

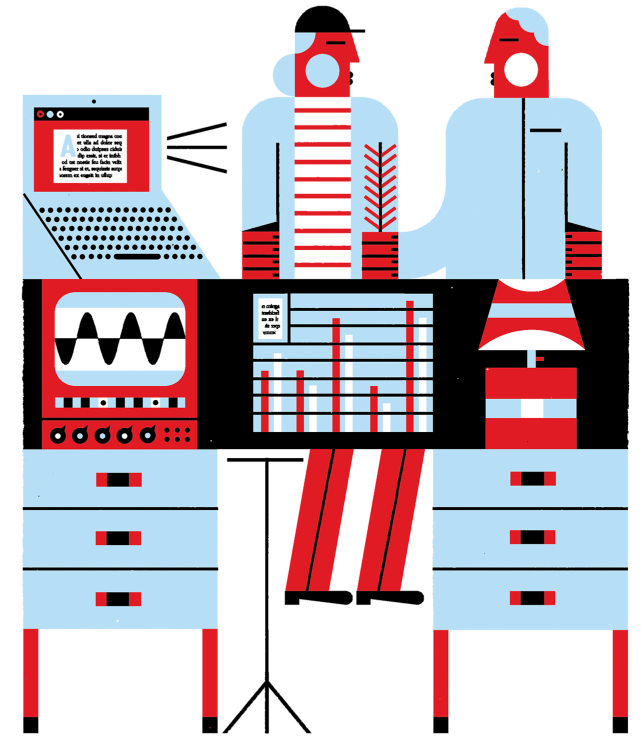


NSERC Presentation 2022

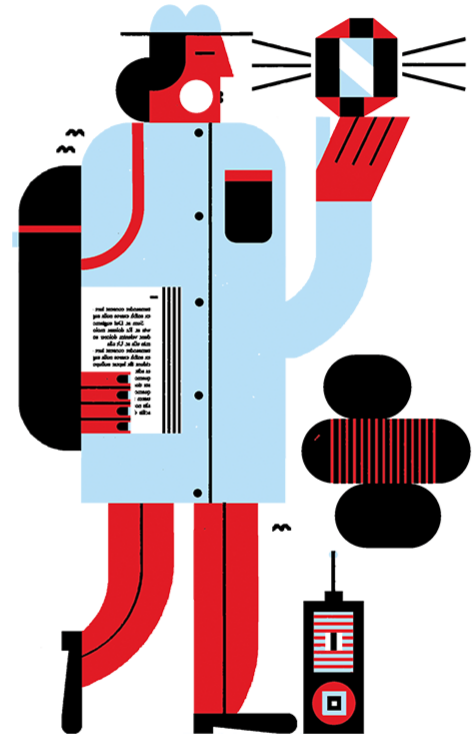
June 2022

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1. NSERC News



NSERC News

NSERC 2030: What We Heard Progress Report

- Released March 14th, 2022
- Key milestone in the development of our next long-term strategic plan
- Report summarizes feedback received from stakeholders through workshops, focus groups and online submissions between November 2021 and January 2022

Next Steps:

- NSERC will develop its strategic plan based on input received from the two rounds of consultations
- The Strategic Plan will be released in Fall 2022



NSERC News

Budget 2022

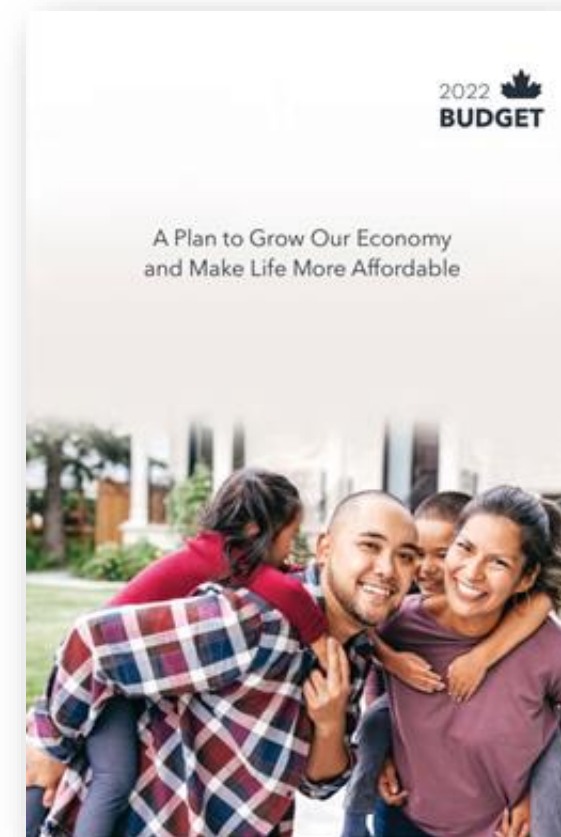
New tri-agency investments to boost innovation, enhance research security, and encourage the next generation of Canadian researchers.

Investments for the Federal Granting Councils:

- **\$40.9 million** over five years and \$9.7 million ongoing for scholarships and fellowships for promising Black student researchers
- **\$100 million** over six years, to support post-secondary research to develop technologies and crop varieties that will allow for net-zero emissions agriculture
- **\$38.3 million** over four years and \$12.7 million ongoing to add new, internationally recruited Canada Excellence Research Chairs in STEM fields (12 to 25 new CERCs). (Starting 2023–24)

Of interest to NSERC:

- **\$125 million** over five years and \$25 million ongoing for the Research Support Fund to build capacity within post-secondary institutions to identify, assess and mitigate potential risks to research security
- **\$34.6 million** over five years and \$8.4 million ongoing to enhance Canada's research protection and to establish a research security centre that will guide research institutions directly



This budget was framed as a roadmap to drive Canada's economic recovery and boost innovation.

NSERC News

Research Excellence Highlights

- [Tri-agency Equity, Diversity and Inclusion \(EDI\) Action Plan](#) to address systemic barriers and increase equity, diversity and inclusion in the postsecondary research ecosystem
- Indigenous strategic plan, [Setting new directions to support Indigenous research and research training in Canada](#)
- [San Francisco Declaration on Research Assessment](#) (DORA) signatory
- Consult our web site and social media for all of NSERC's activities

www.nserc-crsng.gc.ca

 [@nserc_crsng](https://twitter.com/nserc_crsng) / [@crsng_nserc](https://twitter.com/crsng_nserc)

 facebook.com/nserccanada / facebook.com/crsngcanada

NSERC News

Tri-agency Equity, Diversity and Inclusion (EDI) Action Plan

- A 7-year plan to help drive cultural and systemic change in the Canadian research ecosystem
- Two main objectives:
 - Fair access to tri-agency research support
 - Equitable participation in the research system
- Developed under the strategic oversight of the Canada Research Coordinating Committee (CRCC)

https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Action-Plan_Plan-dAction_eng.asp

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](#)



Figure 1. EDI considerations in the research process

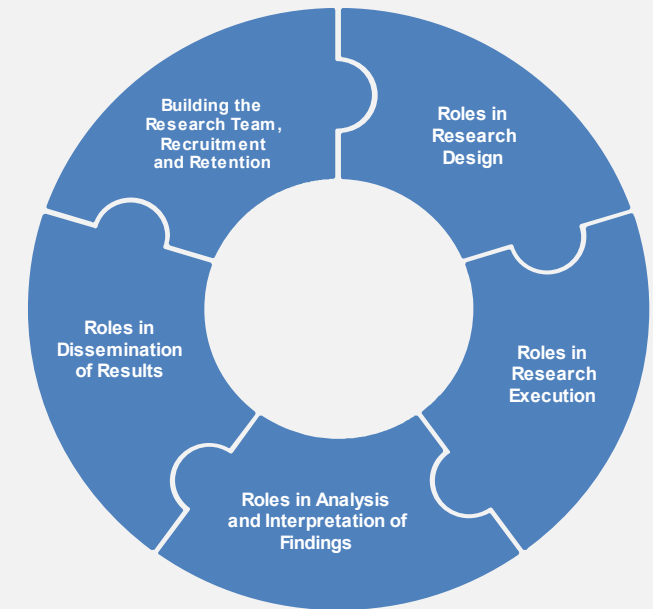


Figure 2. EDI considerations for research teams

Canada Research Coordinating Committee

- Release of the **Collective Response: Canada Research Coordinating Committee Progress Report 2020-21** (February 2022)

Topics at recent meetings:

- Implementation of Budget 2021 National Strategies for Artificial Intelligence, Quantum, and Genomics
- ISED's Science, Technology and Innovation priority setting
- New Frontiers Research Fund
- Indigenous initiatives and activities sponsored by CRCC member organizations
- Framework for supporting major research facilities
- Exploratory talks regarding Canada's associate membership in Horizon Europe

Organizational updates from the heads of:

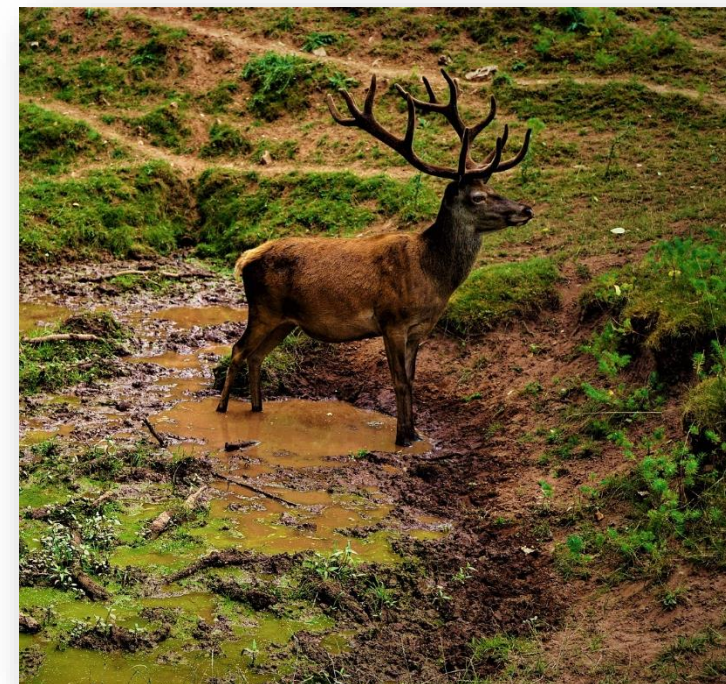
- CIFAR
- Genome Canada
- Mitacs
- Canadian Space Agency
- Digital Research Alliance of Canada



This report outlines the CRCC's priorities and the actions taken by member agencies and departments in fiscal year 2020-21 to mobilize Canadian research for the benefit of all Canadians.

July 2021 CAN BON report now published

- Publication date: March 3, 2022
- This report summarizes findings of a two-stage process to gather information on the potential for creation of a Canadian Biodiversity Observation Network (CAN BON)
- Workshop Partners:
 - Environment and Climate Change Canada
 - Fisheries and Oceans Canada
 - Parks Canada
 - Canadian Space Agency
 - Natural Resources Canada
 - Agriculture and Agri-Food Canada
 - GEO BON Secretariat and NatureServe



virtual workshop brought together over 60 participants that discussed key requirements to implement a CAN BON; how a CAN BON could effectively engage Indigenous people; and priority monitoring gaps that a CAN BON could address

Update on implementation of strategic plan to strengthen Indigenous research capacity

CRCC released its first progress report on the implementation of the interagency strategic plan, *Setting new directions to support Indigenous research and research training in Canada*.

- Provides highlights of recent progress, including the development of new governance structures and advisory bodies to support meaningful and systemic change.
- Three working groups provided a focal point for the advancement of the strategy:
 - the Tri-agency Indigenous Funding Opportunities Working Group
 - a Tri-agency working group focused on addressing administrative barriers to Indigenous community-led research
 - the Reference Group for the Appropriate Review of Indigenous Research



The interagency strategic plan was launched in 2020, following extensive engagement with First Nations, Inuit and Métis communities, collectives and organizations.

NSERC News

Government of Canada invests in talented graduate scholars and postdoctoral researchers

In January 2022, the Government of Canada announced that the three federal research granting agencies are providing \$260 million for the latest cohort of scholarship and fellowship recipients

- More than 5,300 scholarships and fellowships have been awarded for research training under the following programs:
- The Canada Graduate Scholarships (Doctoral program and Master's program)
- The Canada Graduate Scholarships – Michael Smith Foreign Study Supplements
- The NSERC Postgraduate Scholarships – Doctoral
- The NSERC Postdoctoral Fellowships program

In addition:

- Unveiled results of New Frontiers in Research Fund 2020 Transformation competition
- Announced new investment to support new and renewed Canada Research Chairs across the country



A total of 32,800 students and postdoctoral fellows are trained each year by the most talented scientists and engineers in Canada

NSERC News

College Partnership Programs

Applied Research and Technology Partnership grants

- Announced April 5th by Minister Champagne
- **\$46.9 million** over two years for **74 grants**

CCI Mobile Grants

- Simplifies suite of grants CCI grants from 14 streams to five
- Expands range of partner organizations
- Creates more college training opportunities

Tri-agency College and Community Social Innovation Fund (CCSIF)

- Managed by NSERC
- Fosters community innovation by connecting colleges and polytechnics with community organizations



The Applied Research and Technology Partnership grants: a special call from Budget 2021 to support more applied research partnerships through NSERC's CCI program.

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 [Policies and Guidelines on the Assessment of Contributions to Research and Training](#) and the [Guidelines for the Preparation and review of Applications in Engineering and the Applied Sciences](#)

Guidelines on assessment of contributions to research, training and mentoring

Quality indicators include:

- Novelty, creativity, and/or innovation in the methodology and/or application of the research
- Transparency, accessibility of results, and appropriate data stewardship
- Exposure for trainees to non-academic work environments

Impact indicators include:

- Increases to EDI in the research ecosystem, including enhanced engagement and retention of underrepresented groups in the NSE
- Advances to reconciliation and the decolonization of Indigenous research
- Contributions to economic development or to environmental or social innovations, at the local, regional, national, or international level(s)

Other examples available in the [Guidelines](#)

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 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

Tri-agency Self-Identification Questionnaires

Questionnaire: updated summer 2021

- Age
- **Gender** (updated to include more gender options)
- **Sexual orientation** (new question)
- Indigenous Identity
- **Person with a disability** (updated to also ask about type(s) of disability)
- **Visible minorities** (updated to include “white” as a response option)
- **Languages** (new question)

Tri-agency Self-Identification Questionnaires

- Form is mandatory, but for each category there is an option for “I prefer not to answer”
- Applicants are encouraged to self-identify if they feel comfortable doing so
- This information is used to inform NSERC policies
- Self-identification data **is never shared with reviewers**

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.

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.
https://www.science.gc.ca/eic/site/063.nsf/eng/h_98257.html
- The granting agencies are also reviewing their security policies and procedures, following national and international best practices.

Research Security



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

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

NSERC News

Updates on the Tri-Agency Grants Management Solution

- The three federal granting agencies are collaborating on a project to modernize their grants management solutions (i.e., TGMS)
- One aspect of the TGMS is that this solution will replace the CCV
- TGMS team has conducted workshops with the research community (applicants, reviewers and research administrators) to better understand why the CV management experience is a problem, and to identify what is causing the problem
- With the upcoming implementation of a new CV management tool (in TGMS), the agencies have the opportunity to address these problems and optimize the experience for users
- Work is underway to assess the feasibility of harmonizing CV templates and streamlining the information to reduce the administrative burden on the research community, provide the necessary information reviewers need, while fostering a CV that is flexible

Secretariat on Responsible Conduct of Research Highlights 2021-2022

- Held two public consultations
 1. Research ethics guidance documents (review of multi-jurisdictional research; broad consent for the storage and use of data and human biological materials; exemptions for research involving human cell lines; and research involving totipotent stem cells)
 2. Revisions to Tri-Agency Framework: Responsible Conduct of Research (RCR Framework)
 - Published RCR Framework (2021) in December 2021
 - Launched new Course of Research Ethics (CORE-2022) in January 2022

Tri-Agency Research Data Management Policy

Launched March 2021



Institutional Strategies

Each post-secondary institution and research hospital eligible to administer CIHR, NSERC or SSHRC funds is required to create an institutional RDM strategy and notify the agencies when it has been completed. **Deadline March 1, 2023**



Data Management Plans (DMPs)

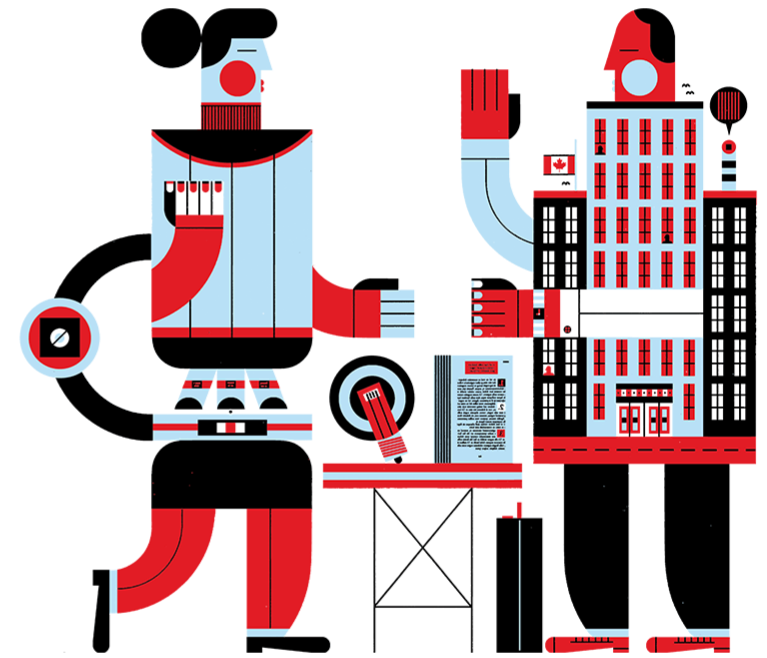
For certain funding opportunities, the agencies will require DMPs to be submitted to the appropriate agency at time of application, as outlined in the call for proposals.



Data deposit

Grant recipients are 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.

2. Research Grants and Scholarships (RGS) Programs



RGS Program Updates

Tri-Agency Interdisciplinary Peer Review and NSERC's Discovery Horizons

Launched in 2021 to adjudicate Tri-Agency interdisciplinary applications

- First year of the pilot saw 22 members review 85 applications across 3 programs
 - NSERC's Discovery Horizons
 - 842 LOIs received, 55 full applications reviewed and 10 grants awarded
 - SSHRC's Insight Grants
 - CIHR's Project Grant programs

TAIPR and NSERC's Discovery Horizons have been **extended for an additional year**

- Tri-Agency deadlines
 - **NSERC Discovery Horizons: Letter of Intent, June 16 2022**
 - CIHR Project: Registration, early/mid August 2022
 - SSHRC Insight: Full Applications, 1 October 2022

RGS Program Updates

Discovery Horizons 2023

Changes for 2023

- Application package including move to narrative style CV
- Grant amounts to be commensurate to the size of the research team

Reminders for applicants:

- Primary objective to advance knowledge in the natural sciences or engineering
 - If primary objective is outside of the NSE, applicants must apply through another agency
- Must integrate or transcend disciplines across tri-agency (not just within the NSE)
 - Must not fit within the Discovery Grants conference model
 - Interdisciplinarity must be integrated throughout the application

Discovery Horizons LOI Deadline June 16, 2022

RGS Program 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 following the successful delivery of the 2021 and 2022 competitions. Moreover, NSERC will be better positioned to provide more concrete direction on competition planning for future years after staff have integrated into our new NSERC headquarters (later this year).

NSERC is committed to maintaining a peer review process of the highest quality, including fairness and consistency between evaluating committees and across competition years.

Contact: resgrant@nserc-crsng.gc.ca

RGS Program Updates

Discovery Grant Application Delays in Research

Applicant delays are recorded in the CCV, under the Employment section

- For examples see Section 4.4.4.4 of the [Peer Review Manual](#)

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 and training (e.g., dissemination of results, ability to recruit or train HQP)

RGS Program Updates

Discovery Grant Application: Attachment for eligible leaves or delays

Applicants who report an eligible leave of absence or delay are entitled to list additional contributions beyond the last six years, for a period equivalent to the duration of the leave

Contributions prior to the last six years can be recorded in:

- 2-page attachment
- *Past contributions to the training of HQP section*
- *Most significant contributions to research section*
- *Samples of research contributions section*

Eligible leaves of absence include delays due to COVID-19

RGS Program Updates

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

Canada Research Coordinating Committee (CRCC) Progress Report Highlights on ECRs

Progress on priority on Supporting early career researchers

- Updated Tri-agency ECR Action Plan
- Updated Tri-agency ECR definition to better support ECRs and meet program needs
- Shared performance indicators for ECR initiatives
- Balanced funding for ECRs:
- Increased parental benefits
- 250 Tier 2 Canada Research Chairs allocated to emerging researchers

2019-20 Progress Report: Mobilizing Canadian Research

RGS Program Updates

RTI Program

Application deadline date is **October 25**; Research Portal opens in August

Current change:

- Applicants and co-applicants awarded in April will not be eligible to apply in October for the next year's RTI competition

Recent changes:

- Changes to selection criteria (names have been shortened, and 2nd criterion no longer assesses the excellence of the researcher)
- Clarified instructions in Budget Justification section and added a template budget table applicants are to use to show tax and currency exchange rates and totals
- Confirmation of Financial Contribution documents are no longer required and should not be submitted

RGS Program Updates

Upcoming Deadlines for 2022

Grant Application Deadlines

- Discovery Grants Appeals Process – **May 31st**
- NOI Discovery Grants – **August 2nd**
- Subatomic Physics Major Resources Support Program – **August 2nd**
- Subatomic Physics – RTI (Category 2 & 3) – **August 2nd**
- Ship Time Program - **September 1st**
- Subatomic Physics Project (Applications requesting \$500,000 or more per year)
October 1st
- Research Tools & Instruments (and Subatomic Physics Category 1) - **October 25th**
- Northern Research Supplements Program - **November 1st**
- Full Application Discovery Grants - **November 1st**

RGS Program Updates

Upcoming Deadlines for 2022

Others application deadlines

- Discovery Horizons LOI – **June 16th**
- Undergraduate Student Research Award (USRA) – **Set by institution**
- CREATE Letter of Intent – **May 1st**
- Arthur B. McDonald Fellowships - **June 7th**
- Canada Graduate and Postgraduate Scholarships (Doctoral) – **October 17th**
- Canada Graduate Scholarships (Masters) – **December 1st**

RGS Program Updates

Open Access

Tri-Agency Open Access Policy on Publications

Launched February 2015: http://www.science.gc.ca/eic/site/063.nsf/eng/h_F6765465.html

Policy Requirements

- Grant recipients are required to ensure that any peer-reviewed journal publications arising from Agency-supported research are **freely accessible within 12 months of publication**
- **Applies to all grants awarded May 1, 2015 and onward**
- **How to comply:**
 - **Deposit final, peer-reviewed manuscript into an institutional or disciplinary repository that will make the manuscript freely accessible within 12 months; and/or**
 - **Publish in a journal that offers immediate open access or that offers open access on its website within 12 months**

Frequently Asked Questions: http://www.science.gc.ca/eic/site/063.nsf/eng/h_42701EA6.html

Toolbox: http://www.science.gc.ca/eic/site/063.nsf/eng/h_ECEFDFAA.html

Contact: openaccess@nserc-crsng.gc.ca

RGS Program Updates

Special Response Fund for Trainees (Ukraine)

- Enables grant-holders to retain research trainees who were expected to return to Ukraine in 2022

The fund will allow for support of up to:

- \$20,000 for the master's level
- \$25,000 for the doctoral level
- \$45,000 for the post-doctoral level.
- The supplement for salaries and stipends may extend for up to one year
- Applications will be accepted on a continuous intake basis until December 22nd, 2022



The presidents of Canada's three federal research funding agencies issued a statement on March 11th expressing our deep solidarity with the Ukrainian people in the context of Vladimir Putin's unjustifiable invasion of Ukraine.

RGS Program Updates

New investments in support of National Quantum Strategy

\$137.9 million over seven years through NSERC CREATE and Alliance grants

Accepting applications as of March 15th, 2022:

- **CREATE (\$5.4 million)** to develop, attract and retain top quantum talent
 - NSERC will fund at least three CREATE grants in quantum science and tech

Accepting applications as of April 1st, 2022:

- **Alliance International Quantum grants (\$29.7 million):** Support for researchers in Canada to work with international researchers to establish collaborations and projects

Accepting applications in Spring 2022:

- **Alliance Quantum grants (\$62.4 million):** Partnerships to reinforce, coordinate and scale up Canada's domestic research capabilities in quantum science and tech.
- **Alliance Consortia Quantum grants (\$40.4 million):** Large-scale research collaborations and enable improved synergy across Canada's quantum research and innovation centres and stakeholders



These new investments build on nearly \$384 million in funding that NSERC has provided for quantum research at over the last 10 years.

RGS Program Updates

MOU between NSERC and the French National Centre for Scientific Research (CNRS)

- Signed on April 21st, 2022 at the French Embassy in Ottawa
- CNRS opened a full-time Canada Office in Ottawa in 2022
- This partnership will also foster the shared commitment by NSERC and CNRS to ensure that EDI principles are considered in all research-related activities



The MoU was signed by Alejandro Adem, President of NSERC, and Antoine Petit, Chairman and Chief Executive Officer of CNRS, at the French Embassy in Ottawa, in the presence of the Chargé d'affaire Frank Marchetti, and other distinguished guests.

RGS Program Updates

NSERC and US National Science Foundation

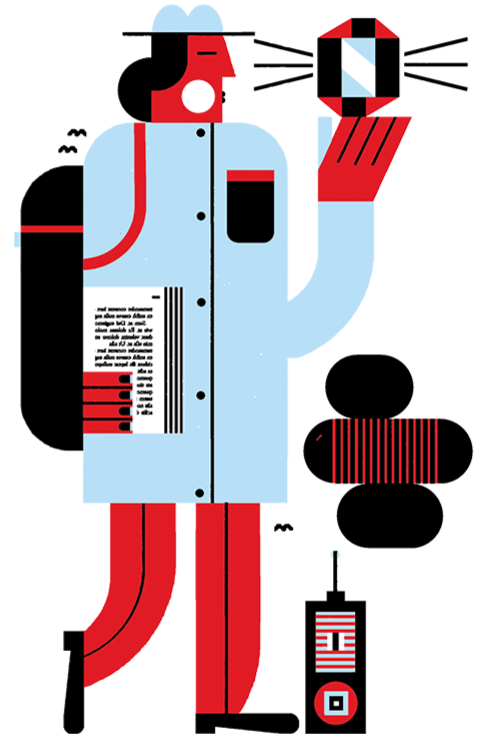
In December 2021, NSERC and the NSF launched their first collaborative research opportunity since the announcement of the MOU, focusing on discoveries and innovations in the areas of quantum science and artificial intelligence.

- Flexible, streamlined application process
- U.S. and Canadian research teams submit **single** collaborative proposal for review at the NSF (lead agency)
 - Canadian academic researchers receive funding from NSERC
 - U.S. researchers receive funding from NSF



A photo commemorating the virtual signing of the original Memorandum of Understanding between NSERC and the US NSF from June 15th, 2021.

3. COVID-19 Response



COVID-19 Response

Guidelines: delays due to COVID-19

- 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

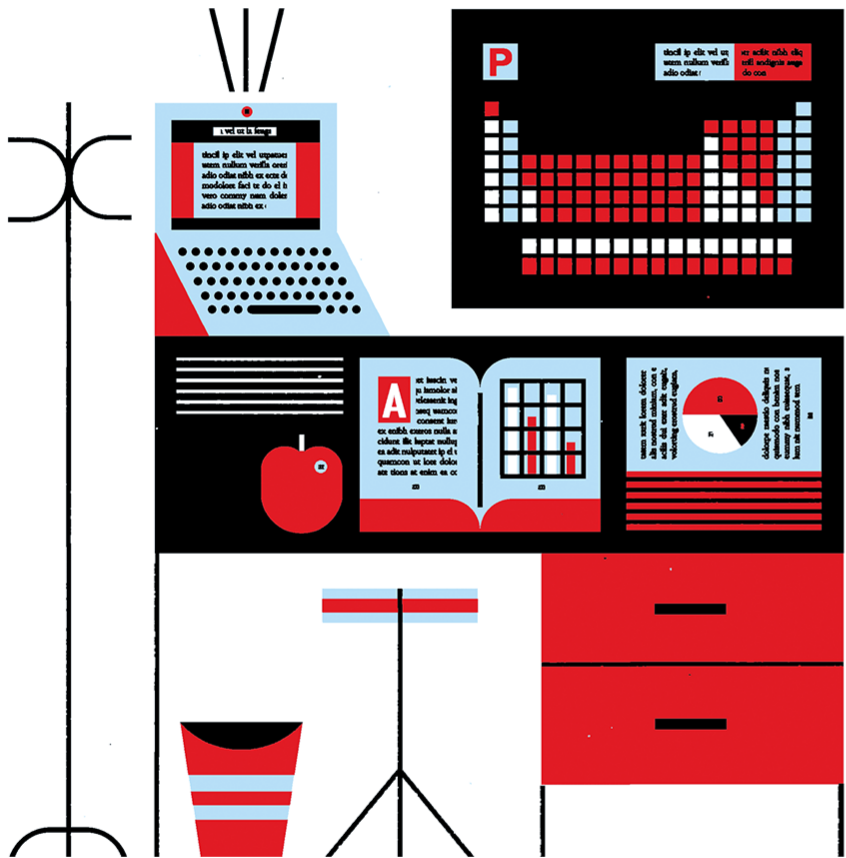
COVID-19 Response

Optional Extensions to Discovery Grants due to COVID-19

- **With funds: extensions offered to all 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



Questions?

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