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Breakthrough answers to timeless questions

Des réponses innovantes à de grandes questions



Canada



Council of Chairs of Canadian Earth Science Departments – CCCESD Meeting

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October 26-27, 2023

Table of contents

- 1. Competition 2023 Results
- 2. NSERC News and Program Overview



1. Competition 2023 Results



2023 Discovery Grants Results - Overview

Discovery Research Program Results CY2023

- The Discovery Grants program invested over \$360M in awards, along with \$68M in COVID-19 extensions with funds, totaling more than \$430M in investments
 - 58% overall success rate; average grant size \$45k
 - The CY2023 competition cohort is approximately 85% (n = 2,802) the size of a typical competition (2018-2020 average n = 3,330)
- The Subatomic Physics Grants program (individual, project, major resources support, and research tools and instruments) invested over \$10.5M in new awards
 - 47 applications across all categories; 35 awards
 - Success rates ranged from 68% to 90%; no SAP-RTI grants were awarded
- The Research Tools and Instruments Grants program invested over \$26M in new awards
 - 599 applications; 204 awards
 - 35% overall success rate

Discovery Grants over the last 15 years



*Pools of applicants differ from a typical year, due to COVID-19 one-time extensions with funds provided to eligible DG holders

\$45.0k

What We've Heard

Funding levels

- Discovery Grants should better support personnel and at minimum cover the costs of hiring one student
- Average grant needs to be higher to counter inflation and rising cost of research
- Discovery Research requires more investment for Canadians remain competitive internationally

Simplifying

- Reducing the burden of peer review is important; however should be balanced with maintaining high quality of decision making
- Maintaining flexibility of research programs is key

Funding distribution

- Maintaining equitable access to funding for underrepresented groups is a priority
- Maintaining support for research at small institutions is important
- Researchers need more support in early stages of their careers







2023 Discovery Grants Results – Overview

Overall DG – Results by Applicant Category

	Early Career	Established Researchers (ER)			
	Researcher (ECR)	Not Holding a Grant (ER-NHG)	Returning (ER-R)	All Established Researchers	Total
# of applications	868	517	1,417	1,934	2,802
# of awards	475	136	1,024	1,160	1,635
Success Rate	55%	26%	72%	60%	58%
Average Grant (yearly)	\$34,644	\$46,305	\$49,635	\$49,245	\$45,003

2023 Discovery Grants Results - EG1506

Geosciences (EG1506) – Results by Applicant Category

	Early Career	Establi			
	Researcher (ECR)	Not Holding a Grant (ER-NHG)	Returning (ER-R)	All Established Researchers	Total
# of applications	54	16	83	99	153
# of awards	32	8	66	74	106
Success Rate	59%	50%	80%	75%	69%
Average Grant (yearly)	\$31,964	\$41,500	\$45,863	\$45,753	\$41,706

Discovery Development Grants (DDG)

	2018	2019	2020	2021	2022	2023*
Awarded	34	24	47	22	28	40

Research Tools and Instruments (RTI)

	2018	2019	2020	2021	2022	2023*
Budget	\$25.1M	\$25.3M	\$30.7M	\$25.3M	\$25.0M	\$26.0M
# of Applications	1,043	1,005	893	811	713	585
# Funded	208	210	248	201	207	204
Success Rate	20%	21%	28%	27%	29%	34.9%
Funding Rate	21%	22%	29%	25%	29%	35.5%

Northern Research Supplements (NRS)

	Pre-Competition ^A						Compe	etition ^B		
СҮ	# Apps Received	Success Rate (overall)	\$ Requested (overall)	Funding Rate (overall)	# Apps Assessed	# of Apps funded	Success Rate (Comp)	\$ Requested (Comp)	\$ Awarded (Comp)	Funding Rate (Comp)
2023*	57	49%	\$1,300,280	30%	41	28	68%	\$926,896	\$395,162	43%
2022	49	55%	\$1,122,905	34%	40	27	68%	\$930,029	\$376,700	40%
2021	44	43%	\$1,055,215	25%	29	19	66%	\$717,685	\$266,000	37%
2020	82	44%	\$1,769,032	30%	58	36	62%	\$1,308,436	\$533,900	41%
2019	69	45%	\$1,569,697	34%	46	31	67%	\$985,890	\$526,000	53%
2018	49	61%	\$1,100,054	41%	40	30	75%	\$927,807	\$450,940	49%

A - these data are from BEFORE the NRS Competition & BEFORE unsuccessful DG applicants were removed

B - these data represent the results of the NRS Competition -AFTER unsuccessful DG applicants were removed from consideration

Ship Time Program (STP)

СҮ	# of Applications Reviewed	# of Applications Awarded	Application Success Rate	Request Funding Rate	Total Amount Requested	Total Amount Awarded
2023*	11	6	55%	57%	\$1,906,014	\$1,086,614
2022	11	6	55%	46%	\$2,150,359	\$995,685
2021	8	7	88%	82%	\$1,241,615	\$1,013,751
2020	12	6	50%	45%	\$2,270,323	\$1,015,465
2019	11	7	64%	69%	\$1,544,392	\$1,061,899
2018	9	7	78%	55%	\$1,697,547	\$933,172

2. NSERC News and Program Overview



NSERC webpage for equity, diversity and inclusion (EDI)

True to its commitment to supporting research excellence, NSERC has launched an <u>Equity, diversity and inclusion</u> webpage to help the research community to easily access information on NSERC's EDI-related actions, programs and policies.

The new EDI hub includes information on:

- EDI policies related to the **Review process** and **Career interruptions**;
- Grants and awards that address barriers and biases experienced by underrepresented groups;
- concrete **Actions** NSERC is taking to support EDI;
- Data collected and used by NSERC to support EDI goals; and
- Resources to assist NSE researchers with integrating EDI considerations in their work.

Signatory of

DORA

NSERC News

Overview of NSERC's DORA journey to date



serc-crsng.gc.ca

Balanced, broad, and responsible: A practical



NSERC has posted a link to the DORA ٠ and Luxembourg National Research Foundation's video – Broad, balanced and responsible: a practical guide for research evaluators. French translation was carried out by NSERC.

Promotion of broader and fairer application

NSERC News

assessments

The 5-min video contains 6 practical • tips for fostering a more holistic evaluation process.

guide for research evaluators



NSERC News

Indigenous Research

 In 2022, NSERC assumed the leadership role of the Reference Group for the Appropriate Review of Indigenous Research (Reference Group) and NSERC secretarial support to the group began in April 2023.

Based on discussions with the Reference Group, and experiences shared by CIHR and SSHRC, RGS has begun developing guidance on some crucial aspects of the **Discovery Grant (DG)** program:

- A definition of Indigenous research, developed in collaboration with Indigenous researchers has been incorporated into DG program literature in 2023.
- Furthermore, DG Program literature for Competition 2024 has been updated to provide guidance for peer review of applications proposing research involving Indigenous Peoples and Communities.

Policy Reminders Indigenous Research



The PRM for CY2024 Competition includes guidelines for reviewing Indigenous research.



If an application mentions Indigenous research without describing the approach, there's no penalty.



This year, applicants were only asked to indicate in the Summary of Proposal whether their research qualifies as Indigenous research; no specific instructions for describing the approach were provided.

NSERC News

Tri-Agency Research Data Management (RDM) Policy



Institutional Strategies

Post-secondary institutions and research hospitals eligible to administer CIHR, NSERC or SSHRC funds are required to publish an RDM strategy.

Over 120 strategies were received by the agencies by the deadline of March 1, 2023



Data Management Plans (DMPs)

Certain funding opportunities will require DMPs to be submitted at time of application. NSERC's upcoming pilot:

> Subatomic Physics Discovery Grants – Individual and Project

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Data Deposit

Grant recipients will be required to deposit into a digital repository all digital research data, metadata and code that directly support the research conclusions in journal publications and pre-prints that arise from agency-supported research.

New Measures to Enhance Research Security

The February 2023 tri-ministerial statement on protecting Canada's research requested new measures:

• "Research grant applications proposing to conduct research in a sensitive research area will not be funded if any of the researchers working on the project are affiliated with a university, research institute or laboratory connected to military, national defence or state security entities of foreign state actors that pose a risk to Canada's national security."

Clear guidance will be provided by the Government of Canada in the coming months to ensure that the research community can appropriately comply with these new measures once they are implemented.

The Government of Canada, granting agencies, and research community have a **shared responsibility** to:

- <u>Protect the integrity of our research ecosystem</u> and to safeguard it from activities that undermine its principles of openness, transparency, merit, academic freedom, and reciprocity; and,
- Ensure that research security measures (new and existing) <u>do not lead to discrimination</u> against or profiling of any member of the community.

NSERC News

Alliance refresh

Refresh Objectives and Strategic Outcomes

- The Alliance Refresh project is a coordinated effort to drive program improvements by delivering strategic outcomes that are developed to address feedback and add value to Alliance Grants stakeholders
- The following strategic outcomes are goals of the Alliance Refresh project:
 - Removing barriers to collaboration
 - Championing more research partnerships
 - Providing efficient and responsive proposal assessment
 - Strengthening relationships with the research community
 - Ensuring inclusive support for research partnerships

Alliance Refresh

Ensuring Inclusive Research Support



NSERC News - Alliance Refresh

Summary of Alliance Refresh Implementation

- Early 2023: Increased flexibility for administrative errors
- June 23, 2023: Single 2:1 Funding Ratio
- August 21, 2023: Extension with Funds
- Late 2023: Expanded recognition for cost sharing, updated COI guidance, consolidated merit criteria, higher small application threshold, ECR voucher lottery
- Ongoing into 2024: Renaming and website organization
- We will develop a (primarily virtual) communications plan to promote Alliance changes

Optional Extensions to Discovery Grants due to COVID-19

- With funds: extensions offered to all active DG holders (2023/24)
 - 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

NSERC News

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 through the institution 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 paid out of an NSERC grant, and those receiving awards directly from NSERC, are eligible to receive up to 12 months of paid maternity / parental leave.
- The leave supplement will be paid by NSERC.

Discovery Research: NSERC aims to...



Fund research excellence with grants that allow researchers to maintain basic research programs



Simplify the grant application process and reduce the burden.



Develop new ways of communicating the value of investments made in basic research.

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

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.

RGS Program Updates – DG Policy Update

Equity, Diversity and Inclusion (EDI) within Evaluation Criteria

• Excellence of the Researcher

• May include past contributions to the promotion of EDI in research, *if they participated in this way.*

• Merit of the Proposal

• Integration of equity, diversity and inclusion considerations in the research proposal *where relevant*.

• Contributions to the Training of HQP

- Consideration of EDI in future approaches to training HQP is required.
- May include EDI considerations in the past training of HQP, *if they contributed in this way*.

For more information, please consult: <u>NSERC guide on integrating EDI considerations in research</u> **RGS Program Updates – Merit Assessment**

Merit of the Proposal

Equity, diversity and inclusion considerations in the research process

- Integration of equity, diversity and inclusion considerations in the research proposal where relevant.
- For more information, please refer to NSERC's guidance on the integration of <u>Equity, diversity and inclusion</u> <u>considerations at each stage of the research process</u>.



The research process including elements such as research questions, design of the study, methodology and data collection, analysis and interpretation, dissemination of results.

Discovery Development Grants (DDG)

Description:

- No separate application is required offered according to DG results
- Provide resources to established 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:** \$20K/year for 2 years

Objectives:

- To promote a diversified base of high-quality research in small universities
- To foster a stimulating environment for research training in small universities

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 1st)
- 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 on-going Discovery research programs

Description:

- Selection Criteria updated as of 2021 with weighted scoring applied by committee & more feedback provided to applicants
- 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: <u>EnviroSciences-SciencesEnviro@nserc-crsng.gc.ca</u>

DND*/NSERC Discovery Grant Supplements

- Supports unclassified university-based research dedicated to the development of non-weapon 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 Prizes

Revised timelines:

- The call for nominations will launch in August of 2023
 - November 28, 2023 for the Herzberg, Polanyi, Brockhouse and Strickland Prizes
 - December 14, 2023 for the Synergy Prize and McDonald Fellowships

In nominating a person or a team, please consider:

- Including various contributions to research such as transfer of knowledge, training and mentoring of highly qualified personnel, or communication of research to nonspecialist audiences.
- Encouraging your colleagues to nominate someone as there can be more than one nomination per institution.
- Thinking broadly before nominating to ensure diverse candidacies are considered.



Questions?

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