig is the new Associate Vice-President, Research Grants and Scholarships, effective August 29, 2022
- Dr. Imogen Coe is NSERC's inaugural Scholar in Residence, as of August 2022. Dr. Coe will apply her expertise to support NSERC's policies, programs and strategic initiatives

NSERC 2030: Discovery. Innovation. Inclusion.

# Our new strategic plan

- Released September 21, 2022
- Will guide the execution of our mandate as the main natural sciences and engineering research funder in Canada.
- Lays out an ambitious vision for Canadian research excellence and the potential of natural sciences and engineering to benefit the well-being of humanity and of our planet
- Read it <u>here</u>.



NSERC 2030: Discovery. Innovation. Inclusion.

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## Our vision for the future

- An agile agency that is steadfast in its support for investigator-driven discovery research while enabling quick responses to emerging Canadian research priorities.
- A strong, harmonized research infrastructure that reflects the increasingly interdisciplinary and dynamic nature of scientific research.
- A diverse and inclusive research ecosystem that expands the existing talent pool, welcomes researchers with a range of expertise, finds common space for mutually respectful exploration and decolonizes research practices to support First Nations-, Inuit- and Métis-led knowledge creation and innovation.



*Tree of life* Image by Keerthana Harwalkar, YuQi Li and Matthew Lok-Man Chang McGill University

NSERC 2030: Discovery. Innovation. Inclusion.

# **Our focus**

*NSERC 2030* is built around five pillars:

- 1. Support research excellence that strengthens Canada
- 2. Expand, diversify, and nurture Canada's talent pool
- 3. Translate discovery into impact
- 4. Mobilize knowledge on a global scale
- 5. Empower our organization and our people



Everything is deeply intertwingled Image by Olga Sirbu University of Toronto

#### **Research Grants and Scholarships**

# **Equity, Diversity and Inclusion**

- Council Standing Committee on EDI (CEDI) met on September 13
  - Engagement with Canadian Black Scientists Network
  - Engagement with other agencies' Advisory committees
- Advancing development of NSERC's Accessibility Plan, in coordination with SSHRC and CIHR
- Update to NSERC's guide on integrating equity, diversity and inclusion considerations in research
  - New section: Equity, diversity and inclusion considerations for research teams
- Agency-sponsored study selected by ISED for assessment by the Council of Canadian Academies (CCA) in 2023
  - Title: Evidence-Based Equity, Diversity and Inclusion Practices for Impactful Change in the Post-Secondary Research Ecosystem
- Coordinated annual report to CRCC on Tri-agency EDI Action Plan implementation (September 20)
- In progress: updates to Bias in Peer Review training module, coordinated by CIHR

#### **NSERC** News - New resource

### NSERC guide to incorporating equity, diversity and inclusion considerations in research

Two primary sections:

- 1) EDI considerations at each stage of the research process
- 2) EDI considerations for research teams

The new guide provides:

- information on how EDI considerations in research promote research excellence
- detailed guidance and examples relevant to the natural sciences and engineering disciplines
- links to key resources

EDI considerations at each stage of the research process



#### **NSERC** News

# Guidelines on assessment of contributions to research, training and mentoring

Released in May 2022, the new Guidelines:

- Promote NSERC's support of research excellence in Canada and incorporate the principles of the Declaration on Research Assessment (DORA)
- Recognize and value a broader range of contributions, including outreach and mentoring, emphasizing their quality and impact
- Permit applicants to select from a broader variety of contributions and suitable indicators to demonstrate their impact
- Clarify eligible interruptions in research, training and mentoring
- These guidelines replace the <u>Policies and Guidelines on the Assessment of Contributions to</u> <u>Research and Training</u> and the <u>Guidelines for the Preparation and review of Applications in</u> <u>Engineering and the Applied Sciences</u>

#### **NSERC** News

# Research Security



- Espionage and foreign interference activities pose real threats to Canadian research integrity, intellectual property and business interests.
- Since 2018 the federal granting agencies have been working with the Government of Canada -Universities Working group to ensure the security and integrity of publicly funded research in Canada. In September 2020, the Working Group published the Safeguarding your Research portal – science.gc.ca/safeguarding-your-research/, an evergreen resource where guidance and tools are shared with the research community
- The National Security Guidelines for Research Partnerships were developed in consultation with this working group and applied in July 2021 to the NSERC Alliance grants program. Applicants with one or more private sector partners must now submit a Risk Assessment Form with the application. <u>https://www.science.gc.ca/eic/site/063.nsf/eng/h\_98257.html</u>
- The granting agencies are also reviewing their security policies and procedures, following national and international best practices.

#### **NSERC News**

# Research Security



All researchers and administrators are encouraged to consult the following resources for more information on how to safeguard research and innovation:

- <u>Safeguarding Your Research Portal</u>: guidance, information, tools, case studies, and self-directed courses.
- <u>National Security Guidelines for Research Partnerships</u>: tool to integrate national security considerations into the development, evaluation, and funding of research partnerships
- <u>Safeguarding Science</u>: Interactive workshop from Public Safety Canada
- <u>Canadian Centre for Cyber Security</u>: Hosts resources on the cyber threat environment, including interactive content, publications, alerts, and advisories
- <u>Canadian Cyber Security Tool</u>: Voluntary self-assessment survey

# 2. Competition 2022 Results



#### 2022 Competition Results

## Thank You!

#### **2518 Discovery Grants (DG) Applications**

468+ Evaluation Group (EG) Members 12 950+ Reviews by EG members 6687+ External Reviewers Reports

I'd like to offer my sincere thanks to all committee members and external reviewers for their hard work and dedication in the 2022 Discovery Grants competition, which was conducted virtually. Your tremendous efforts during these unprecedented times have helped keep Canada's research enterprise strong in the midst of this pandemic. I hope that you, your families, and your colleagues are safe and healthy, and remain so in the future.

#### - Alejandro Adem, NSERC President

2022 Competition Results

# **Overall DG – Results by Applicant Category**

	Early Career Researcher (ECR)	Establish	Total		
		Not Holding a Grant (ER-NHG)	Returning (ER-R)	All Established Researchers	
# of applications	837	474	1207	1681	2518
# of awards	529	192	994	1186	1715
Success Rate	63%	41%	82%	71%	68%
Average Grant (yearly)	\$28,386	\$33,868	\$43,292	\$41,766	\$37,638

#### 2022 Discovery Grants Results – Overview

### **Overall DG – Equity, Diversity and Inclusion (EDI)**



# **Overall DG – Equity, Diversity and Inclusion (EDI)**

		Women	Men	Other Categories
Early Career Researchers (ECR)	Number of Awards	294	502	41
	Success rate	65%	63%	51%
Established Researchers Returning (ER-R)	Number of Awards	251	824	132
	Success rate	82%	82%	82%
Established Researchers Not Holding a Grant (ER-NHG)	Number of Awards	84	340	50
	Success rate	40%	41%	38%

# 2022 Discovery Grants Results by EG EG1506 – Geosciences

	Early Career Researcher	Establ			
	(ECR)	Not Holding a Grant (ER-NHG)	Returning (ER-R)	All Established Researchers	Overall
Success Rate	64%	52%	92%	84%	79%



# **Research Tools and Instruments (RTI)**

Program webpage:

https://www.nserc-crsng.gc.ca/professors-professeurs/rtii-oiri/rti-oir\_eng.asp

	2017	2018	2019	2020	2021	2022
Budget	\$30.5M	\$25.1M	\$25.3M	\$30.7M	\$25.3M	\$25.0M
# Appl.	748	1043	1005	893	811	713
# Funded	241	208	210	248	201	207
Success Rate	32%	20%	21%	28%	27%	29%
Funding Rate	33%	21%	22%	29%	25%	29%

**2022 Competition Results** 

## **Statistics Package**

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

 The 2022 competition statistics package and dashboards are live: <u>https://www.nserc-crsng.gc.ca/professors-</u> <u>professeurs/discoverygrants-subventionsdecouverte/index\_eng.asp</u>

Contact <u>resgrant@nserc-crsng.gc.ca</u> if you have any questions.

# 3. Programs and Policy Updates



# **2023 Discovery Grants Competition**

- As the global pandemic situation remains fluid, to ensure effective and timely delivery of the 2023 Discovery Grants competition and the safety of participants, the Discovery Grants review meetings will take place by videoconference once again this year over 4 weeks starting January 30, 2023
- NSERC is committed to maintaining a peer review process of the highest quality, including fairness and consistency between evaluating committees and across competition years
- Over 3200 Notices of Intent were received for the 2023 Discovery Grants competition, moving closer to pre-pandemic numbers

Contact: <u>resgrant@nserc-crsng.gc.ca</u>

NSERC Discovery Grants Program 2023 Important Dates Notification of Intent: August 2, 2022 Application : November 1, 2022 Announcement of results: April 2023

#### **Research Grants and Scholarships**

# **Highlights**

- Research Tools and Instruments (RTI): Successful CY2022 applicants and co-applicants will not be able to apply to the 2023 RTI competition
- Following the <u>Tri-Agency Research Data Management (RDM) Policy</u>, NSERC's Subatomic Physics (SAP) Individual and Project grants have been selected to pilot the submission of Data Management Plans for Competition 2024
- Following the release of the revised <u>Guidelines on the assessment of contributions to</u> <u>research, training and mentoring</u> (May 6, 2022) the program literature and peer review manuals for Discovery Research Programs were updated to provide a web link to these guidelines. No other updates are planned for the 2023 competition, but further updates will occur in preparation for future competitions

## Support for Early Career Researchers (ECRs)

- Early Career Researchers are applicants who have held an independent academic position for 5 years or less.
  - Five year window adjusted for any eligible delay in research
  - All eligible leaves taken (e.g. parental, bereavement, illness of applicant or family) are now credited as twice the amount of time taken *(started Fall 2020)*
- NSERC devotes additional funds to support ECRs through
  - Increases to Discovery Grants
  - Discovery Launch Supplement
- ECRs re-applying for the first time have the option of extending their DG by one year with funds in addition to the Discovery Grants one-year extension with funds due to COVID-19.

# Delays in research and dissemination of research results

- Eligible leaves of absence (e.g., maternity and parental leave, personal illness, chronic illness, mental illness, or disability associated with reduced research activity, leave taken by applicant for family-related illness, bereavement, and extraordinary administrative duties) are those taken within the last six years.
- COVID-19-related impacts on research and training are considered eligible delays.
- The impact of delays is taken into consideration in the assessment of contributions to research and/or training.

# **Delays in research: Leaves of absence attachment**

Applicants who have reported an eligible leave of absence or delay in their CCV are entitled to an attachment that must be used to list **only** *supplemental contributions to research and to training* beyond the last six years, for a period equivalent to the duration of the leave or delay.

- <u>Contributions to research</u>: list of presentations, interviews and media relations, publications, intellectual property and recognitions
- <u>Contributions to training</u>: list of supervisory activities

## **Optional Extensions to Discovery Grants due to COVID-19**

- With funds: extensions offered to all eligible active DG holders (2022/23)
  - 1 year with funds at previous level
  - Offered by NSERC to grantees in the last year of funding

Contact: resgrant@nserc-crsng.gc.ca

- Without funds: extensions for grantees in their automatic 1 year for the residual use of DG funds
  - 1 year time only
  - Via Research Grants Officers
  - For grantees not receiving additional funds

Contact: grantsadministration@nserc-crsng.gc.ca

# **Northern Research Supplements (NRS)**

- Objective: To augment and promote Canadian university-based northern research, training, and community outreach by recognizing the added costs unique to conducting research in the Canadian North.
- Recent changes:
  - Selection Criteria updated: weighted scoring applied to each criterion; will provide more detailed feedback to applicants
  - Application Process: submit with DG application and CCV in Research Portal no longer separate through Online System (Deadline: November 1<sup>st</sup>)
- Up to \$25,000/year for duration of the DG award
- NRS awards based on peer-review consideration of logistical costs & recognizing outstanding contributions to outreach, engagement, collaboration, & communication initiatives with northerners

Contact: EnviroSciences-SciencesEnviro@nserc-crsng.gc.ca

# Ship Time Program (STP)

#### **Objective:**

 Assists with the high costs associated with chartering research vessels in Canada and abroad, in support of ongoing Discovery research programs

#### **Description:**

- NEW: Selection Criteria updated with weighted scoring applied by committee & more feedback provided to applicants
- NEW: CCV has replaced the Form 100
- Applicants must hold a Discovery Grant (or be successful in current DG competition)
- Duration usually one year (potential for 2 years of funding, if justified)
- Deadline: September 1st

Contact: EnviroSciences-SciencesEnviro@nserc-crsng.gc.ca

# DND\*/NSERC Discovery Grant Supplements

- Supports unclassified university-based research dedicated to the development of nonweapon specific technologies with dual-use applications in defence and security target areas.
- Each supplement valued at \$120,000 over 3 years (\$40,000 per year)
- Eligibility
  - Researchers applying to current DG competition
  - Proposed research must fit within DND defence and security target areas
- Internal DND committee will select recipients

Contact: dndsuppmdn@nserc-crsng.gc.ca

\*DND, Department of National Defence

nserc-crsng.gc.ca

#### **Program Updates**

# **Discovery Development Grant (DDG)**

- Small Universities only
- No separate application is required → offered according to DG results
- \$15K/year for 2 years
- May hold twice throughout career
- Need letter of support from their university, indicating what additional measures will be taken to support the individual's research program

Contact: <u>ddg-sdd@nserc-</u> <u>crsng.gc.ca</u>

Distribution of the offered awards by Evaluation Group	
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			Pilot				3 X X		
Evaluation Group	2015	2016	2017	2018	2019	2020	2021	2022	Total (to date)
19					1	1	1		3
1501	8	2	3	3		6	4	2	28
1502	4	6	5	10	4	11		5	45
1503	3	3	9	5	4	6	1	3	34
1504	3	4	3		2	2	3	3	20
1505	3		6	3	1	2	2	2	19
1506	5	4	5	2		2	3	3	24
1507	8	6	6	6	4	7			37
1508	5	5	3	1	3	1	2	3	23
1509	2	3	5		2	3	3	3	21
1510	4	1	4	2	1	4	1	1	18
1511	5	4	3		2		2		16
1512	7	5	2	2		2			18
Total Awards	57	43	54	34	24	47	22	25	306



# **Questions?**

#### **Elizabeth Boston**

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