

People. Discovery. Innovation.
Les gens. La découverte. L'innovation.



Natural Sciences and Engineering
Research Council of Canada

Conseil de recherches en sciences
naturelles et en génie du Canada

Canada

Connect with NSERC 2020

June 2020



Natural Sciences and Engineering
Research Council of Canada

Conseil de recherches en sciences
naturelles et en génie du Canada

Canada

Table of Contents

1. NSERC News

2. Research Grants and Scholarships
Program Updates

3. COVID-19 Response



Connect with NSERC 2020

NSERC News



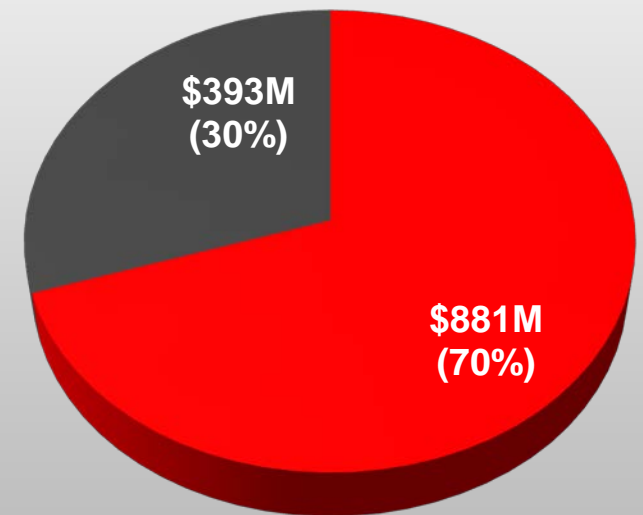
NSERC News

Overview

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

- Supports nearly **37,700** students and postdoctoral fellows
- Funds more than **12,400** researchers for their research programs
- Supports university and college-industry research partnerships with nearly **3,800** Canadian companies
- Business invests **\$269** million in university and college researchers

NSERC Expenditures 2019-2020
Total: \$1.27 billion



■ Discovery (includes Scholarships & Fellowships)

■ Innovation

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

| Agency | Programs | Over five years | Ongoing/year |
|------------------|---|-----------------|----------------|
| NSERC/CIHR/SSHRC | Canada Graduate Scholarship (CGS) Master's (CGS-M) and Doctoral (CGS-D) | \$114 million | \$26.5 million |
| NSERC/CIHR/SSHRC | Paid parental leave for student researchers | \$37.4 million | \$8.6 million |

NSERC News

NSERC Leadership

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



Equity, diversity, and inclusion (EDI) in Canada

NSERC, on behalf of the three federal granting agencies, administers the new Dimensions program, which aims to increase EDI and help drive deeper cultural change within the research ecosystem

Dimensions includes, but is not limited to, five underrepresented groups across all disciplines – women, Indigenous Peoples, persons with disabilities, members of visible minority/racialized groups, and members of LGBTQ2+ communities

NSERC News Dimensions



17 colleges and universities from coast to coast are participating in a **pilot program** to be recognized for their EDI work

1-in-3 Canadian post-secondary institutions have endorsed the **Dimensions charter** so far



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

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

NSERC News

New Frontiers in Research Fund (NFRF)

NFRF funds research that is international, interdisciplinary, fast-breaking and high risk through 3 streams

- **Exploration** generates opportunities for Canada to build strength in high-risk, high-reward, and interdisciplinary research
 - Annual competition, next launch expected summer 2020
- **Transformation** provides large-scale support for Canada to build strength and leadership in interdisciplinary and transformative research
 - First competition launched Dec 2019; NOI deadline Feb 2020
 - Competitions to be launched approximately every 2 years
- **International** enhances opportunities for Canadian researchers to participate in research with international partners through 2 mechanisms:
 - Joint funding calls with international agencies on topics of international relevance (in development)
 - Dedicated funds to support participation of Canadian researchers within international teams in projects seeking funding from major global platforms (NFRF Horizon Global Platforms launched Jan 2020)

NSERC News

Networks of Centres of Excellence Update

- Final cohort of NCE networks funded until March 2024
 - other cohorts end earlier
 - names and details at www.nce-rce.gc.ca
- Implication for research community
 - researchers will see opportunities to respond to calls for proposals from networks over next couple of years
 - annual reporting requirements will continue until 2024



NSERC News

Alliance grants- Overview

Launched in May 2019: replaces prior NSERC University partnerships grants

Objective: To support research projects in **natural sciences and engineering** led by strong, complementary, collaborative teams that will generate new knowledge and accelerate the application of research results to create benefits for Canada

Broader types of partner organizations: private, public and not-for-profit sector;

- *must be recognized for cost-sharing and provide cash and in-kind contribution*
- *must be involved in the project and contribute to its success*
- *must have the ability to exploit the research results and to achieve the desired outcomes*

Cost sharing options: adapted to the type and size of the partner organizations

No deadline for application

NSERC News

Alliance grants- Option 1

- Funding: \$20,000 to \$1 million per year
- Duration: 1 to 5 years
- Cost-sharing: 50% (1:1) to 66.7% (2:1) of the direct cost of research from NSERC

- No limit in the number of applications per applicant

- Merit assessment:
 - internal for grants up to \$30,000 per year from NSERC
 - peer review for larger grants merit indicator
 - funding decision based on overall merit
 - decision time: depends on the size and evaluation mode

NSERC News

Alliance grants- Option 2

- Limit in a 12 months period:
 - 1 application per PI or co-PI
 - 2 applications per partner organization
- Funding: over \$30,000 to \$100,000 per year
- Duration: 1 to 5 years
- Cost-sharing: 90% to 100% of the direct cost of research from NSERC-
depends on the type of partner: 10% requested when partners include private sector.
- 3 specific characteristics:
 - societal impact,
 - making connections
 - broad outcomes
- Evaluation:
 - Selection committee: validates the alignment with the characteristics
 - If successful: peer review and funding decision as for Option 1



**During the
launch period**

**Target an important and unmet
societal need
No barrier for end users
Increased level of public funds is
justified**

NSERC News

Alliance- Resources

- [Alliance grants website](#)
- [Alliance research topics](#)
- [Role of partner organizations](#)
- [Funding and cost-sharing](#)
- [Instructions for completing an Alliance grant application](#)
- [Alliance proposal template](#)
- [Review mechanisms and evaluation criteria](#)
- [Merit indicators](#)
- [Alliance resources](#)
- [Alliance FAQ](#)
- [Use of grant funds](#)

Contact: alliance@nserc-crsng.gc.ca

NSERC News

Plastics Science for a Cleaner Future

- Collaboration with ECCC to support research that will increase scientific knowledge to achieve Canada's zero plastic waste targets and to inform the advancement of policy and regulatory measures.
- Multidisciplinary and collaborative projects between 1-4 years and up to \$1M.
- Projects must address specific research objectives.
- Letters of Intent due **July 8, 2020**.
- Full proposals (by invitation) due October 1, 2020.
- Website: https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Plastics-Plastiques_eng.asp
- Contact: RP-Initiatives-PR@nserc-crsng.gc.ca

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

https://www.nserc-crsng.gc.ca/NSERC-CRSNG/policies-politiques/DORA-DORA_eng.asp

Connect with NSERC 2020

Research Grants and Scholarships (RGS) Program Updates



Research Grants and Scholarships - Updates

Support for Early Career Researchers

- 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) will now be credited as twice the amount of time taken (*New!*)
- 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

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!

Research Grants and Scholarships - Updates

RTI Program Update

- Application deadline date is **October 25**;
Research Portal opens in August
- Still 3 weighted RTI selection criteria
- 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

Research Grants and Scholarships - Updates

Human Frontier Science Program

Objective:

The Human Frontier Science Program (HFSP) promotes international collaboration in basic research focused on the elucidation of the sophisticated and complex mechanisms of living organisms

Description:

- Research Grants (Submission deadline was March 2020)
 - Program Grants
 - Young Investigators
- Postdoctoral Fellowships (Submission deadline August 27th, 2020)
 - Long-Term Fellowships
 - Cross-Disciplinary Fellowships

For more information:

<https://www.hfsp.org/> or
[https://cihr-
irsc.gc.ca/e/51826.html](https://cihr-irsc.gc.ca/e/51826.html)



Research Grants and Scholarships - Updates

Science Communication Skills Grant (pilot)

- Supports organizations providing science communication skills training to students, fellows, and faculty in science, technology, engineering and math (STEM) from Canadian postsecondary institutions
- Training will educate students and researchers in STEM on how to effectively communicate science to the public.
- 1 year, up to \$20,000, organizations can hold one grant only during pilot phase

Contact: promoscience@nserc-crsng.gc.ca

Research Grants and Scholarships - Updates

Recent changes to CREATE program

- **Start Date:** Choice of April 1 or September 1
- **Eligible expenses:** Program coordinator salary for duration of the grant (formerly only first 2 years)
- **DFG grant duration** (international stream): can match the duration (up to 9 years) of the complementary German International Research Training Group (IRTG) grant. PI can travel to Germany once a year
- **Mentorship and EDI provisions:** Included under composition of proposed team of researchers, program committee, and also in trainee recruitment, selection and inclusion

Research Grants and Scholarships - 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 underrepresented or disadvantaged groups in STEM
- Outreach activity must be organized independently by the applicant
- NSERC pays \$1,000 in support of event costs

Research Grants and Scholarships - Updates NSERC Indigenous Student Ambassadors (NISA (formerly AANSE))

Do you have Indigenous students or PDFs interested in promoting NSE in an Indigenous community or school?

- NISA pays travel costs up to \$5,000
- NISA holder participates in science promotion events or shares their NSE research & education experience
- **Eligibility:** Indigenous students registered full-time in NSE degree or PDF in NSE
- **No deadlines:** apply 2 months before visit

Contact: ambassadors@nserc-crsng.gc.ca

Research Grants and Scholarships - Updates

Steacie Prize Renewal - Summary of changes

2021 will be the first year with the new rules:

- Eligibility: Up to 10 years post first university appointment
- Self-nomination: Nomination letter written by nominee
- Institution certification includes EDI provisions
- Evaluation criteria changed

Research Grants and Scholarships - Updates Equity, Diversity and Inclusion (EDI) Institutional Capacity-Building Grant

Created in 2018 - \$10 million over 5 years

Objectives

- To foster EDI in the Canadian post-secondary research enterprise
- Funds will allow institutions to undertake activities to advance their own EDI objectives

| | | | |
|------------------------------|--|---------------------------|--------------------------|
| Value | Up to \$200,000 per year, for up to two years, non-renewable | | |
| Eligible institutions | <ul style="list-style-type: none"> • Canadian universities with Canada Research Chairs (CRC) program quota of 1 to 10 • Canadian colleges that received between a total of \$100K and \$4M in tri-agency funding | | |
| Selection Criteria | Motivation | Merit of Proposed Project | Institutional Commitment |
| Evaluation | Reviewed by a Committee constituted of researchers, administrators with expertise in EDI. | | |

Research Grants and Scholarships - Updates

Canada Graduate Scholarships – Doctoral (CGS D)

| | | |
|-----------------------------|--|--|
| Value | 35,000 \$ per year for three years | |
| Eligibility Criteria | <ul style="list-style-type: none"> • No more than 24 full-time months completed in current PhD program • Never held a doctoral scholarship or postdoctoral fellowship from one of the agencies • Submit only one application in a given academic year | |
| Selection Criteria | Research ability and potential | Relevant experience and achievements obtained within and beyond academia |
| Evaluation | Reviewed by one of the 13 selection committee constituted by researchers with expertise in the proposed research | |

Ongoing measures to further harmonize between NSERC, SSHRC, and CIHR.

New elements for Competition 2021:

- Addition of a diversity module for research design
- Expanded definition for allowable deferments

Contact: schol@nserc-crsng.gc.ca

Research Grants and Scholarships - Updates

Undergraduate Student Research Award (USRA)

USRA Modernization - Four changes as of Summer 2020

- Supervisors no longer need to hold an active NSERC/Tri-Agency grant
 - Supervisors must be approved by the university
 - Research projects must still respect NSERC's mandate
 - New evaluation criteria: quality of the training to be received
- Universities must have a CRC (NSERC or special) to participate
- Travel allowance is discontinued
- New formula for allocating awards based on CRC allocations

Contact: usra-brpc@nserc-crsng.gc.ca

Use NSERC webpages as the official source of program information.

Research Grants and Scholarships - Updates Chairs for Women in Science and Engineering (CWSE)

- To increase the participation of women in science and engineering, and to provide role models for women active in, and considering, careers in these fields
- 1 Chair for each region: Atlantic, Quebec, Ontario, Prairies, BC/Yukon
- Chairs are approved for a five-year term and are renewable for an additional term of three to five years
- New Prairies and Ontario Chairs to be announced in 2020
- A new competition will be launched this year for the British Columbia / Yukon region

Contact: cwse-cfsg@nserc-crsng.gc.ca

Research Grants and Scholarships - Updates

Upcoming Deadlines for 2020

Grant Application Deadlines

- Discovery Grants Appeals Process – June 30th (Updated)
- NOI Discovery Grants - August 4th
- Subatomic Physics Major Resources Support Program - August 4th
- Subatomic Physics – RTI (Category 2 & 3) - August 4th
- 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 2nd
- Full Application Discovery Grants - November 2nd

Research Grants and Scholarships - Updates

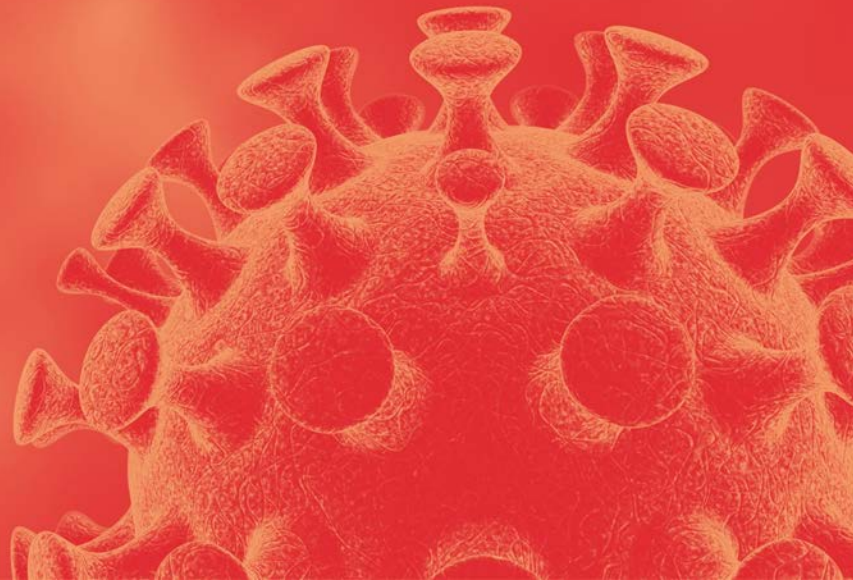
Upcoming Deadlines for 2020

Others application deadlines

- Undergraduate Student Research Award (USRA) – accepting past May 1st (Updated)
- CREATE Letter of Intent – June 1st (Updated)
- Canada-UK projects on quantum technologies (QT) – June 8th (NEW)
- E.W.R. Steacie Memorial Fellowships - July 7th (Updated)
- Canada Graduate and Postgraduate Scholarships (Doctoral) – October 17th
- Canada Graduate Scholarships (Masters) – December 1st

Connect with NSERC 2020

Covid-19 Response



COVID-19 Response Program Updates

Covid-19



- NSERC continues to monitor the impact of COVID-19 and make adjustments to its operations as necessary, including program reporting and application deadlines
- See website for regular updates: https://www.nserc-crsng.gc.ca/Media-Media/ProgramNewsDetails-NouvellesDesProgrammesDetails_eng.asp?ID=1139

COVID-19 Response Program Updates

Covid-19



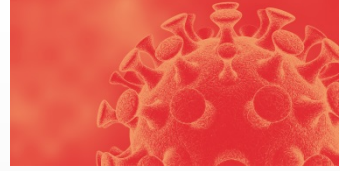
Discovery Grants one-year extension with funds

- 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
- **FAQ:** https://www.nserc-crsng.gc.ca/Professors-Professeurs/FAQ-FAQ/DG-SD_eng.asp
- **Contact:** resgrant@nserc-crsng.gc.ca

COVID-19 Response

Program Updates

Covid-19



NSERC / SSHRC grants one-year extension in time

- Academic institutions can immediately approve extension 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

COVID-19 Response Program Updates

Covid-19

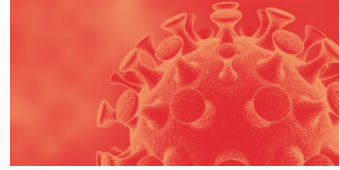


Scholarships & Fellowships COVID response

- **USRA program**, in the event universities remain closed in summer: NSERC will honour full value of award (\$4,500). University must contribute a minimum of 25% and supervisors are encouraged to contribute the agreed-upon top-up. Work terms will not have to be a minimum of 12 weeks. NSERC encourages remote work
- **Master's, doctoral and postdoctoral** training award recipients may defer start date or request unpaid interruption of up to four months
- If awardees can only devote **part-time hours** to their research due to COVID-19: they may continue to hold their awards at the full amount, amount will not be prorated, and end date will remain unchanged
- **Michael Smith Foreign Study Supplement** holders can travel up to a year after being awarded and do not need an active CGS at travel
- **Contact:** schol@nserc-crsng.gc.ca

COVID-19 Response Program Updates

Covid-19



Federal support for students and new graduates

- \$291.6 million in federal funding to the federal granting councils to extend expiring federal graduate research scholarships and postdoctoral fellowships, and supplement existing federal research grants, to support students and post-doctoral fellows

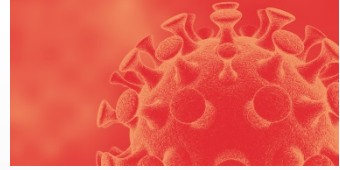
supplements@nserc-crsng.gc.ca

https://www.nserc-crsng.gc.ca/Media-Media/NewsDetail-DetailNouvelles_eng.asp?ID=1160

<https://pm.gc.ca/en/news/news-releases/2020/04/22/support-students-and-new-grads-affected-covid-19>

COVID-19 Response Program Updates

Covid-19



Direct Support (Announced May 29, 2020)

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

Indirect Support (Announced June 4, 2020)

- Additional funding will be provided to research grant holders to continue supporting trainee and research support personnel
- The value of the supplement will be commensurate with the average level of support provided to trainees and research support personnel over a three-month period.
- Grant and award holders will be contacted in the coming weeks and funding will be provided before September 30

COVID-19 Response

Program Updates

Covid-19

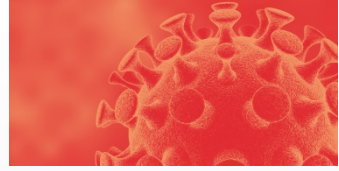


Federal support for research staff: Canada Research Continuity Emergency Fund (CRCEF)

- **\$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)
- <https://www.sshrc-crsh.gc.ca/funding-financement/crcef-fucrc/index-eng.aspx>

COVID-19 Response Program Updates

Covid-19



Alliance COVID-19 grants:

- Application deadline was June 1

https://www.nserc-crsng.gc.ca/Innovate-Innover/COVID-19/index_eng.asp

CCIP Applied Research rapid response:

- Application deadline was June 1

https://www.nserc-crsng.gc.ca/Innovate-Innover/CCI-COVID_eng.asp

Canadian COVID-2019 rapid research funding opportunity:

- Application deadline was Feb 10

<https://cihr-irsc.gc.ca/e/51908.html>

Over to You...

- Questions?
- Comments?
- Advice?

resgrant@nserc-crsng.gc.ca

