# 2020–21 Departmental Results Report

# **Natural Sciences and Engineering Research Council of Canada**

The Honourable François-Philippe Champagne, P.C., M.P.

Minister of Innovation, Science and Industry

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### From the Minister

It is our pleasure to present the 2020–21 Departmental Results Report for the Natural Sciences and Engineering Research Council of Canada (NSERC).

In a year that was characterized by uncertainty and rapidly shifting priorities as a result of the global COVID-19 pandemic, Innovation, Science and Economic Development Canada (ISED) and its Portfolio partners remained committed in their continued efforts to meet the evolving needs of Canadians and the Canadian economy. The ISED and Portfolio Departmental Results Reports describe a number of immediate and remarkable contributions over the past year, including those that were part of Canada's COVID-19 Economic Response Plan.

NSERC, in close collaboration with its funding agency counterparts, has made great strides in responding to the COVID-19 pandemic and in strengthening Canada's research and innovation ecosystem through investments in discovery research, research talent



The Honourable François-Philippe Champagne Minister of Innovation, Science and Industry

development and research partnerships. These investments are based on the principles of research excellence, equity, diversity and inclusion for the social and economic wellbeing of Canadians. These investments will help provide the necessary knowledge base and expertise in supporting the response to and the recovery from the most significant challenges of our generation.

Through all these initiatives and more, we continued to deliver on our commitment to foster a dynamic and growing economy that creates jobs, opportunities and a better quality of life for all Canadians, including those from diverse backgrounds, such as women, Indigenous peoples, racialized Canadians, persons with disabilities and LGBTQ+ groups.

We invite you to read this report to learn more about how NSERC, like ISED and other Portfolio partners are building a strong culture of innovation to position Canada as a leader in the global economy.

#### From the President

It is my pleasure to present NSERC's 2020-21 Departmental Results Report.

Since 1978, NSERC has played a critically important role in the evolution of natural sciences and engineering research in Canada. Thanks to NSERC's support, scientists and engineers across Canada are engaged in cutting-edge research and innovation that produce important benefits for all Canadians. NSERC's programs benefit thousands of students and postdoctoral fellows across the country, and provide the stable, long-term support that deep, multi-year research requires to tackle complex problems. NSERC also supports creative public outreach activities, explaining and promoting the value of science and engineering to our citizens, especially to young people.



**Dr. Alejandro Adem**President

NSERC has worked to address the differential impacts of the COVID-19 pandemic on the extramural research community by providing crucial support throughout the pandemic, and has also played a key role in mobilizing mathematical sciences and public health to tackle pandemic challenges.

NSERC's Departmental Results Report demonstrates delivery on our objectives and intended results for making Canadian natural sciences and engineering research internationally competitive, developing a pool of highly skilled people, and ensuring that the results of the research we fund is used for the benefit of all Canadians.

In 2020-21, NSERC worked in collaboration with our partners, the Social Sciences and Humanities Research Council (SSHRC), the Canadian Institutes of Health Research (CIHR), the Canada Foundation for Innovation (CFI) and other agencies to provide equitable and inclusive participation in the research system; to support early career researchers and to strengthen Indigenous research capacity in Canada through our Discovery and Research Partnership Programs and policies.

We continue to contribute to research training and talent development in Canada through our scholarships and programs such as Collaborative Research and Training Experience (CREATE) and PromoScience. NSERC continues to advance research partnerships through the now fully implemented Alliance Grants, supporting projects led by strong, complementary, collaborative teams.

## Results at a glance

	Who was involved? (2020-21 Actual full-time equivalents [FTEs])
1,487,893,558	496

In 2020-21, NSERC supported over 12,000 researchers including scientists and engineers and over 33,000 trainees at post-secondary institutions across Canada through its funding opportunities under the Discovery Research Program as well as the Research Training and Talent Development Program and the Research Partnerships Program. NSERC supported researchers represent 75% of all Natural Science and Engineering (NSE) researchers in Canada.

In 2020-21, NSERC created a new advisory committee to Council, the Committee on Equity Diversity and Inclusion (EDI), to provide advice on matters pertaining to EDI in NSERC program design, delivery and policies.

#### **Discovery Research**

- NSERC continued to provide targeted investments in Early Career Researchers (ECCs) through the Discovery Launch Supplements and the execution of the Tri-agency ECR Action Plan. In the 2021 Discovery Grants competition, 490 supplements valued at \$12,500 each, provided timely resources to support ECRs as they establish their research programs and hire students in areas ranging from environmental sciences and agriculture to information and communications technologies.
- NSERC expanded eligibility for the Discovery Development Grants (DDG) program to allow researchers to hold up to two DDG awards throughout their career. In 2020-21, \$960,000 was provided to 64 recipients.

#### **Research Training and Talent Development**

- Budget 2019 increased direct support to students by awarding additional scholarships for both master's and doctoral-level scholarships through the Canada Graduate Scholarship Program.
- The Science Communication Skills grant (pilot) was launched to increase the reach of the PromoScience program by allowing non-profit organizations, postsecondary institutions and non-federal museums and science centres to offer science communication skills to students and professors.
- In 2020-21, 94 Collaborative Research and Training Experience (CREATE) awardees received \$25 million. Over 80% of CREATE initiatives offered trainees the opportunity to gain experience in enriched and varied research environments beyond their home institution, including 65% of initiatives that offered internships in industrial, government, non-profit or other settings.
- In December 2020, NSERC signed a memorandum of understanding with Inuit Tapiriit Kanatami (ITK) to contribute to the advancement of the National Inuit Strategy on Research.

#### **Research Partnerships**

- The Alliance program is now fully operational. In 2020-21, 962 applications were received, and 452 awards were granted for a total of \$112.9 million.
- In 2020-21, the College and Community Innovation (CCI) Program continued undergoing an evolution to simplify, streamline and address the changing dynamics of applied research in colleges and communities across Canada. This evolution will better reflect the program's tri-council nature by broadening the program's scope to include social and health innovation.

#### **COVID-19 Impact**

- Various calls and competitions were delayed or modified due to the COVID-19
  pandemic; including Discovery Frontiers, Discovery Institutes Support, Collaborative
  Health Research Projects, Science Odyssey, Synergy Awards for Innovation and Healthy
  Cities Research Training Platform.
- In support of students and new graduates affected by the COVID-19 pandemic, \$291.6 million in additional tri-council funding for trainees was made available in 2020-21 to extend expiring scholarships and postdoctoral fellowships and supplement existing awards, to support students and postdoctoral fellows. The tri-agencies supported nearly 3,000 scholarship and fellowship recipients with COVID-19 extensions and additional funding was provided to 16,000 grants to extend student salaries.
- Two accelerated COVID-19 special calls were launched: Alliance COVID-19 grants, (769 applications received; 317 awards at a total value of \$15.7 million) and CCI Applied Research Rapid Response to COVID-19 grants (185 applications received; 53 awards at a total value of \$3.9 million in funding).
- The Public Health Agency of Canada and NSERC launched a call to strengthen
  collaborative efforts among the academic community and all relevant stakeholders to
  conduct and coordinate emerging infectious diseases modelling to better respond to the
  COVID-19 pandemic and other similar situations. The call received over 400 Expressions
  of Interest from individual potential applicants, co-applicants and collaborators.
- Discovery Grants competition was successfully delivered through virtual peer review meetings involving over 430 committee members. This first-time shift to virtual peer review for NSERC's flagship Discovery Grants funding opportunity ensured stable access to funding for Canada's natural sciences and engineering researchers.

For more information on NSERC's plans, priorities and results achieved, see the "Results: what we achieved" section of this report.

### Results: what we achieved

## **Core responsibility**

Funding Natural Sciences and Engineering Research and Training.

**Description**: The Natural Sciences and Engineering Research Council of Canada (NSERC), through grants, fellowships and scholarships, promotes and supports research and research training in the natural sciences and engineering to develop talent, generate discoveries, and support innovation in pursuit of economic and social outcomes for Canadians.

#### Results:

# Departmental Result: Canada's natural sciences and engineering research is internationally competitive.

This result is aligned with the Government of Canada's mandate to support innovation ecosystems across the country. NSERC continued to support the Minister of Innovation, Science and Industry in his mandate to address the great challenges of our age, including protecting public health; ensuring a strong economic recovery; promoting a cleaner environment and standing up for fairness and equality.

In 2020-21, NSERC supported over 12,000 researchers including scientists and engineers, and over 33,000 trainees at post-secondary institutions across Canada through its funding opportunities under the Discovery Research, Research Training and Talent Development, and Research Partnerships Programs.

The publication of research results in peer-reviewed journals is one of many factors used to measure discovery and knowledge generated in the natural sciences and engineering (NSE) in Canada, and citations of these publications provide a measure of knowledge flow and the influence of Canadian researchers. The ranking of Canada among OECD nations on the average citation in the NSE illustrates Canada's international competitive strength. Based on the most recent data available (2019), Canada ranked 17th among the 38 OECD countries with an Average Relative Citation score of 1.35.

Canada produces approximately 4% of the world's scholarly publications in the natural sciences and engineering. Canadian researchers collaborate extensively with international researchers to keep abreast of the latest research results. In 2019-20, 48% of NSERC funded publications involved international collaborators, which increases the impact of Canadian NSE research in the global research community.

In 2020-21, NSERC continued to provide targeted investments in Early Career Researchers (ECRs) through the <u>Discovery Launch Supplements</u> and the execution of the Tri-agency ECR Action Plan. In the 2021 Discovery Grants competition, 490 supplements, valued at \$12,500 each, provided timely resources to support ECRs as they establish their research programs and hire students in areas ranging from environmental sciences and agriculture to information and

communications technologies. As a result of these initiatives, the Discovery Research Program committed \$92.5 million over six years for new awards to ECRs.

In consideration of the COVID-19 pandemic and in consultation with the impacted stakeholders, the planned full Discovery Institute Support<sup>ii</sup> (DIS) competition was delayed by one year. This Gender-Based Analysis Plus (GBA+)-informed funding opportunity was part of NSERC's response to the 2019-20 Discovery Research Evaluation recommendation that NSERC should clarify its vision and develop a comprehensive framework and guidelines around ongoing support to research institutes in Canada, as well as implement improvements to the monitoring and reporting framework for institutes. A competitive DIS bridge funding opportunity was instead made available to existing NSERC-funded co-applicant institutes currently awarded funding through the Collaborative and Thematic Resources Support in Mathematics and Statistics (CTRMS) program<sup>iii</sup>. The two eligible institutes were awarded funding of \$767,520 for one year.

The <u>Tri-Agency Equity</u>, <u>Diversity and Inclusion (EDI) Action Plan</u><sup>iv</sup> outlines actions needed to increase fair access to research support and to promote equitable participation in the research system. It serves as the foundation of a concerted effort to create the diverse and inclusive research environment necessary to respond to local, national and global challenges. The action plan and key performance indicators were updated in 2020 and publicly released in April 2021.

In September 2020, a new advisory committee to Council, the Committee on EDI, was created to provide advice on matters pertaining to EDI in NSERC program design, delivery and policies.

To promote and maintain a diversified base of high-quality research across Canada and provide a stimulating environment for research training in small universities across Canada, NSERC expanded eligibility for the <u>Discovery Development Grants</u><sup>v</sup> (DDG) program to allow researchers to hold up to two (2) DDG awards throughout their career. In 2020-21, \$960,000 was provided to 64 recipients.

In 2020-21, NSERC continued to seek opportunities to participate in international funding initiatives and leverage NSERC's investments by providing opportunities for international collaboration. As part of its membership in <a href="Belmont Forum">Belmont Forum</a> (an international research funding network dedicated to advancing sustainable development goals), NSERC participated in the annual fall plenary meeting virtually as the Canadian representative and also contributed staff support to Belmont Forum Secretariat throughout the past year. Since 2014, NSERC has been involved in three Belmont Forum competitions, resulting in NSERC support for Canadian participation in 14 funded projects for a total investment of \$2.4 million.

<u>Discovery Frontiers</u> vii grants address national research priorities and global challenges, and are led by world-class Canadian researchers with international collaborations. New calls for the Discovery Frontiers program have been put on hold beginning in 2020 as a result of budget pressures caused by the COVID-19 pandemic.

NSERC continues to engage with science based departments and agencies (SBDA) to leverage Canada's academic strengths to complement SBDA internal capabilities, accelerate knowledge generation, application of research results, and training of personnel in SBDA priority areas. In 2020-21, NSERC collaborated with Environment and Climate Change Canada with \$2.39 million to co-fund seven awards over four years in the Plastics Science for a Cleaner Future initiative viii. NSERC continued to collaborate with the Department of Fisheries and Oceans in supporting three ongoing awards under the Whales Science for Tomorrow initiative and with Environment and Climate Change Canada to co-fund nine ongoing awards under the Advancing Climate Change Science in Canada initiative.

In 2020-21, ten projects were funded through the special initiative entitled <u>Canada-UK Artificial Intelligence Initiative</u><sup>xi</sup>, with each project involving a Canadian principal investigator (PI) and a UK PI. These projects stem from a partnership initiated in 2019 between NSERC, SSHRC, CIHR, and our sister agencies in the UK.

The Public Health Agency of Canada and NSERC launched a call to strengthen collaborative efforts among the academic community and all relevant stakeholders to conduct and coordinate emerging infectious diseases modelling<sup>xii</sup> to better respond to the COVID-19 pandemic and other similar situations. The GBA+ informed-call received over 400 Expressions of Interest (EOIs) from individual potential applicants, co-applicants and collaborators. These EOIs were securely shared back with all EOI applicants in an effort to facilitate collaborations across this multi-disciplinary group. As intended, interested researchers and groups made connections, and 14 applications were submitted. Five multidisciplinary infectious disease modelling networks, supporting over 150 researchers from across the country received partial funding, for a total of \$10M over two years starting in FY2020-21.

In March 2021, to support Canadian research excellence by promoting sound research data management and data stewardship practices, NSERC, in partnership with SSHRC and CIHR, announced the launch of the <u>Tri-Agency Data Management Policy</u><sup>xiii</sup>.

# Departmental Result: Canada has a pool of highly skilled people in the natural sciences and engineering.

NSERC supports the government of Canada's commitment to promoting equity, diversity and inclusion in the Sciences. Through its funding opportunities, NSERC supports the attraction, retention and development of highly qualified and skilled people in the NSE in Canada. By providing grants and scholarships, NSERC helps build the human capital required to enable a strong, globally competitive research and innovation system in Canada. Researchers, students and young people benefit from the grant, scholarship and award funding, which supports post-secondary university research and training as well as some outreach activities at universities, museums, science centres, and community-based organizations.

In 2020-21 NSERC supported over 33,000 students and postdoctoral fellows. In support of students and new graduates affected by the COVID-19 pandemic, \$291.6 million in additional tri-council funding for trainees was made available in 2020-21 to extend expiring scholarships and postdoctoral fellowships and supplement existing awards, to support students and

postdoctoral fellows. The tri-agencies supported nearly 3,000 scholarship and fellowship recipients with COVID-19 extensions and additional funding was provided to 16,000 grants to extend student salaries.

In 2020-21, <u>Science Odyssey</u> xiv continued to be a key component in the Canadian science promotion network, confirming NSERC as a national leader in the efforts to strengthen a Canadian science culture. Notwithstanding that the national celebrations planned from May 2 to 17, 2020 were cancelled due to the COVID-19 pandemic, Science Odyssey supported several organizations delivering science outreach activities to kids and families at home. The Science Odyssey social media channels promoted close to 100 hands-on at home science initiatives and resources presented and organized by our science promotion and outreach partners.

In 2020-21, the NSERC-led <u>Science Literacy Week</u><sup>xv</sup> successfully collaborated with the Canadian Wildlife Federation to present 2020's biodiversity themed celebration of science, mobilizing 150 partners that delivered 300 online and in-person events across Canada. This was NSERC's first large-scale science celebration to take place during the COVID-19 pandemic. On September 23, 2020, NSERC organized the 4<sup>th</sup> <u>National Science Reading Day</u><sup>xvi</sup> in collaboration with six Canadian science magazines. More than 60,000 children and adults participated.

In 2020-21, NSERC continued to deliver its <u>PromoScience grants</u><sup>xvii</sup> with a sustained focus on science teachers and on underrepresented groups such as girls and Indigenous youth. Over \$12 million in funding was awarded to 81 grantees over a three-year period. Of these 81 grants, 22 included teacher resources/training, while 21 focused on girls and 37 focused on Indigenous youth. Additionally, funding of \$71,590 was awarded through the PromoScience Supplements for Collaboration to support 7 different partnerships within the science promotion community that will contribute to STEM learning opportunities for youth.

The <u>Science Communication Skills grant</u><sup>xviii</sup> (pilot) was launched to increase the reach of the PromoScience program by allowing non-profit organizations, postsecondary institutions and non-federal museums and science centres to offer science communication skills to students and professors. 128 applications were received and 21 1-year grants were distributed for a total amount of \$414,020.

To strengthen the promotion of STEM fields to Canadian youth, NSERC continued a five-year pilot of the micro-funding instrument promoted by Treasury Board to experiment with an innovative approach to distribute grants (low-value payments of up to \$1,000) to individuals and not-for-profit organizations. In 2020–21, 24 recipients in seven different provinces received grants through the <a href="NSERC Student Ambassadors">NSERC Student Ambassadors</a> xix grants and through the <a href="NSERC Young Innovators">NSERC Young Innovators</a> xx grants, and seven organizations were provided with grants of \$1,000 in support of virtual events across Canada.

In spring 2020, the <u>Ingenium-NSERC STEAM Horizon Awards</u><sup>xxi</sup> were presented to five young people, including two candidates from Indigenous communities.

Through its scholarship, fellowship and grant funding opportunities, NSERC continued to support the development of highly qualified "marketplace-ready" people in the NSE. In 2020-21,

26% of NSERC supported research trainees gained industrial experience. NSERC continued to deliver the Collaborative Research and Training Experience (CREATE) funding opportunity, which provides enhanced opportunities for research trainees to develop technical and professional skills and to gain experience in enriched and varied research environments. In 2020-21, 94 CREATE awardees received \$25 million. Over 80% of CREATE initiatives offered trainees the opportunity to gain experience in enriched and varied research environments beyond their home institution, including 65% of initiatives that offered internships in industrial, government, non-profit or other settings.

The COVID-19 pandemic impacted the opportunities for CREATE trainees to develop technical and professional skills. In some cases, internships (including industrial) were either postponed or converted to a virtual experience. In other cases, trainees were able to participate in a greater number of training activities (e.g., seminars and workshops) as the on-line format provided greater accessibility for trainees.

The competition planned for the 2020-21 <u>Healthy Cities Research Training Platform</u><sup>xxiii</sup> was delayed to 2021-22 due to the COVID-19 pandemic.

Direct support to students increased, with more students accessing master's level scholarship and three-year doctoral scholarship awards through the <u>Canada Graduate Scholarship Program</u>xxiv. 950 master's-level scholarship awards were allocated to eligible institutions, which represent an increase of 150 from the 800 awards allocated previously. The total expenditure for master's-level scholarship awards in 2020-21 was \$ 16.4 million. At the doctoral level, NSERC had funds to support a total of 950 Canada Graduate Scholarships, an increase of 50 additional new awards per year. The expenditure for these awards, including on-going similar awards from previous years was \$28 million.

Since 2018, the funding agencies have used the <u>self-identification questionnaire</u><sup>xxv</sup> to gather data from individuals who are applying for funding. With more complete data collection, it is now possible to analyze and report on the diversity of people who apply for and receive funding, to monitor for potential biases in policies, programs and peer review processes, and to inform decision-making. The funding agencies are reporting program application and award rates through the annual <u>Canada Research Coordinating Committee Progress Reports</u><sup>xxvi</sup>.

Announced in Budget 2018 and launched in 2019, the <u>Dimensions: equity, diversity and inclusion Canada</u><sup>xxvii</sup> program is mobilizing the transformational and cultural change needed to increase EDI within postsecondary institutions and the research ecosystem. To date, 125 organizations have signed the <u>Dimensions Charter</u><sup>xxviii</sup>. Core elements of the program, including the inclusive assessment framework, are being designed through a co-development approach with a cohort of 17 Canadian post-secondary institutions.

In April 2020, the Interagency Committee on Indigenous Research and Reconciliation (IC-IRR), responsible for coordinating the implementation of the <u>Strategic Plan for Indigenous Research</u> 2019-22<sup>xxix</sup> across Canada's research funding agencies (NSERC, SSHRC, CIHR, and CFI) was formed. It also supported the launch of the new Reference Group for the Appropriate Review of Indigenous Research, led by CIHR under the guidance of the IC-IRR. Composed exclusively of

Indigenous scholars, the Reference Group advises Canada's research funding agencies and provides guidance on the development and implementation of culturally appropriate review approaches and practices for research conducted by and with First Nations, Inuit and Métis Peoples. In 2020-21, Canada's research funding agencies launched a call for expressions of interest for the new Indigenous Leadership Circle in Research, which will monitor overall progress of the strategic plan implementation and advise the presidents of Canada's research funding agencies on matters related to Indigenous research and reconciliation. The call for expressions of interest was concluded in January 2021, and members of the Circle are to be announced by the end of 2021. In December 2020, NSERC signed a memorandum of understanding with Inuit Tapiriit Kanatami (ITK) to contribute to the advancement of the National Inuit Strategy on Research<sup>xxx</sup>.

#### **Highlight box:** Talent

NSERC recognises and rewards the talent, potential and accomplishments of the members of the Canadian research community in the NSE. Examples from 2020-21:

- Molly Shoichet from the Department of Chemical Engineering & Applied Chemistry
  at the University of Toronto is the 2020 winner of the Gerhard Herzberg Canada
  Gold Medal for Science and Engineering for her game-changing applications for
  hydrogels in the areas of tissue engineering/regenerative medicine and
  pharmaceutical testing.
- Shohini Ghose, a theoretical physicist at Wilfrid Laurier University who examines how the laws of quantum physics can be harnessed to transform computation and communication, was appointed as the NSERC Chair for Women in Science and Engineering (Ontario) in 2020.
- <u>Fanie Pelletier</u>: Département de biologie, at the Université de Sherbrooke, is one of six 2020 E.W.R. Steacie Memorial Fellowship awardees for her ground breaking work in in eco-evolutionary dynamics. This honour (now Arthur B. McDonald Fellowships) recognizes early stage academic researchers in the natural sciences and engineering.

# Departmental Result: Canada's natural sciences and engineering research knowledge is used.

This result aims to mobilize knowledge generated through the transformation of Canada's natural sciences and engineering research into results for the benefit of all Canadians.

NSERC supported the Minister of Innovation, Science and Industry's mandate to help Canadian businesses innovate and grow so that they can create good quality jobs and wealth for Canadians. Through its research partnerships funding opportunities, NSERC supported innovation ecosystems across the country, particularly those based on partnerships between businesses and postsecondary institutions, to support job creation, technology adoption, investment and scale-up. These collaborations build on strong discovery research to mobilize knowledge that allows Canada to address complex challenges, generate economic benefits and support evidence-based decision making. Funds leveraged through the Research Partnerships program enable researchers to advance scientific knowledge, address real world challenges, and connect people and skills.

The <u>Networks of Centres of Excellence (NCE)</u>xxxi program continued to mobilize multidisciplinary research teams from across the country to help find solutions to major social, economic or health issues for Canada and train the next generation of highly qualified personnel. The gradual transition of NCE funding to the <u>New Frontiers in Research Fund</u>xxxii will continue over the next few years with a complete wind-down of the NCE suite of programs by 2023-24. During the transition period, networks will continue to be fully supported until the end of their funding agreement.

In 2020-21, the <u>Centres of Excellence for Commercialization and Research (CECR)</u> and the <u>Business-led Networks of Centres of Excellence (BL-NCE)</u> programs continued to help connect businesses to Canada's world-class research enterprise. The responsibility for NCE-funded programs will be gradually transferred to ISED's Strategic Innovation Fund, ensuring that the programs continue to support BL-networks and centres, until the end of their funding agreements.

The Alliance program xxxv is now fully operational. A phased-in implementation approach was adopted to enable the successful deployment by staff of the processes and procedures needed to effectively manage a significant new program. Applications are being accepted within both Options 1 and 2. Alliance Option 1 has been fully operational since December 2019, for which NSERC funds up to 50-67% of the research costs, from \$20,000 to \$1,000,000 per year for up to five years. Alliance Option 2 was launched in February 2020, and for this option NSERC provides up to 100% of the cost of projects aiming at generating results driven by societal needs where funds are scarce to achieve the anticipated results.

Demand for Alliance grants increased significantly in 2020-21 compared to 2019-20. NSERC anticipates this increase will continue as the community becomes more aware of the program's possibilities and the resources available.

In 2020-21, 962 applications were received (852 in Option 1 and 110 in Option 2), and 452 awards (438 in Option 1 and 14 in Option 2) were granted for a total of \$112.9 million. Successful Option 1 projects had an average of 1.7 partner organizations. In total, these partners committed \$114.5 million in cash contributions, 62% from the private sector, 21% from the public sector and 16% from the not-for-profit sector.

Within the Alliance platform, NSERC also supported different special calls for <u>Collaborative</u> Research Projects<sup>xxxvi</sup>.

- Alberta Innovates Advance grants xxxvii. 37 applications; 33 awards
- <u>Canada-UK quantum technologies</u> xxxviii. 11 applications, 7 awards
- FRONT Team Research supplements xxxix. 22 applications, 18 awards
- Ontario Centre of Innovation (OCI) Voucher for Innovation and Productivity (VIP)<sup>xl</sup>. 65 applications, 39 awards

In early April 2020, NSERC launched two accelerated COVID-19 special calls: the <u>Alliance</u> COVID-19 grants<sup>xli</sup>, (769 applications received; 317 awards at a total value of \$15,687,680) and the CCI Applied Research Rapid Response to COVID-19 grants<sup>xlii</sup> (185 applications received; 53

awards at a total value of \$3.9M in funding). This rapid-response funding allowed the best researchers in Canada to address pandemic-related research and technical challenges by stimulating collaborations between academic researchers and the public and not-for-profit sectors, and industry.

The pandemic also created the impetus for NSERC to roll-out a pilot <u>Making Connections</u> tunction, which allowed organizations to post publicly the COVID-related research challenges for which they were seeking assistance from the academic community. Based on the success of this initiative, a more permanent challenge-driven funding opportunity is being developed.

The <u>College and Community Innovation (CCI) Program</u><sup>xliv</sup> invests approximately \$86 million annually to increase innovation at the community and/or regional level by enabling Canadian colleges to increase their capacity to work with local partner organizations, particularly small and medium-sized enterprises (SMEs).

In 2020-21, NSERC continued to invest new funds in the CCI Program, a tri-agency program managed by NSERC. The program invested \$24.1 million in <u>Applied Research and Development Grants xlv</u> and \$9.1 million in <u>Engage and Engage Plus Grants for Colleges xlvi</u> and also supported 60 active <u>Technology Access Centres Grants xlviii</u>, 70 active <u>Innovation Enhancement Grants xlviii</u> and 25 active <u>Industrial Research Chairs for Colleges Grants xlvii</u>.

In 2020-21, the CCI Program continued undergoing an evolution to simplify, streamline and address the changing dynamics of applied research in colleges and communities across Canada. This evolution will better reflect the program's tri-council nature by broadening the program's scope to include social and health innovation.

#### Gender-based analysis plus

In 2018-19, NSERC implemented the self-identification form. In 2020-21, 35% of all NSERC award holders self-identified as women, 1% self-identified as Indigenous Peoples, 29% identified as a Visible minority and 2% self-identified as Persons with Disabilities.

NSERC continues to update and offer EDI training that is relevant within the workplace and in the research context, such as <u>Gender-based Analysis Plus (GBA+)</u><sup>1</sup>, Indigenous background context and unconscious bias awareness training. As of March 2021, 80% of NSERC staff have completed GBA+ training.

In response to the COVID-19 pandemic, the research funding agencies implemented measures to mitigate disproportionate impacts on members of the research community from underrepresented and historically excluded groups, and avoid exacerbating inequities. These measures included: extending timelines for application intake for some funding competitions; developing guidance<sup>li</sup> for including considerations of COVID-19 impacts in research proposals; extending peer review deadlines; reimbursing dependent care and internet expenses for individuals participating in virtual peer review to facilitate broader participation; providing funded extensions for selected grants, scholarships and fellowships (including Discovery Grants for an additional year and Triagency Scholarships and Fellows for an additional four months); providing extensions in time for all other grants; and, extending reporting timelines for grantees.

## **Experimentation**

In 2020-21, NSERC published a set of dashboards to improve results communication both internally and to external stakeholders. These dashboards share detailed multi-year analysis of Discovery Research Program results, including EDI-related analyses and can be found here:

2021 Competition Statistics Dashboard - Discovery Grantslii

2021 Competition Statistics Dashboard - Research Tools and Instruments Grants liii

2021 Competition Statistics Dashboard - Subatomic Physics Grants liv

### **Results achieved**

Departmental results	Performance indicators	Target	Date to achieve target	2018–19 Actual results	2019–20 Actual results	2020–21 Actual results
Canada's natural sciences and engineering research is internationally competitive	Canada's rank among OECD nations on the citation score of natural sciences and engineering research publications	15	March 31, 2021	18	17	N/A*
	Percentage of funded research involving international collaboration	47	March 31, 2021	47**	48	N/A*
Canada has a pool of highly skilled people in the natural sciences and	Proportion of award holders who are underrepresente d individuals	30	March 31, 2021	33***	36***	34
engineering	Number of research trainees supported	33,000	March 31, 2021	37,700	32,800****	33,100
	Percentage of research trainees supported gaining industrial experience	30	March 31, 2021	36.3	30	26
	Percentage of previously funded research trainees that go on to work in a research position	67	March 31, 2021	80	N/A****	82
Canada's natural sciences and engineering	Partner funding for research projects	\$225M	March 31, 2021	\$269M	\$281M	\$352M
research knowledge is used	Number of partners on research projects	3,700	March 31, 2021	3,760	3,245	3,445
	Percentage of funded projects reporting socioeconomic outcomes for Canadians	55	March 31, 2021	52	52	52

<sup>\*</sup> Results are delayed one year, due to availability of data.

16 Results: what we achieved

<sup>\*\*</sup> Methodology to calculate the result updated to include NSERC-acknowledged papers only.

<sup>\*\*\*</sup> Percentage of funded researchers and research trainees who self-identify as a woman.

<sup>\*\*\*\*</sup> Result lower than target, due to Experience Awards being sunset.

<sup>\*\*\*\*\*</sup>Result available every two years.

# **Budgetary financial resources (dollars)**

	2020–21 Planned spending	Total authorities	Actual spending (authorities used)	2020–21 Difference (Actual spending minus Planned spending)
1,341,810,544	1,341,810,544	1,504,725,350	1,458,921,353	117,110,809

The variance is mainly due to the COVID Statutory funding NSERC received and spent in FY2020-21 under Public Health Events of National Concern Payments Act (PHENCPA).

### **Human resources (full-time equivalents)**

	·	2020–21 Difference (Actual full-time equivalents minus Planned full-time equivalents)
299	315	16

The variance is mainly due to the implementation of COVID Statutory funding NSERC received under Public Health Events of National Concern Payments Act (PHENCPA) and initiated other COVID grant programs to help the research community.

Financial, human resources and performance information for NSERC's Program Inventory is available in <u>GC InfoBase</u><sup>lv</sup>.

#### **Internal Services**

## **Description**

Internal Services are those groups of related activities and resources that the federal government considers to be services in support of programs and/or required to meet corporate obligations of an organization. Internal Services refers to the activities and resources of the 10 distinct service categories that support Program delivery in the organization, regardless of the Internal Services delivery model in a department. The 10 service categories are:

- Acquisition Management Services
- **▶** Communication Services
- ▶ Financial Management Services
- ▶ Human Resources Management Services
- ▶ Information Management Services
- ▶ Information Technology Services
- Legal Services
- ▶ Material Management Services
- Management and Oversight Services
- ▶ Real Property Management Services

#### Results

Over the past year, NSERC as all other public sector organizations, operated under exceptional circumstances. The COVID-19 pandemic impacted the way NSERC conducted every aspect of its business and required a quick shift to virtual delivery of our internal services. Throughout the pandemic, the health and safety of employees remained a priority, and all required social distancing measures, cleaning measures, self-screening and contact-tracing protocols were quickly put in place. Other guidance and resources to support employees were developed, including a virtual ergonomic program to ensure staff can work safely from home, and a widerange of mental health resources to support them through this period.

In order to enable the Agency to work virtually, all employees had been provided with mobile work tools (e.g. tablets, iPhones and remote access keys) and office equipment to use at home. Applications (e.g. Microsoft Teams, Webex, etc.) to enhance collaboration were launched and employees were provided training and support to use them. The results of the 2020 Public Service Employee Survey (PSES) demonstrate that NSERC responded effectively to the COVID-19 pandemic. Some of these tools have been leveraged to develop and launch a new virtual platform for the Discovery Grants program peer review for the first time. The COVID-19 pandemic also required critical updates to existing funding opportunities in NSERC's granting systems to ensure continuity in our delivery of programs.

NSERC is developing its new People Management Strategy that will guide people management activities at the agency for multiple years by setting out its priorities and commitments and consolidate a variety of plans and strategies to provide a focal point and integrated approach. In

the meantime, all current People Strategy Action Plans have been extended until March 2022 in order to continue key activities to support Employment Equity, Official Languages, Values and Ethics and Mental Health and Wellbeing in the workplace. The results of the PSES have highlighted the impact of those commitments on overall employee engagement, respectful workplace, use of both official languages and support for work-life balance and continue to be more positive on average than the overall public service, than other government organizations of similar size (150-500 employees) and other science-based government organizations. The Agency is also compliant with the new Bill-C-65 legislation and has developed a new Prevention of Harassment and Violence in the Workplace policy. The PSES also demonstrates that sustained efforts have resulted in improvement with regard to harassment and discrimination.

NSERC continues to plan for several key compliance activities, some of which have been delayed further due to the COVID-19 pandemic. NSERC participated in providing input for updates to the new Policy on Transfer Payments, which has now been postponed to 2022. NSERC also continued its involvement with central agencies for the migration to the new GC Financial Management System, now expected for 2023-24. NSERC continued to work with CIHR and SSHRC on the Tri-Agency Grants Management Solution (TGMS) initiative to harmonize and modernize grants management to better support applicants, administrators, reviewers, and Agency staff across the entire grants management lifecycle.

## **Budgetary financial resources (dollars)**

2020–21 Main Estimates	2020–21 Planned spending	2020–21 Total authorities available for use	2020–21 Actual spending (authorities used)	2020–21 Difference (Actual spending minus Planned spending)
23,505,390	23,505,390	26,673,422	28,972,205	5,466,815

<sup>\*</sup> The variance is due to the implementation of COVID special grants under PHENCPA, support Council-wide teleworking due to the COVID-19 pandemic and pay for moving to a new work location.

### **Human resources (full-time equivalents)**

	Actual full-time equivalents	2020–21 Difference (Actual full-time equivalents minus Planned full-time equivalents)
156	181	25

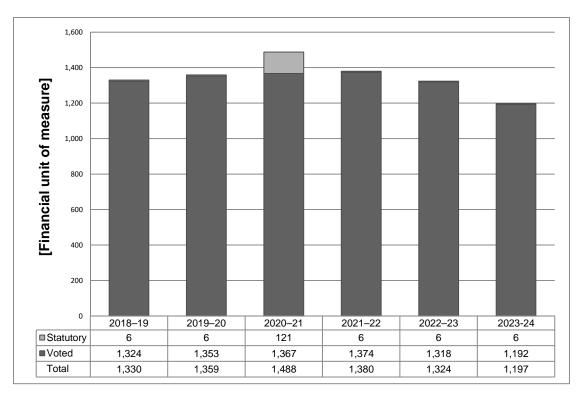
<sup>\*</sup> The variance is due to the implementation of COVID special grants under PHENCPA, support Council-wide teleworking due to the COVID-19 pandemic.

# Analysis of trends in spending and human resources

# **Actual expenditures**

### Departmental spending trend graph

The following graph presents planned (voted and statutory spending) over time.



<sup>\*</sup>The decrease in planned spending from 2022-23 to 2023-24 is mainly due to the sunsetting of the Canada First Research Excellence Fund.

# **Budgetary performance summary for Core Responsibilities and Internal Services (dollars)**

Core responsibilities and Internal Services	2020–21 Main Estimates	2020–21 Planned spending	2021–22 Planned spending	2022–23 Planned spending	2020–21 Total authorities available for use	2018–19 Actual spending (authoritie s used)	2019–20 Actual spending (authoritie s used)	2020–21 Actual spending (authoritie s used)
Funding Natural Sciences and Engineering Research and Training	1,341,810,544	1,341,810,544	1,365,315,934	1,355,799,029	1,504,725,350	1,306,959,366	1,332,759,771	1,458,921,353
Subtotal	1,341,810,544	1,341,810,544	1,365,315,934	1,355,799,029	1,504,725,350	1,306,959,366	1,332,759,771	1,458,921,353
Internal Services	23,505,390	23,505,390	23,505,390	23,163,807	26,673,422	23,015,594	26,605,581	28,972,205
Total	1,365,315,934	1,365,315,934	1,388,821,324	1,378,962,836	1,531,398,772	1,329,974,960	1,359,365,352	1,487,893,558

<sup>\*</sup> The variance of actual spending (authorities used) is due to increase of programs, communications and support services in delivering of funds for the implementation of Budget 2018 (fundamental research funding; College and Community Innovation Program; Canada Research Chairs Program), Budget 2019 (Canada Graduate Scholarship; Paid Parental Leave), and the COVID Statutory funding NSERC received and spent under *Public Health Events of National Concern Payments Act* in 2020-21.

### **Actual human resources**

## Human resources summary for core responsibilities and Internal Services

Core responsibilities and Internal Services	2018–19 Actual full- time equivalents	Actual full- time	2020–21 Planned full-time equivalents	2020–21 Actual full- time equivalents	Planned	2022–23 Planned full-time equivalents
Funding Natural Sciences and Engineering Research and Training	284	303	299	315	300	298
Subtotal	284	303	299	315	300	298
Internal Services	147	168	156	181	165	161
Total	431	471	455	496	465	459

## **Expenditures by vote**

For information on NSERC's organizational voted and statutory expenditures, consult the <u>Public</u> Accounts of Canada 2020–2021. Ivi

## **Government of Canada spending and activities**

Information on the alignment of NSERC's spending with the Government of Canada's spending and activities is available in <u>GC InfoBase</u>. Ivii

## Financial statements and financial statements highlights

#### **Financial statements**

NSERC's financial statements (unaudited) for the year ended March 31, 2021, are available on the <u>departmental website</u>.

### Financial statement highlights

# Condensed Statement of Operations (unaudited) for the year ended March 31, 2021 (dollars)

Financial information	2020–21 Planned results*	2020–21 Actual results	2019–20 Actual results	(2020–21 Actual results minus 2020–21 Planned	Difference (2020–21 Actual results minus 2019–20 Actual results)
Total expenses	1,373,464,130	1,491,878,822	1,364,777,116	118,414,692	127,101,706
Total revenues	178,779	132,991	152,681	(45,788)	(19,690)
Net cost of operations before government funding and transfers	1,373,285,351	1,491,745,831	1,364,624,435	118,460,480	127,121,396

<sup>\*</sup>As per 2020-21 Future-Oriented Statement of Operations.

The increase in total expenses over previous year is mainly due to spending related to the Public Health Events of National Concern Payments Act (PHENCPA) to support students and youth impacted by COVID-19 as well as research institutes and universities.

The decrease in total revenues over previous year is mainly due to a decrease in SharePoint hosting revenues from other government departments.

# Condensed Statement of Financial Position (unaudited) as of March 31, 2021 (dollars)

Financial information	2020–21	2019–20	Difference (2020–21 minus 2019–20)
Total net liabilities	43,143,418	45,898,127	(2,754,709)
Total net financial assets	40,790,374	43,870,662	(3,080,288)
Departmental net debt	2,353,044	2,027,465	325,579
Total non-financial assets	2,982,222	1,219,889	1,762,333
Departmental net financial position	629,178	(807,576)	1,436,754

The decrease in net liabilities and net financial assets is mainly due to a higher volume of grants and scholarships recorded as liabilities at the end of March 2020 compared to March 2021, and paid in April 2020 and April 2021, respectively.

The increase in non-financial assets is mainly due to the increase in NSERC's tangible capital assets, where expenditures related to the Workplace Renewal project were recorded as Construction-in-Progress during 2020-21.

# **Corporate Information**

## Organizational profile

**Appropriate minister:** Minister of Innovation, Science and Industry

The Honourable François-Philippe Champagne, P.C., M.P.

**Institutional head:** Dr. Alejandro Adem (President)

Ministerial portfolio: Innovation, Science and Economic Development

**Enabling instrument[s]:** Natural Sciences and Engineering Research Council Act<sup>lviii</sup>

Year of incorporation / commencement: May 1, 1978

## Raison d'être, mandate and role: who we are and what we do

"Raison d'être, mandate and role: who we are and what we do" is available on <u>NSERC's</u> website<sup>lix</sup>.

For more information on the department's organizational mandate letter commitments, see the Minister's mandate letter<sup>lx</sup>.

## **Operating context**

Information on the operating context is available on NSERC's website.

## Reporting framework

NSERC's Departmental Results Framework and Program Inventory of record for 2020–21 are shown below.

#### **Core Responsibility:**

Funding Natural Sciences and Engineering Research and Training

#### **Departmental Result:**

Canada's natural sciences and engineering research is internationally competitive **Indicator:** Canada's rank among OECD nations on the citation score of natural sciences and engineering research publications

**Indicator:** Percentage of funded research involving international collaborations

#### **Departmental Result:**

Canada has a pool of highly skilled people in the natural sciences and engineering **Indicator:** Proportion of award holders who are underrepresented individuals

**Indicator:** Number of research trainees supported

**Indicator:** Percentage of research trainees supported gaining industrial experience

**Indicator:** Percentage of previously funded research trainees that go on to work in a research position

#### **Departmental Result:**

Canada's natural sciences and engineering research knowledge is used **Indicator:** Partner funding for research projects

**Indicator:** Number of partners on research projects

**Indicator:** Percentage of funded projects reporting socioeconomic outcomes for Canadians

# Program Inventory

**Departmental Results Framework** 

**Program: Discovery Research** 

**Program: Research Training and Talent Development** 

**Program: Research Partnerships** 

# Supporting information on the program inventory

Financial, human resources and performance information for NSERC's Program Inventory is available in <u>GC InfoBase</u>. lxi

# Supplementary information tables

The following supplementary information tables are available on NSERC's website:

- ▶ Reporting on Green Procurement
- Details on transfer payment programs
- Gender-based analysis plus

## Federal tax expenditures

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures each year in the Report on Federal Tax Expenditures. This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs as well as evaluations and GBA+ of tax expenditures.

# Organizational contact information

#### Mailing address

NSERC 350 Albert Street 16th Floor Ottawa, ON K1A 1H5

**Telephone:** 343-549-6120

Email: sorin.seruna@nserc-crsng.gc.ca

Website: https://www.nserc-crsng.gc.ca/index eng.asp lxiii

# **Appendix: definitions**

#### appropriation (crédit)

Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

#### **budgetary expenditures** (dépenses budgétaires)

Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

#### **core responsibility** (responsabilité essentielle)

An enduring function or role performed by a department. The intentions of the department with respect to a core responsibility are reflected in one or more related departmental results that the department seeks to contribute to or influence.

#### **Departmental Plan** (plan ministériel)

A report on the plans and expected performance of an appropriated department over a 3-year period. Departmental Plans are usually tabled in Parliament each spring.

#### departmental priority (priorité ministérielle)

A plan or project that a department has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired departmental results.

#### departmental result (résultat ministériel)

A consequence or outcome that a department seeks to achieve. A departmental result is often outside departments' immediate control, but it should be influenced by program-level outcomes.

#### departmental result indicator (indicateur de résultat ministériel)

A quantitative measure of progress on a departmental result.

#### **departmental results framework** (cadre ministériel des résultats)

A framework that connects the department's core responsibilities to its departmental results and departmental result indicators.

#### **Departmental Results Report** (rapport sur les résultats ministériels)

A report on a department's actual accomplishments against the plans, priorities and expected results set out in the corresponding Departmental Plan.

#### **experimentation** (expérimentation)

The conducting of activities that seek to first explore, then test and compare the effects and impacts of policies and interventions in order to inform evidence-based decision-making, and improve outcomes for Canadians, by learning what works, for whom and in what circumstances.

Experimentation is related to, but distinct from innovation (the trying of new things), because it involves a rigorous comparison of results. For example, using a new website to communicate with Canadians can be an innovation; systematically testing the new website against existing outreach tools or an old website to see which one leads to more engagement, is experimentation.

#### **full-time equivalent** (équivalent temps plein)

A measure of the extent to which an employee represents a full person-year charge against a departmental budget. For a particular position, the full-time equivalent figure is the ratio of number of hours the person actually works divided by the standard number of hours set out in the person's collective agreement.

#### **gender-based analysis plus (GBA+)** (analyse comparative entre les sexes plus [ACS+])

An analytical process used to assess how diverse groups of women, men and gender-diverse people experience policies, programs and services based on multiple factors including race ethnicity, religion, age, and mental or physical disability.

#### **government-wide priorities** (priorités pangouvernementales)

For the purpose of the 2020–21 Departmental Results Report, those high-level themes outlining the government's agenda in the 2019 Speech from the Throne, namely: Fighting climate change; Strengthening the Middle Class; Walking the road of reconciliation; Keeping Canadians safe and healthy; and Positioning Canada for success in an uncertain world.

#### **horizontal initiative** (initiative horizontale)

An initiative where two or more federal organizations are given funding to pursue a shared outcome, often linked to a government priority.

#### **non-budgetary expenditures** (dépenses non budgétaires)

Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

#### performance (rendement)

What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

#### **performance indicator** (indicateur de rendement)

A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

#### **performance reporting** (production de rapports sur le rendement)

The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

#### **plan** (plan)

The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally, a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead to the expected result.

#### planned spending (dépenses prévues)

For Departmental Plans and Departmental Results Reports, planned spending refers to those amounts presented in Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their Departmental Plans and Departmental Results Reports.

#### program (programme)

Individual or groups of services, activities or combinations thereof that are managed together within the department and focus on a specific set of outputs, outcomes or service levels.

#### **program inventory** (répertoire des programmes)

Identifies all the department's programs and describes how resources are organized to contribute to the department's core responsibilities and results.

#### **result** (résultat)

A consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

#### **statutory expenditures** (dépenses législatives)

Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

#### target (cible)

A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

#### voted expenditures (dépenses votées)

Expenditures that Parliament approves annually through an appropriation act. The vote wording becomes the governing conditions under which these expenditures may be made.

### **Endnotes**

Discovery Launch Supplements, https://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/Dis-Sup\_eng.asp ii Discovery Institute Support, https://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/DIS-ADIR eng.asp Collaborative and Thematic Resources Support in Mathematics and Statistics (CTRMS) program, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RTII-OIRI/CTMRS-ARTCMS eng.asp iv Tri-Agency EDI Action Plan, http://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Action-Plan PlandAction eng.asp Discovery Development Grants, https://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/DiscoveryPilot-DecouvertePilote eng.asp vi Belmont Forum, https://www.belmontforum.org/ vii Discovery Frontiers, https://www.nserc-crsng.gc.ca/professors-professeurs/grants-subs/df-fd\_eng.asp viii Plastics Science for a Cleaner Future initiative, https://www.nserc-crsng.gc.ca/professors-professeurs/rpppp/plastics-plastiques\_eng.asp ix Whales Science for Tomorrow initiative, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Whale-Baleines eng.asp Advancing Climate Change Science in Canada initiative, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/ACCSC-SARCCC eng.asp Canada-UK Artificial Intelligence Initiative, https://www.sshrc-crsh.gc.ca/funding-financement/programsprogrammes/canada-uk\_ai/index-eng.aspx xii emerging infectious diseases modelling, https://www.nserc-crsng.gc.ca/NSERC-CRSNG/FundingDecisions-DecisionsFinancement/2021/EIDM-MMIE eng.asp xiii Tri-Agency Data Management Policy, https://science.gc.ca/eic/site/063.nsf/eng/h 97610.html Science Odyssey, <a href="http://www.sciod.ca/about/">http://www.sciod.ca/about/</a> xiv χv Science Literacy Week, http://www.scienceliteracy.ca/ xvi National Science Reading Day, https://www.owlkids.com/contest/sciencereadingday/#:~:text=Celebrate%20National%20Science%20Read ing%20Day%20by%20entering%20a,Science%20Reading%20Day%20and%20Science%20Literacy%20W eek%202020%21 xvii PromoScience grants, http://www.nserc-crsng.gc.ca/Promoter-Promotion/PromoScience-PromoScience/About-Apropos eng.asp xviii Science Communication Skills grant, https://www.nserc-crsng.gc.ca/Promoter-Promotion/ScienceCommFunding eng.asp xix NSERC Student Ambassadors, https://www.nserc-crsng.gc.ca/students-etudiants/ug-pc/ambassadorsambassadeurs eng.asp xx NSERC Young Innovators, https://www.nserc-crsng.gc.ca/Promoter-Promotion/YI-JI eng.asp xxi Ingenium-NSERC STEAM Horizon Awards, https://www.nserc-crsng.gc.ca/Students-Etudiants/UG-PC/STEAM-STIAM\_eng.asp xxii Collaborative Research and Training Experience, http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/CREATE-FONCER eng.asp xxiii Healthy Cities Research Training Platform, https://www.sshrc-crsh.gc.ca/news\_roomsalle de presse/latest news-nouvelles recentes/2019/healthy cities-villes en sante-eng.aspx xxiv Canada Graduate Scholarship Program, https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/index\_eng.asp XXV self-identification questionnaire, https://www.ic.gc.ca/eic/site/063.nsf/eng/h 97737.html xxvi Canada Research Coordinating Committee Progress Reports, https://www.canada.ca/en/researchcoordinating-committee/services/publications/progress-reports/2019-2020.html xxvii Dimensions: equity, diversity and inclusion Canada, https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Dimensions Dimensions eng.asp xxviii Dimensions Charter, https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Dimensions-Charter Dimensions-Charte eng.asp

xxix Strategic Plan for Indigenous Research 2019-22, https://www.canada.ca/en/research-coordinatingcommittee/priorities/indigenous-research/strategic-plan-2019-2022.html XXX National Inuit Strategy on Research, <a href="https://www.itk.ca/national-inuit-strategy-on-research/">https://www.itk.ca/national-inuit-strategy-on-research/</a> xxxi Networks of Centres of Excellence (NCE), https://nce-rce.gc.ca/Index\_eng.asp xxxii New Frontiers in Research Fund, https://www.sshrc-crsh.gc.ca/funding-financement/nfrf-fnfr/indexeng.aspx xxxiii Centres of Excellence for Commercialization and Research (CECR), https://www.nce-rce.gc.ca/Programs-Programmes/CECR-CECR/Index eng.asp xxxiv Business-led Networks of Centres of Excellence (BL-NCE), http://www.nce-rce.gc.ca/Programs-Programmes/BLNCE-RCEE/Index eng.asp XXXV Alliance program, https://www.nserc-crsng.gc.ca/Innovate-Innover/alliance-alliance/index eng.asp Collaborative Research Projects, https://www.nserc-crsng.gc.ca/innovate-innover/Collaborative\_Research-Recherche Collaborative eng.asp xxxvii Alberta Innovates Advance grants, https://www.nserc-crsng.gc.ca/Innovate-Innover/AI-AI eng.asp Canada-UK quantum technologies, <a href="https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Canada-uk.">https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Canada-uk.</a> xxxviii UK\_eng.asp xxxix FRQNT - Team Research supplements, https://www.nserc-crsng.gc.ca/Innovate-Innover/NSERC-FRONT eng.asp xl Ontario Centre of Innovation (OCI) Voucher for Innovation and Productivity (VIP), https://www.nserccrsng.gc.ca/Innovate-Innover/VIP-BIP eng.asp xli Alliance COVID-19 grants, https://www.nserc-crsng.gc.ca/Innovate-Innover/COVID-19/index\_eng.asp xlii CCI Applied Research Rapid Response to COVID-19 grants, https://www.nserc-crsng.gc.ca/Innovate-Innover/CCI-COVID eng.asp xliii Making Connections, https://www.nserc-crsng.gc.ca/Innovate-Innover/COVID-19/making connectionsetablir des liens eng.asp xliv College and Community Innovation (CCI) Program, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Info-Info eng.asp xlvApplied Research and Development Grants, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/ARD-RDA eng.asp xlvi Engage and Engage Plus Grants for Colleges, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/CCIEngage-ICCEngagement eng.asp xlvii Technology Access Centres Grants, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/TAC-ECAT eng.asp xlviii Innovation Enhancement Grants, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/CCI-ICC eng.asp xlix Industrial Research Chairs for Colleges Grants, https://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/IRCC-CRIC\_eng.asp Gender-based Analysis Plus (GBA+), https://women-gender-equality.canada.ca/en/gender-based-analysisplus.html li Guidance, https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nserccrsng.gc.ca%2FNSERC-CRSNG%2FPolicies-Politiques%2FCOVID-COVID eng.asp&data=04%7C01%7CAriel.Grostern%40NSERC-CRSNG.GC.CA%7C4b1a9ca45ada4c6215be08d952b507a7%7Cfbef079820e34be7bdc8372032610f65%7 C1%7C0%7C637631759752295492%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQ IjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=eTdzTLjvonTB6Bbael4E8dghMk ZsOmlC7lb4D9m16Rk%3D&reserved=0 lii 2021 Competition Statistics Dashboard - Discovery Grants, https://app.powerbi.com/view?r=eyJrIjoiMjVjNDk2ODMtNWRhYS00NjlkLWJiZGItMjEwMDg1NDNjZ GQ0IiwidCI6ImZiZWYwNzk4LTIwZTMtNGJlNy1iZGM4LTM3MjAzMjYxMGY2NSJ9

2021 Competition Statistics Dashboard - Research Tools and Instruments Grants,

https://app.powerbi.com/view?r=eyJrIjoiNWM3MWEwYTctNDU4Mi00MjY3LWIyYWQtNDc4NjY4ZW

JkZjU4IiwidCI6ImZiZWYwNzk4LTIwZTMtNGJlNy1iZGM4LTM3MjAzMjYxMGY2NSJ9

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liv	2021 Competition Statistics Dashboard - Subatomic Physics Grants,
	https://app.powerbi.com/view?r=eyJrIjoiNzFlZjdjNjgtNzA0Zi00ZmM3LWE1YTItOGY0MWI5MGIwZW
	Q5IiwidCI6ImZiZWYwNzk4LTIwZTMtNGJlNy1iZGM4LTM3MjAzMjYxMGY2NSJ9
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lvi	Public Accounts of Canada, <a href="http://www.tpsgc-pwgsc.gc.ca/recgen/cpc-pac/index-eng.html">http://www.tpsgc-pwgsc.gc.ca/recgen/cpc-pac/index-eng.html</a>
lvii	GC InfoBase, https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
lviii	Natural Sciences and Engineering Research Council Act, https://laws.justice.gc.ca/eng/acts/N-21/
lix	NSERC's website, <a href="https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp">https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp</a>
lx	Minister's mandate letter, https://pm.gc.ca/en/mandate-letters/2021/01/15/minister-innovation-science-and-
	industry-supplementary-mandate-letter
lxi	GC InfoBase, https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
lxii	Report on Federal Tax Expenditures, <a href="https://www.canada.ca/en/department-">https://www.canada.ca/en/department-</a>
	finance/services/publications/federal-tax-expenditures.html
lxiii	Website, <a href="https://www.nserc-crsng.gc.ca/index_eng.asp">https://www.nserc-crsng.gc.ca/index_eng.asp</a>